Koordinierte Effekte in der EU und den USA

D I S S E R T A T I O N
der Universität St. Gallen,
Hochschule für Wirtschafts-,
Rechts- und Sozialwissenschaften
sowie Internationale Beziehungen (HSG)
zur Erlangung der Würde einer
Doktorin der Rechtswissenschaft

vorgelegt von

Anna Katharina Wolf-Posch

aus

Deutschland

Genehmigt auf Antrag der Herren

Prof. Dr. Dr. h.c. Carl Baudenbacher

und

Prof. Dr. Philippe Corruble

Dissertation Nr. 4253

D-Druck Spescha, St. Gallen 2014

Die Universität St. Gallen, Hochschule für Wirtschafts-, Rechts- und Sozialwissenschaften sowie Internationale Beziehungen (HSG), gestattet hiermit die Drucklegung der vorliegenden Dissertation, ohne damit zu den darin ausgesprochenen Anschauungen Stellung zu nehmen.

St. Gallen, den 23. Oktober 2013

Der Rektor:

Prof. Dr. Thomas Bieger

Index

Summary **15**

Chapter 1: The purpose of this dissertation and basic principles of coordinated effects analysis in the EU and the U.S. **19**

I. Purpose of the dissertation 19

II. Merger analysis at the EC 21

III. The concept of coordinated effects 22

IV. Coordinated effects in the EU 23

1. Development of the concept of collective dominance in horizontal merger cases 23

1.1 Nestlé 25

1.2 Kali-Salz 26

1.3 Gencor 28

1.4 Airtours 30

1.5 Impala 32

2. The gap 34

3. SIEC 37

4. EU Non-horizontal Merger Analysis 40

5. The new role of economists in the EU 41

6. Submission of economic evidence 47

7. Time-line of EC merger review 48

8. Enforcement statistics 49

V. Coordinated effects in the US. 51

1. Different approaches to merger policy 51

2. Merger analysis at the DoJ and the FTC 52

2.1. DoJ 52

2.2. FTC 53

2.3. Enforcement statistics.. 54

VI. Some points of comparison 55

1. Enforcement powers... 55

2. Professional background 56

3. The politics of merger control 59

VII. Uncertainty of merger control economics 63

VIII. Conclusion.. 65

Chapter 2: Horizontal EU and US coordinated effects analysis 66

I. Introduction 66

II. Economics 66

1. The role of concentration levels.. 66

1.1. It's all about game theory.. 67

1.2. How many market players are necessary for competition? 69

2. Other factors 70

2.1. Maverick firms 70

2.2. Asymmetry of firm sizes... 71

2.3. Market transparency 72

2.4. The problem of past coordination 73

2.5. Non-price coordination... 74

2.6. Efficiencies 74

2.7 What do these factors tell us? 76

3. Behavioural economics.. 78

4. Conclusion 80

III. Guidelines 80
1. 2004 EU Horizontal Merger Guidelines 80
1.1. Concentration levels 80
1.2. The Airtours criteria in the Guidelines 81
1.3. Mavericks and market complexity 82
1.4. Market transparency 84
1.5. Multi-market contacts 85
1.6. Evidence of past coordination 85
1.7. Lack of jeopardising outsider reactions 86
1.8. Merger with a potential competitor 87
1.9. Likelihood of entry 88
1.10. Efficiencies 89
1.11. Conclusion 93
2. US 2010 Horizontal Merger Guidelines 94
2.1. Role of concentration levels 95
2.2. Types of coordination 96
2.3. Failed previous attempts at collusion 98
2.4. Payoffs of coordination 100
2.5. Market transparency and product homogeneity 100
2.6. Credible punishment mechanisms and maverick theories 100
2.7. Destabilising effect of innovation 103
2.8. Other destabilising factors 103
2.9. Potential competition 103
2.10. Conclusion 104
IV. Coordinated effects in merger enforcement actions 106

1. EU 106
1.1. Lengthy review periods 106
1.2. Evidence considered by the EC 108
1.3. Overview of the following section 109
1.4. Impact of Impala 109
1.5. ABF 110
1.5.1. Details of the EC’s analysis 111
1.5.2. Comments on ABF 119
1.6. Five-to-four mergers 120
1.6.1. Blackstone 120
1.6.2. Arjowiggins 123
1.6.3. tele.ring 126
1.7. Four-to-three merger: Scheider Electric 128
1.8. Three-to-two mergers 130
1.8.1. Syniverse 130
1.8.2.KLM 132
1.8.3. Antalis 134
1.9. Coordinated effects – Where does the EU stand today? 136
2. US 139
2.1. Six-to-five and five-to-four mergers 142
2.1.1. Kraft General Foods 142
2.1.2. Arch Coal 150
2.1.3. Foster 157
2.1.4. Conclusion on six-to-five and five-to-four mergers 159
2.2. Four-to-three mergers 159

2.2.1. AT&T 160

2.2.2. Dean Foods 162

2.2.3. Grifols 166

2.3. Three-to-two mergers 168

2.3.1.FTC v Heinz 169

2.3.2. H&R Block 174

2.3.3. OSF 179

2.3.4. CCC 183

2.3.5. Polypore 188

2.4. Are economic experts confident about their analysis? 192

2.5. Policy changes under the Obama Administration 195

IV. Conclusion 200

Chapter 3: Coordinated effects analysis in vertical and conglomerate merger cases 213

I. Introduction 213

II. Economics 214

1. Vertical mergers 214

1.1. Elimination of a disruptive buyer 215

1.2. Anti-competitive information exchange 218

1.4. Cartelisation through exclusive contracts 220

1.5. Conclusion 221

2. Conglomerate Mergers 222

3. A Word of caution 224

III. Guidelines 225

1. EU 225

1.1. Vertical mergers 226

1.1.1. Number of major competitors in the market and concentration levels 226

1.1.2. Requirements for successful coordination 226

1.1.2.1. Understanding on the terms of coordination 227

1.1.2.2. Monitoring deviations 228

1.1.2.3. Deterrence mechanisms 229

1.1.2.4. Reaction of outsiders 229

1.2. Conglomerate mergers 229

2. US 231

2.1. Vertical mergers 231

2.1.1. Elimination of a potential entrant 232

2.1.2. Barriers to entry 232

2.1.3. Likelihood of post-merger coordination 232

2.1.3.1. Retail-level vertical integration 233

2.1.3.2. Elimination of a disruptive buyer 234

2.2. Conglomerate Mergers 234

IV. Merger enforcement 235

1. EU 235

1.1. Vertical Mergers 235

1.1.1. TomTom 235

1.1.2. Nokia 239

1.1.3. Philips 242

1.2. Conglomerate Mergers 244

1.3. Conclusion 246

2. US 248

2.1. Vertical mergers 248

2.1.1. Premdor 248

2.1.2. PepsiCo 251

2.1.3. Coca-Cola 253

2.1.4. GrafTech 254

2.2. Conglomerate Mergers 256

2.3. Difficulties of non-horizontal merger enforcement 257

IV. Conclusion 262

Chapter 4: Conclusion 266

Bibliography 276

List of abbreviations

ABA	American Bar Association
ABF	Associated British Foods plc
Acetex	Acetex Corporation
AEUV	Vertrag über die Arbeitsweise der Europäischen Union
AG	Aktiengesellschaft
Air France-KLM	Air France-KLM Holding
AMS-AUA	Amsterdam-Aruba flight route
AMS-CUR	Amsterdam-Curacao flight route
Antalis	Antalis International SAS
Antitrust L.J.	Antitrust Law Journal
Arch Coal	Arch Coal, Inc.
Areva	Areva T&D SA
Arjowiggins	Arjowiggins SAS
Art.	Article/Artikel
Audatex	Audatex North America, Inc.
Aurora	Aurora Equity Partners III, LLP
Baxter	Baxter International, Inc.
Bd.	Band
Blackstone	Blackstone Crystal Holdings Capital Partners
Blue Cross	Blue Cross Shield of Illinois
BP	BP plc.
BSG	Billing Services Group, Ltd.
CCC	CCC Information Services, Inc.
CCE	Chief Competition Economist / Coca-Cola Enterprises
Celanese	Celanese Corporation
CEMFI	Centro de Estudios Monetarios y Financieros
CEO	Chief Executive Officer
CFI	Court of First Instance (former name used for the General Court)
CFR	Code of Federal Regulations
Cir.	Circuit
cit.	citation
Co	Company
Coleman	Coleman Natural Foods LLC
Competition DG	Competition Directorate General

Comp Trib	Competition Tribunal
CON	Illinois' Certificate of Need
ConocoPhilips	ConocoPhilips Company
CSIC	Consejo Superior de Investigaciones Científícas
CSL	CSL Limited
CV	Curriculum Vitae
Daicel	Daicel Corporation
D.D.C.	US District Court, District of Columbia
DDIY	Digital do-it-yourself (tax preparation products)
Dean	Dean Foods Company
DG Comp	Directorate General for Competition
DoJ	US Department of Justice
DPSG	Dr Pepper Snapple Group, Inc.
DSM Bakery	DSM Bakery Ingredients BV
DT	Deutsche Telekom AG
EAGCP	Economic Advisory Group on Competition Policy
EC	European Commission
EC Ancillary Restraints Notice	Commission notice on restrictions directly related and necessary to concentrations
EC Notice on Market Definition	Commission notice on the definition of the relevant market for the purposes of Community competition law
ECO	ECO, Inc.
ECR	European Court Reports
EC Remedies Notice	Commission notice on remedies acceptable under the Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004
ECU	European Currency Unit (unit of account used by the EC prior to the introduction of the euro)
ed.	edition
EDCH	Emirates Data Clearing House
E.D.N.Y.	US District Court for the Eastern District of New York
ed(s).	editor(s)
E.D.Wis.	US District Court for the Eastern District of Wisconsin
EEC	European Economic Community
e.g.	exempli gratia ("*for example*")
Entek	Entek International LLC
EPP	European People's Party
ESCR	Economic and Social Research Council
et al.	et alii ("*and others*")
etc.	et cetera ("*and so on*")

et seq.	et sequentes (“*and the following*”)
EU	European Union
EUV	Vertrag über die Europäische Union
FCC	Federal Communications Commission
FFP	FFP Family Investments
FIW	Forschungsinstitut für Wirtschaftsverfassung und Wettbewerb e.V.
FKVO	Fusionskontrollverordnung
Foremost	Foremost Farms USA
Foster	FTC v Paul L Foster et al.
F. Supp.	Federal Supplement
FTC	US Federal Trade Commission
GBI	GBI Holding BV
GBI Ingredients	GBI Ingredients, the Netherlands, BV
GCP	Online Magazine for Global Competition Policy
GDR	German Democratic Republic
GE	General Electric Company
Geo. Mason L. Rev.	George Mason Law Review
Gerber	Gerber Products Company
Giant	Giant Industries, Inc.
GrafTech	GrafTech International Ltd.
Grifols	Grifols, SA
GSM	Global System for Mobile Communications
H3G	H3G Austria Holdings
Heinz	Heinz Co.
HHI	Herfindahl-Hirschman Index
H&R	H&R Block, Inc.
HWG	Hutchison Whampoa Ltd.
ibid	ibidem (“*the same place*”)
ICN	International Competition Network
i.e.	id est (“*that is*”)
IGP	Industrial Growth Partners II LP
Ind. L.J.	Indiana Law Journal
IRS	International Revenue Service
J. Int’l Econ. L.	Journal of International Economic Law
Joint-Venture Guidelines	Joint Venture Guidelines of the US Department of Justice
K+S	Kali + Salz Group
Kedrion	Kedrion SpA

Kennecott	Kennecott Energy Co.
Kiewit	Peter Kiewit Sons, Inc.
KLM	KLM Royal Dutch Airlines NV
Koehler	Koehler Paper Group
Kraft	Kraft General Foods, Inc.
LBS	Location Based Services
LLC	Limited Liability Company
LLP	Limited Liability Partnership
L. Rev.	Law Review
MAP	MAP Merchant Group BV
Martinair	Martinair Holland NV
MdK	Mitteldeutsche Kali AG
MFN	Most Favoured Customer
Mich. L. Rev.	Michigan Law Review
MiCRA	Microeconomic Consulting & Research Associates, Inc.
Microporous	Microporous Products LP
Mitchel	Mitchel International Inc.
Mitsubishi	Mitsubishi Paper Mills Ltd.
MNO	Mobile Network Operator
M-real	M-real Zanders GmbH / M-real Corporation
MV	Medium Voltage
Nabisco	Nabisco Holdings Corp.
NAVTEQ	NAVTEY Corp.
NERA	National Economic Research Associates
New Vulcan	New Vulcan Coal Holdings
No.	Number
NYU	New York University
N.Y.U.L. Rev.	New York University Law Review
NYSE	New York Stock Exchange
Octapharma	Octapharma AG
OECD	Organisation for Economic Cooperation and Development
OEM	Original Equipment Manufacturer
OJ	Official Journal
OpenGate	Open Gate Capital
Orange	Orange Austria Telecommunications GmbH
OSD	Office Supply Dealer
OSF	OSF HealthCare System
p.	page

para.	paragraph
paras.	paragraphs
PAS	PepsiAmericas, Inc.
PBG	Pepsi Bottling Group, Inc.
PE	Performance Polyethylene
Peabody	Peabody Holding Co.
PepsiCo	PepsiCo, Inc.
Perdue	Perdue Farms, Inc.
PND	Portable Navigation Device
PPTA	Plasma Protein Therapeutics Association
pp.	pages
Premier	Premier Paper Group Ltd.
PSOE	Partido Socialista Obrero Espanol (Spanische Sozialistische Arbeiterpartei)
PYC	Pepsi-Cola Bottling Co.
R&D	Research & Development
RAG	RAG American Coal Holding
Reflex	Reflex Premiumpapier GmbH, Düren, Germany
Rev Ind Organ	Review of Industrial Organization
RHS	Rockford Health System
RTE	Ready-to-eat
Schneider	Schneider Electric SA
SCPA	Société Commérciale des Potasses et de l'Azote
S.D.N.Y.	US District Court, Southern District of New York
Seadrift	Seadrift Coke LP
sec.	section (e.g., "section 7 Clayton Act")
Sedona Conf. J.	Sedona Conference Journal
Sequana	Sequana Capital
SIEC	Significant impediment of effective competition
SIEC-test	Test for a significant impediment of effective competition
SLC	Substantial lessening of competition
SLC-test	Test for a substantial lessening of competition
SLI-batteries	Starter, Lighter and Ignition Batteries
SPRB	Southern Powder River Basin
Sprint	Sprint Nextel Corp.
SPV	Special purpose vehicle
Stan. L. Rev. Online	Standford Law Review Online
Stubai	Stubai SCA

Styrol	Styrol Holding 1 GmbH
SUERF	Société Universitaire Européenne de Recherches Financières
Syniverse	Syniverse Technologies, Inc.
TA	Telekom Austria
Talecris	Talecris Biotherapeutics Holdings Corp.
TaxACT	2SS Holdings, Inc.
TCCC	The Coca-Cola Company
Tele Atlas	Tele Atlas NV
TEU	Treaty on the European Union
TFEU	Treaty on the Functioning of the European Union
THA	Deutsche Treuhandanstalt (German Trust Agency that privatised Eastern German enterprises)
TLV	Total loss valuation
TomTom	TomTom NV
Triton	Triton Coal Company LLC
UK	United Kingdom
U.K. MMC	UK Monopolies and Mergers Commission (replaced by the UK Competition Commission in 1999)
U. Pa. J. Int'l Econ. L.	University of Pennsylvania Journal of International Economic Law
UPS	United Parcel Service
US	United States
US App. D.C.	US Court of Appeals – D.C. Circuit
USC	United States Code
US Remedies Policy Guide	Antitrust Division Policy Guide to Merger Remedies of the US Department of Justice
US SEC	US Securities and Exchange Commission
Torraspapel	Torraspapel, SA
v.	versus
VAM	vinyl acetate monomer
Verizon	Cellco Partnership d/b/a Verizon Wireless
vol.	volume
VVD	Volkspartij voor Vrijheid en Democratie (Dutch People's Party for Freedom and Democracy)
Western	Western Refining, Inc.
Wm. & Mary L. Rev.	William and Mary Law Review
WSJ	Wall Street Journal
ZMZ	Zheijiang Minfeng Zanders Paper Company Ltd.

1984 Non-Horizontal Merger Guidelines	1984 Merger Guidelines of the US Department of Justice
2004 Horizontal Merger Guidelines	Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings
2004 Merger Regulation	Council Regulation (EC) No 139/2004 on the control of Concentrations between undertakings
2006 Commentary	Commentary on the Horizontal Merger Guidelines of the US Department of Justice
2008 Non-Horizontal Merger Guidelines	Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings
2010 Horizontal Merger Guidelines	Horizontal Merger Guidelines of the US Department of Justice and the Federal Trade Commission

Summary

This dissertation compares the use of coordinated effects analysis in merger control by the European Commission, the US Department of Justice and the US Federal Trade Commission. Coordinated effects, one of the two theories of harm in European and American merger control, analyses potential mergers based on whether the remaining competitors in the market will be able to align their behaviour without violating the cartel prohibition – to the detriment of competition and, ultimately, consumers. The role of coordinated effects as a tool in merger control in oligopolistic markets differs in the European Union and the United States.

Coordinated effects analysis is exceedingly complex because it necessitates an ex ante game-theory analysis of the interplay of market players. This necessitates taking into account a great number of factors. As a result, the European Union favours analysing mergers based on their unilateral effects on competition also in oligopolistic markets. This analysis, though also complex, focuses on the behaviour of the merged entity and therefore does not necessitate an evaluation of the post-merger behaviour of all remaining competitors. Despite the complexity of coordinated effects analysis, the United States have analysed the coordinated effects of mergers in oligopolistic markets early on.

In recent years, there has been an advance in game theoretic modelling and quantitative analysis which has led to the improved ability of economists to conduct the complex economic assessments required for a coordinated effects analysis. This advance should have lead to the increased prominence of this approach on both sides of the Atlantic. For several reasons which dissertation will explain in more detail, this expectation has not been fulfilled in European merger control.

In the dissertation that follows, the principles of coordinated effects analysis in both the European Union and the United States are set out in the introduction (Chapter 1). Thereafter, the focus turns to the treatment of coordinated effects in horizontal merger analysis (Chapter 2) and vertical and conglomerate merger analysis (Chapter 3).

The findings of this dissertation are presented in Chapter 4, which critically compares merger control methodology regarding coordinated effects analysis in European and US merger control.

Zusammenfassung

Die Arbeit vergleicht die Untersuchung koordinierter Effekte in der Fusionskontrolle durch die Europäische Kommission, das US-amerikanische Department of Justice und die US-amerikanische Federal Trade Commission. Koordinierte Effekte sind eine von zwei Formen wesentlicher Wettbewerbsbeeinträchtigungen in der europäischen und US-amerkanischen Fusionskontrolle. Koordinierte Effekte treten auf, wenn die nach der Fusion im Markt vorhandenen Wettbewerber ihr Verhalten zum Nachteil des Wettbewerbs und letztlich der Konsumenten koordinieren können, ohne dabei gegen das Kartellverbot zu verstoßen. Zusammenschlüsse in Oligopolmärkten werden in der europäischen und US-amerikanischen Fusionskontrolle unterschiedlich stark auf koordinierte Effekte hin untersucht.

Die Analyse koordinierter Effekte bereitet in der Praxis Schwierigkeiten. Das Verhalten der einzelnen Marktteilnehmer untereinander muss anhand von spieltheoretischen Modellen im Rahmen einer ex-ante Betrachtung untersucht werden. Das erfordert die Berücksichtigung einer großen Anzahl verschiedener Faktoren. Aus diesem Grund untersucht zum Beispiel die Europäische Kommission Zusammenschlüsse auch in Oligopolmärkten lieber auf der Grundlage ihrer einseitigen Wirkungen auf den Wettbewerb. Diese Analyse, obwohl ebenfalls komplex, orientiert sich am Verhalten des fusionierten Unternehmens und erfordert daher keine Beurteilung des Verhaltens aller im Markt verbleibenden Wettbewerber. Demgegenüber haben die USA trotz der Komplexität der Untersuchung schon sehr früh Zusammenschlüsse in Oligopolmärkten anhand ihrer koordinierten Wirkungen untersucht.

Die Fähigkeit von Wirtschaftswissenschaftlern, die für die Beurteilung der koordinierten Wirkungen von Zusammenschlüssen erforderlichen ökonomischen Untersuchungen durchzuführen, haben sich durch die Fortschritte im Bereich der Spieltheorie und der quantitativen Analyse in den letzten Jahren deutlich verbessert. Die Annahme lag nahe, dass diese Entwicklung die Bedeutung koordinierter Wirkungen im Bereich der Zusammenschlusskontrolle auf beiden Seiten des Atlantiks verstärkt. Aus Gründen, die in dieser Dissertation genauer behandelt werden, ist diese Erwartung im Bereich der europäischen Fusionskontrolle nicht erfüllt worden.

Das Einleitungskapitel (Kapitel 1) dieser Dissertation vermittelt die Grundlagen der Analyse von koordinierten Wirkungen in der Europäischen Union und den USA. Danach wird die Behandlung koordinierter Wirkungen im Zusammenhang mit der Beurteilung horizontaler Zusammenschlüsse (Kapitel 2) sowie vertikaler und konglomerater Zusammenschlüsse (Kapitel 3) behandelt.

Die Ergebnisse der Dissertation werden in Kapitel 4 dargestellt, das noch einmal kritisch die Methodologie der Fusionskontrolle im Zusammenhang mit der Analyse koordinierter Wirkungen in der europäischen und der US-amerikanischen Fusionskontrolle vergleicht.

Résumé

Cette thèse compare l'utilisation de l'analyse d'effets coordonnés dans le contrôle de fusions par la Commission Européenne et par le Department of Justice et la Federal Trade Commission des États-Unis. Les effets coordonnés sont l'une de deux formes d'entraves importantes à la libre concurrence que connait le contrôle de fusions par les autorités européennes et américaines. On est en présence d'effets coordonnés quand les concurrents présents sur le marché après la fusion sont en mesure de coordonner leur comportement au détriment de la libre concurrence et en fin de compte au détriment des consommateurs, sans pour autant violer l'interdiction frappant la création de cartels. En ce qui concerne les effets coordonnés, l'analyse de fusions dans des marchés oligopolistiques diffère sensiblement entre l'Europe et les États-Unis.

En pratique, l'analyse d'effets coordonnés s'avère difficile. Le comportement réciproque des différentes parties en présence sur le marché doit faire l'objet d'une analyse ex ante, en utilisant des modèles créés par la théorie des jeux. À cet effet, il convient de tenir compte d'un grand nombre de facteurs différents. Pour cette raison, la Commission Européenne par exemple préfère analyser des fusions, même si elles ont lieu sur des marchés oligopolistiques, en se basant sur les effets unilatéraux de ces fusions sur la libre concurrence. Une telle analyse, pour complexe qu'elle soit elle aussi, s'oriente sur le comportement de l'entreprise fusionnée et ne nécessite donc pas d'évaluation du comportement de la totalité des concurrents qui restent sur le marché. Les États-Unis par contre ont, malgré la complexité de cette analyse, déjà analysé très tôt les effets coordonnés de fusions sur des marchés oligopolistiques.

Grâce aux progrès dans le domaine de la théorie des jeux et de l'analyse quantitative, les économistes ont, au cours des dernières années, nettement amélioré leur capacité de mettre en œuvre les analyses économiques nécessaires à l'évaluation des effets coordonnés de fusions. Il était donc permis de supposer que ce développement renforcerait l'importance de l'utilisation de l'analyse des effets coordonnés dans le domaine du contrôle de fusions des deux côtés de l'Atlantique. Or, pour des raisons qui feront l'objet d'un examen approfondi dans la présente thèse, le contrôle de fusions en Europe n'a pas répondu à cette attente.

Le chapitre introductif (chapitre 1) de la présente thèse présente les bases de l'analyse d'effets coordonnés au sein de l'Union Européenne et aux Etats-Unis. Ensuite, il s'agit de traiter les effets coordonnés en connexe avec l'analyse de fusions horizontales (chapitre 2) ainsi que de fusions verticales et de conglomérats (chapitre 3).

Les résultats de la thèse sont présentés au chapitre 4 qui compare encore une fois de manière critique la méthodologie du contrôle de fusions en ce qui concerne l'analyse d'effets coordonnés, telle qu'elle est appliquée dans le cadre du contrôle de fusions européen et américain.

Chapter 1: The purpose of this dissertation and basic principles of coordinated effects analysis in the EU and the U.S.

I. Purpose of the dissertation

This dissertation analyses coordinated effects in the modern economic and legal literature, the current merger control guidelines of the European Union (***EU***) and the United States (***US***) and the enforcement practice of the European Commission (***EC***), the US Department of Justice (***DoJ***) and of the US Federal Trade Commission (***FTC***).

The relevant law for the assessment of mergers in the EU is the 2004 Merger Regulation.[1] The assessment of mergers in the US is based on section 7 of the Clayton Act.[2]

In addition to laws, the assessment of mergers in the US and the EU is based on guidelines. The US Horizontal Merger Guidelines date from 2010.[3] The EU Horizontal Merger Guidelines date from 2004.[4] Both enumerate in detail the factors that contribute to coordination in an affected market and how a merger may increase the likelihood of post-merger coordination. The EU has also published highly detailed guidelines on non-horizontal mergers.[5] The US, on the other hand, still assesses non-horizontal mergers on the basis of old guidelines that date from 1984.[6]

In addition to merger guidelines, US and EU antitrust authorities have published notices and guides on specific aspects of merger control. Examples include the EC's 2004 Notice on Remedies[7] and the DoJ's 2011 Policy Guide to Merger Remedies[8].

---

[1] Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings, OJ L 24, 29.1.2004, p. 1-22, available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2004:024:0001:0022:en:PDF, last viewed: 17 February 2013 (***2004 Merger Regulation***).

[2] Clayton Act section 7, 15 USC section 18 (***section 7 of the Clayton Act***).

[3] Horizontal Merger Guidelines of the US Department of Justice and the Federal Trade Commission, 19 August 2010, available at: http://www.justice.gov/atr/public/guidelines/hmg-2010.html, last viewed: 7 January 2013 (***2010 Horizontal Merger Guidelines***).

[4] Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 31, 05.02.2004, pp. 5-18, available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2004:031:0005:0018:en:PDF, last viewed: 7 January 2013 (***2004 Horizontal Merger Guidelines***).

[5] Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 265, 18.10.2008, pp. 6-25, available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:265:0006:0025:en:PDF, last viewed: 7 January 2013 (***2008 Non-Horizontal Merger Guidelines***).

[6] US Dep'mt of Justice, 1984 Merger Guidelines, available at: http://www.justice.gov/atr/hmerger/11249.pdf, last viewed: 7 January 2013 (***1984 Non-Horizontal Merger Guidelines***).

[7] Commission notice on remedies acceptable under the Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004, OJ C 267, 22.10.2008, pp. 1-27, available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:267:0001:0027:EN:PDF, last viewed: 7 January 2013 (***EC Remedies Notice***). Further examples in the EU include the Commission notice on the definition of the Relevant Market for the purposes of Community competition law, OJ C 372, 09.12.1997, p. 5, available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31997Y1209(01):EN:NOT, last viewed: 7 January

The EU and US Merger Guidelines include many of the contemporary economic fundamentals of when a merger will be considered anti-competitive. They also include detailed sections on coordinated effects. By issuing highly detailed guidelines that incorporate coordinated effects economics, the EC, the FTC and the DoJ have committed themselves to applying coordinated effects economics in their merger analysis.

The dissertation also analyses how often merger control decisions are based on coordinated effects as opposed to unilateral effects, the arguments used when assessing coordinated effects, the influence of the number of remaining competitors on the decision of the competition authority and courts, the economics analysis employed, the role of expert reports and whether the merger decision was upheld in court. It suffices to say at this stage that the EC has been reluctant in the past to base decisions on coordinated effects. It will be interesting to see whether this has changed recently. The DoJ and the FTC have relied on coordinated effects analysis early on, but the focus then shifted to unilateral effects. With respect to the DoJ and the FTC, this dissertation analyses whether coordinated effects analysis has been revived in recent times.

The dissertation also touches upon more fundamental questions of merger control, such as the effect of changes in administration on competition authorities' enforcement practices and the general role of politics in merger control as well as the limits of econometrics and quantitative analysis in merger control's *ex-ante* analysis. To avoid straying from the topic of coordinated effects, the analysis of these questions will be limited to the extent that they are relevant to coordinated effects analysis.

What distinguishes this dissertation from previous studies is that it provides the complete picture on coordinated effects analysis by the EC, the FTC and the DoJ today. It includes: (1) what economists currently tell competition authorities about coordinated effects; (2) what competition authorities promise to do in the guidelines; and (3) what the real-life case-by-case analysis looks like. A comprehensive approach is indispensable to understanding how coordinated effects analysis works in the EU and the US and what could be done to improve it.

2013 (***EC Notice on Market Definition***) and the Commission Notice on restrictions directly related and necessary to concentrations, OJ C 56, 05.03.2005, pp. 24-31, available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52005XC0305(02):EN:NOT, last viewed: 7 January 2013 (***EC Ancillary Restraints Notice***).

[8] US Dep'mt of Justice, Antitrust Division Policy Guide to Merger Remedies, June 2011, available at: http://www.justice.gov/atr/public/guidelines/272350.pdf, last viewed: 7 January 2013 (***US Remedies Policy Guide***). See also US Dep'mt of Justice, Commentary on the Horizontal Merger Guidelines, March 2006, available at: http://www.justice.gov/atr/public/guidelines/215247.htm, last viewed: 7 January 2013 (***2006 Commentary on the Horizontal Merger Guidelines*** or ***2006 Commentary***) and US Dep'mt of Justice, Joint-Venture Guidelines, April 2000, available at: http://www.ftc.gov/os/2000/04/ftcdojguidelines.pdf, last viewed: 7 January 2013 (***Joint-Venture Guidelines***).

This dissertation focuses on mergers in highly concentrated, oligopolistic markets that have reduced the number of players in the market from six-to-five, five-to-four, four-to-three or three-to-two.

II. Merger analysis at the EC

The EC is competent to review concentrations with a Community dimension.[9] A concentration has a Community dimension, if either the turnover thresholds laid down in Article 1(2) or those laid down in Article 1(3) of the 2004 Merger Regulation are fulfilled.[10] Concentrations without a Community dimension and which are not referred to the EC are reviewed by the competition authorities of the Member States.

According to Article 4(1), concentrations with a Community dimension shall be notified to the prior to their implementation and following the conclusion of the agreement, the announcement of the public bid, or the acquisition of a controlling interest. If the EC finds that the notified transaction falls within the scope of the 2004 Merger Regulation, it will publish the fact of the notification, indicating the names of the undertaking concerned, their country of origin, the nature of the concentration and the economic sectors involved (Article 4(3)).

Article 6(1) provides that the EC will examine the notification as soon as it is received. Where the EC finds that the notified concentration does not fall within the scope of the Regulation, it will record that finding by means of a decision (Article 6(1)(a)). Where it finds that the transaction falls within the scope of the Regulation but does not raise serious doubts as to its compatibility with the common market, the EC will declare the concentration compatible with the common market (Article 6(1)(b)). Such a clearance decision will be deemed to cover restrictions that are directly related and necessary to the implementation of the concentration (so-called ancilliary restraints, Article 6(1)(b) second subparagraph).

---

[9] On the basis of Articles 1(1), 4(5) and 22, the EC is also competent to review mergers without a Community dimension in the case of a referral.

[10] Article 1(2): "*(a) the combined aggregate worldwide turnover of all the undertakings concerned is more than EUR 5 000 million; and (b) the aggregate Community-wide turnover of each of at least two of the undertakings concerned is more than EUR 250 million, unless each of the undertakings concerned achieves more than two-thirds of its aggregate Community-wide turnover within one and the same Member State.*" Article 1(3): "*A concentration that does not meet the thresholds laid down in paragraph 2 has a Community dimension where: (a) the combined aggregate worldwide turnover of all the undertakings concerned is more than EUR 2500 million; (b) in each of at least three Member States, the combined aggregate turnover of all the undertakings concerned is more than EUR 100 million; (c) in each of at least three Member States included for the purpose of point (b), the aggregate turnover of each of at least two of the undertakings concerned is more than EUR 25 million; and (d) the aggregate Community-wide turnover of each of at least two of the undertakings concerned is more than EUR 100 million, unless each of the undertakings concerned achieves more than two-thirds of its aggregate Community-wide turnover within one and the same Member State.*"

Where the EC finds that the notified concentration raises serious doubts regarding its compatibility with the common market, it shall decide to initiate proceedings. This in-depth review, also called "*Phase 2*", will be closed by means of a decision provided for in Article 8(1) to (4) unless the undertakings concerned demonstrate that they have abandoned the transaction (Article 6(1)(c)).

Where the EC finds after the in-depth review that the (modified) transaction does not significantly impede effective competition in the common market or a substantial part of it, it will declare the concentration compatible with the common market (Articles 8(1), (2), 2(2)). If the parties have entered into commitments with a view to rendering the concentration compatible with the common market, the EC may impose conditions and obligations (Article 8(2) second subparagraph).

Where the EC finds that the concentration would significantly impede effective competition, in the common market or a substantial part of it, it will issue a decision declaring the concentration incompatible with the common market (Articles 8(3), 2(3)).

III. The concept of coordinated effects

A merger leads to coordinated effects if it changes the market structure in a way that enables the remaining firms to compete less vigorously and to raise prices above the prevailing level.[11] The effects are "*coordinated*" rather than "*unilateral*" because the competing firms realise that following a common strategy yields higher profits than individual competitive behaviour. The actions are not, therefore, based on the *individual* exploitation of market power.[12]

Coordinated effects arise if competing companies in a given market align their behaviour without resorting to express collusion or concerted practices. Antitrust authorities cannot punish tacit coordination because the behaviour is not illegal. The relevant statutes in EU and federal US law - Article 101 TFEU[13] and section 1 of the Sherman Act[14] - only cover agreements[15] (sec. 1 Sherman Act) and "*concerted practices*" (Article 101 TFEU) that have

---

[11] Simon Bishop/Andrea Lofaro, *A legal and economic consensus? The theory and practice of coordinated effects in EC Merger Control,* The Antitrust Bulletin, Spring-Summer 2004, p. 198.
[12] Bishop et al, *A legal and economic consensus?*, supra, p. 198.
[13] Treaty on the Functioning of the European Union (Consolidated Version), OJ C 326, 26.10.2012, p. 47, available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2012:326:0047:0200:EN:PDF, last viewed: 7 January 2013.
[14] § 1 Sherman Act, 15 USC § 1.
[15] Section 1 of the Sherman Act uses the words "*contract*", "*combination in the form of trust*" and "*conspiracy*" which requires a meeting of minds and excludes autonomous coordinated behaviour.

as their "*object or effect the prevention, restriction or distortion of competition*". This does not include tacit coordination.[16]

Section 1 of the Sherman Act is even more restrictive. It requires a "*meeting of minds*". The mere exchange of competitively sensitive information – even though punishable under EU law – does not constitute a violation of Section 1 of the Sherman Act.

Nevertheless, "*coordinated effects*" harm competition in the affected market because they enable companies to profitably raise prices or reduce output by acting in concert. This is why coordinated effects are the second main theory of harm in merger control in the EU and the US besides unilateral (non-coordinated) effects.

The 2004 EU Horizontal Merger Guidelines of the EC describe coordinated effects in the following way:

> *"In some markets the structure may be such that firms would consider it possible, economically rational, and hence preferable, to adopt on a sustainable basis a course of action on the market aimed at selling at increased prices."*[17]

In markets affected by coordination, market conditions are such that each company knows as a result of multiple repetitions that it will be better off aligning its behaviour to the perceived behaviour of its rivals. Whether reaching an agreement on the terms of coordination is possible and sustainable depends upon the structure of the affected market: Factors that contribute to coordination are high concentration levels, product homogeneity, demand inelasticity and market transparency.

IV. Coordinated effects in the EU

1. Development of the concept of collective dominance in horizontal merger cases

"*Coordinated effects*" and "*collective dominance*" *de facto* refer to the same behaviour. A difference exists on a theoretical level because coordinated effects do not require a finding of dominance. In practice, however, EU and US coordinated effects analysis focuses on the likelihood of coordination between the major competitors in the affected market. These competitors together have market shares that would, in almost all cases also, be substantial enough for a finding of collective dominance.

[16] See Torsten Körber, in Immenga/Mestmäcker, *EU-Wettbewerbsrecht*, 5th ed. (2012), FKVO Art. 2, para. 459, with further reference.
[17] 2004 Horizontal Merger Guidelines, para. 39.

The EU's concept of collective dominance developed under the old 1989 Merger Regulation.[18] The Regulation's Article's 2(2) and (3) focused on dominance:

> "*2. A concentration which does not create or strengthen a dominant position as a result of which effective competition would be significantly impeded in the common market or in a substantial part of it shall be declared compatible with the common market.*
>
> *3. A concentration which creates or strengthens a dominant position as a result of which effective competition would be significantly impeded in the common market or in a substantial part of it shall be declared incompatible with the common market.*"

A precondition for the finding that a transaction significantly impeded effective competition in the common market was the creation or strengthening of a dominant position. Due to the fact that Articles 2(2) and (3) of the Regulation did not explicitly refer to collective dominance, it was unclear for some time whether the Regulation justified intervention on this basis. This created a perceived enforcement problem in situations in which no single firm became dominant as a result of the transaction, but instead several firms together held a significant part of the market and there was a chance that they would coordinate their action (and act independently of other competitors).[19]

Five major decisions under the old 1989 Merger Regulation established collective dominance as a new concept under the existing legal framework and removed the (perceived) enforcement problem regarding coordinated effects: *Nestlé/Perrier, Kali + Salz, Gencor, Airtours* and *Impala.*[20]

---

[18] Council Regulation (EEC) No 4064/89 of 21 December 1989 on the control of concentrations between undertakings, OJ L 257/90, 30/12/1989, p. 13 (***1989 Merger Regulation***).

[19] There was a much more realistic enforcement gap in situations in which a non-dominant firm was able to act to some degree independently of its competitors as a result of the merger. The real "*gap*" therefore was in unilateral effects analysis.

[20] Case No. IV/M.190, *Nestlé/Perrier*, 22 July 1992, OJ L 356, 05/12/1992, pp. 1-31; IV/M.308 – *Kali-Salz/MdK/Treuhand*, 14 December 1993, OJ L 186, 21/07/1994, pp. 38-56; Case No IV/M.619, *Gencor/Lonrho,* 24 April 1996, OJ L 11, 14/01/1997, pp. 30-72; IV/M.1524 – *Airtours/First Choice*, 22 September 1999, OJ L 93, 13/04/2000, pp. 1-33; COMP/M.3333 – *SONY/BMG*, 19 July 2004, OJ L 62, 09/03/2005, pp. 30-33; Killick et al., *Horizontal and Vertical Mergers in the Reformed EC Merger Control*, supra, at 439-442; Silvelyn Wrase, *Europäische Fusionskontrolle*, 2007, pp. 122-128. See also Moritz Pellmann, *Significant Impediment to Effective Competition,* 2006, p. 231.

1.1 Nestlé

On 25 February 1992, Nestlé SA (***Nestlé***)[21] notified a public bid for all of the shares of Source Perrier SA (***Perrier***)[22] through Demilac SA (***Demilac***), a jointly controlled subsidiary of Nestlé and Banque Indosuez. Nestlé held an option to purchase the shareholding of Banque Indosuez in Demilac, which it had already by that time announced it would take up.[23]

The merger had its main effects in the market for the bottling of water from a natural spring or source.[24] To alleviate the EC's concerns about the merger's effects, Nestlé and Bussois-Souchon-Neuvesel (***BSN***)[25] agreed on 30 January 1992 to sell the Volvic source of Perrier to BSN.[26]

Even with the commitment to sell Volvic, Nestlé and BSN would have been the two major players in the French market for bottled source water (still and sparkling) post-merger. They would have had a combined market share of 82.3%.[27] The merger reduced the number of major players in the market from three to two. The market was highly transparent, the remaining two major competitors had similar firm structures, demand price elasticity was relatively low, innovation only played a minor role and there were indications that the level of price competition was already low pre-merger.[28]

Nestlé, supported by BSN, submitted that Article 2(3) of the 1989 Merger Regulation did not apply to oligopolistic dominance.[29] The EC believed that it did:

> *"The dominant position is only the means by which effective competition can be impeded. Whether this impediment occurs through single firm power or collective*

[21] Nestlé SA is a publicly held Swiss company active in nutrition. The Nestlé group manufactures and sell food products on a worldwide basis. For more information, see the website of the company, available at: www.nestle.com, last viewed: 7 January 2013.
[22] Perrier SA, a French company, is mainly active in the production and distribution of bottled water. For more information on Perrier, see the website of the company, available at: www.perrier.com, last viewed: 7 January 2013.
[23] *Nestlé,* para. 1.
[24] *Nestlé,* para. 7.
[25] BSN merged with Danone in 1972 to form the company BSN Gervais Danone. See the statement of Daniel Carasso, Vice-President of BSN Gervais Danone, on the website of Danone, available at: http://www.danone.com/en/press-releases/cp-mai-2009.html, last viewed: 7 January 2013.
[26] *Nestlé,* para. 1.
[27] *Nestlé,* paras. 40, 48. See also Killick et al., *Horizontal and Vertical Mergers in the Reformed EC Merger Control*, supra, at 439. The segment of still water represents approx. 84% of the total bottled-water market, *Nestlé,* para. 35.
[28] *Nestlé,* paras. 57, 121-127. Explained in detail in Killick et al., *Horizontal and Vertical Mergers in the Reformed EC Merger Control,* supra, p. 439. *Killick et al.* point out that the EC did not address the need for an adequate deterrent mechanism to prevent members of the duopoly from cheating, but that this requirement was only added later by the General Court in its *Airtours* judgement. See also Marc Amstutz, *Kollektive Marktbeherrschung im europäischen Wettbewerbsrecht: Eine evolutorische Perspektive*, 1999, Tübingen, p. 22 et seq.; Christian Bürger, *Die erhebliche Verhinderung wirksamen Wettbewerbs in Art. 2 der Verordnung Nr. 4064/89 und in Art. 2 der Verordnung Nr. 139/2004*, Juristische Reihe TENEA/www.jurawelt.com; Bd. 87, p. 34 et seq.; Arndt Christiansen, *Der More Economic Approach in der EU-Fusionskontrolle: Entwicklung, konzeptionelle Grundlagen und kritische Analyse*, Frankfurt a.M., 2010, p. 39.
[29] *Nestlé,* para. 109.

power cannot be decisive for the application or non-application of Article 2 (3) of the Merger Regulation."[30]

The EC argued that to exclude oligopolistic dominance from the EC's scrutiny would have created a loophole which would have violated the objective of the Treaty to maintain effective competition.[31] It also referred to the US, German, French and UK merger control laws which all applied to both single firm and oligopolistic dominance.[32] It was the first clear statement of the EC on collective dominance.[33]

1.2 Kali-Salz

The concept of collective dominance was further developed in *Kali-Salz*. Kali-Salz (***K+S***)[34] and Treuhandanstalt (***THA***)[35] planned to form a joint venture which combined the potash and rock-salt activities of K+S and Mitteldeutsche Kali AG (***MdK***). The EC raised serious doubts regarding the compatibility of the project with the common market.[36] At that time, the potash and rock-salt activities of the former German Democratic Republic (***GDR***) were combined in MdK.[37] K+S and THA were going to hold 51% and 49% respectively of the joint venture.[38]

The joint venture reduced the number of major competitors in the market for the production of potash in the EEA (excluding Germany) from three to two, as had been the case in *Nestlé*, leaving only the joint venture of K+S and MdK and the French firm Société Commérciale des Potasses et de l'Azote (***SCPA***). Combined, these accounted for 80% of the EU's total potash production.[39]

---

[30] *Nestlé,* para. 113.
[31] *Nestlé,* para. 114.
[32] *Nestlé,* para. 115.
[33] The EC approved the transaction after Nestlé offered to divest a number of springs and brand names. The case therefore never made it to court and it took some time until the question whether the EC was competent to intervene against mergers that threatened to create a collectively dominant position was assessed by the EU's judiciary. Killick et al., *Horizontal and Vertical Mergers in the Reformed EC Merger Control,* supra, p. 440.
[34] K+S Group was one of the first producers of fertiliser in Germany. Salzdetfurth AG – the oldest forerunner of K+S AG – was established in 1899. See http://www.k-plus-s.com/en/historie/index.html, last viewed: 22 April 2013. K+S is a subsidiary of the chemicals group BASF. At the time of the decision, K+S was primarily engaged in the production of potash, potash- and salt-based industrial products and waste disposal services. See *Kali-Salz*, para. 4. For an analysis of K+S, see also Frank, Jungermann, *Kollektive Marktbeherrschung durch interpendentes Parallelverhalten und deren Missbrauch*, FIW-Schriftenreihe, Heft 210, Carl Heymanns Verlag, 2007, pp. 119-121.
[35] THA was created to privatise a total of approx. 13,000 Eastern German publicly owned enterprises after the collapse of the German Democratic Republic (***GDR***). See Herbert Brücker, *Privatization in Eastern Germany: A Neo-Institutional Analysis*, 1997, p. 1; Phyllis Dininio, *The Political Economy of East German Privatization,* 1999, p. 12.
[36] *Kali-Salz*, paras. 1-2.
[37] *Kali-Salz*, para. 4.
[38] *Kali-Salz*, para. 4. THA was going to bear 90% of any losses that exceeded the amounts provided for in the business plan in 1993-1995 (and after that at a decreasing rate), para. 6.
[39] *Kali-Salz*, para. 51. The EC believed that the rest of the EEA excluding Germany belonged to one single geographic market for the production of potash, see para. 44.

The EC was concerned about post-merger coordination between the joint venture and SCPA. The EEA-wide market for the production of potash was mature and characterised by a high degree of product homogeneity, a low level of technological innovation and a high level of market transparency. K+S and SCPA had concluded an agreement relating to the joint determination of the exported quantities and qualities of potash products.[40] There had been "*exceptionally close links*" between K+S and SCPA "*over a long period of time".*[41] The EC therefore believed that the concentration was likely to result in duopolistic dominance in the affected market. The transaction was only cleared after K+S offered to sever the links between itself and SCPA.[42]

SCPA appealed the EC's decision to the European Court of Justice. The Court held that even though the EC had a margin of discretion in its economic assessments, the assessment of the EC relating to the effects of the concentration in this case had been flawed, especially with regards to the structural links between K+S and SCPA.[43]

More importantly, however, the Court fully endorsed the EC's concept of collective dominance:

> *"[…] Articles 87 and 235 of the Treaty can in principle be used as the legal basis of a regulation permitting preventive action with respect to concentrations which create or strengthen a collective dominant position liable to have a significant effect on competition.*
>
> *Second, it cannot be deduced from the wording of Article 2 of the Regulation that only concentrations which create or strengthen an individual dominant position, that is, a dominant position held by the parties to the concentration, come within the scope of the Regulation. Article 2, in referring to "a concentration which creates or strengthens a dominant position," does not itself exclude the possibility of applying the Regulation to cases where concentrations lead to the creation or strengthening of a collective dominant position, that is, a dominant position held by the parties to the concentration together with an entity not a party hereto.*

---

[40] *Kali-Salz,* para. 57. See also Gisela Aigner/Oliver/Budzinski, *The Analysis of Coordinated Effects in EU Merger Control, Where Do We Stand After Sony/BMG and Impala?*, European Competition Journal, Vol. 2, Issue 2, 2006, p. 311.

[41] K+S and SCPA had been running a joint venture in Canada (Potacan), cooperated in the export cartel Kali-Export GmbH in Vienna and K+S marketed its potash products sold in France through SCPA. See *Kali-Salz*, paras. 57-61.

[42] *Kali-Salz*, paras. 64-68. See also Sigrid Stroux, *US and EC oligopoly control*, p. 208.

[43] Court of Justice, Joined Cases C-86/94, 31 March 1998, *Kali-Salz*, paras. 251-259. The Court emphasised that the EC has a margin of discretion in its economic assessment, paras. 223-224. Also more recently confirmed by the General Court in T-342/07, *Ryanair Holdings plc v European Commission*, 6 July 2010, OJ C 221, 14/08/2010, paras. 29-30.

Third, with respect to the traveaux preparatoires, it appears from the documents in the case that they cannot be regarded as expressing clearly the intention of the authors of the Regulation as to the scope of the term "dominant position". […]

Consequently, if it were accepted that only concentrations creating or strengthening a dominant position on the part of the parties to the concentration were covered by the Regulation, its purpose [...] would be partially frustrated […]." [44]

In *Kali + Salz*, the concept of collective dominance therefore received the blessing of the EU's judiciary.

1.3 Gencor

The next decision that contributed to the concept of coordinated effects was *Gencor*.[45] Gencor Ltd. (***Gencor***) is a South African international minerals resource group.[46] It planned to acquire joint control of Impala Platinum Holdings Limited (***Implats***) with the British company Lonrho plc (***Lonrho***).[47]

In the first step, both parties would gain joint control over Implats, of which Gencor at that time held 46.5% of the shares. The rest of the share capital was publicly held. In a second step, Lonrho would transfer its 73% share in Eastplats and Westplats, which conducted all of Lonrho's platinum activities, to Implats, which from then on would hold all of the shares in Eastplats and Westplats. In exchange, Lonrho would receive shares in Implats. Ultimately, Gencor and Lonrho would hold approx. 32% each of the shares in Implats.[48]

The proposed transaction reduced the number of primary producers of platinum metals in South Africa from three to two.[49] On a worldwide basis, the transaction was going to leave four main competitors: Amplats, Implats, LPD and Russian federal activities, which together accounted for a combined market share of approx. 90%.[50]

---

[44] Court of Justice, C-86/94, *Kali&Salz*, paras. 165-171.
[45] *Gencor*, para. 1. For an analysis of Gencor in the context of exterritorialy, see Carl Baudenbacher, *The CFI's Gencor Judgement – Some Remarks on its Global Implications*, in: Baudenbacher/Gulmann/Lenaerts/Coulon/Barbier de la Serre, Liber Amicorum en l'honneur de/in honour of Bo Vesterdorf, Bruxelles, 2007, p. 557. Baudenbacher explains that Gencor's exterritorial "*community dimension*" was a result of the increased attractiveness of the European domestic market. See also Jungermann*, Kollektive Marktbeherrschung durch interpendentes Parallelverhalten und deren Missbrauch*, supra, pp. 121-123. For more information about Implats, see http://www.implats.co.za/implats/index.asp, last viewed: 22 April 2013.
[46] For Gencor Industries, Inc., see http: www.gencor.com, last viewed: 17 February 2013.
[47] See http: www.lonrho.com, last viewed: 17 February 2013.
[48] *Gencor*, para. 6.
[49] *Gencor*, para. 74. The EC found that Bushveld (South Africa) was the only larger region in which minerals were being mined solely because of their platinum metal content, para. 85
[50] *Gencor*, para. 137.

The EC was concerned about post-merger coordination between the remaining platinum metal suppliers. Amplats, Implats, LPD and the Russians controlled supplies. The EC found that even the pre-merger market bore several characteristics of an anti-competitive oligopoly including high concentration levels, high levels of market transparency, moderate growth, inelastic demand, mature production technology, high entry barriers, insignificant countervailing buyer power, multi-market contacts and indications that oligopolistic market power had been exercised with regards to other market participants.[51]

The concentration removed Lonrho, the only expanding competitor with a potential to expand its sales even further.[52] Lonrho was a low cost producer. It was more profitable for Lonrho to compete aggressively than to align its behaviour to that of its rivals Implats and Amplats. The integrated companies on the other hand would have had similar cost structures. This, in a market with clear tendencies towards oligopolistic dominance, was taken by the EC as a strong indication that the transaction threatened to result in oligopolistic dominance.[53]

Attempts to reach an agreement with the parties failed. The parties only offered behavioural commitments, which did not address the oligopolistic market structure.[54] The EC therefore decided that the concentration was incompatible with the common market (Article 8(3) of the 1989 Merger Regulation). The decision was upheld by the General Court. According to the Court, the fact that Article 2 (3) of Merger Regulation 1989 did not mention collective dominance did not mean that the EC could not intervene against mergers on the basis that they created or strengthened a collective dominant position.[55] A prerequisite was showing that the merged entity's and its main competitors' interests were sufficiently aligned, based on the prevailing post-merger market characteristics, to allow the collective exercise of market power.[56]

This did not necessitate proof that the remaining competitors were likely to act collectively dominant. Instead, proof of market concentration, especially a duopoly, combined with other factors, such as the similarity of the cost structure of the main competitors, market transparency and evidence of past collectively dominant behaviour, was sufficient.[57] The EC was therefore not required to provide an example of *how* post-merger coordination would work. Instead, it only needed to show that the post-merger market situation would be conducive to coordination.

[51] *Gencor*, para. 141. For the detailed discussion of the market characteristics, see paras. 143-192.
[52] *Gencor*, para. 173, apart from temporary sales of Russian stocks.
[53] *Gencor*, paras.176, 182.
[54] *Gencor*, para. 216.
[55] General Court, Case T-102/96, 25 March 1999, *Gencor Ltd. v Commission*, ECR 1999, II-753, paras. 123-140.
[56] Killick et al., *Horizontal and Vertical Mergers in the Reformed EC Merger Control*, supra, Ch. 11Bii, p. 442. See also Bishop et al., *A legal and economic consensus?*, supra, p. 223.
[57] Killick et al., *Horizontal and Vertical Mergers in the Reformed EC Merger Control*, supra, Ch. 11Bii, p. 442.

Gencor had a strong political dimension. Like in *Honeywell*[58], in which the EC blocked a high-profile merger between two US companies, *Gencor* was an example that the EC had greater confidence to wield the EU's power of a major economic player. Companies could not afford not to do business in Europe. The EC's intervention signalled its increasing awareness of the fact that it held a winning hand in merger-control negotiations with global companies. [59]

1.4 Airtours

In 2003, three years after *Gencor*, the General Court further developed the concept of collective dominance in *Airtours.* Airtours plc (***Airtours***) is a British company active in tour operating, travel agencies, charter airlines, hotels and cruise ships with operations in 17 countries across Europe, amongst them, the UK and Ireland, and North America. Airtours planned to acquire First Choice, a British company active in tour operating, travel agencies, charter airlines, seat booking and car rental broking, mainly in the UK and Ireland and with activities in Canada, by way of public bid.[60]

The EC was concerned that the transaction would create a dominant undertaking in the market for short-haul package holidays in the UK and declared the concentration incompatible with the common market based on Article 8(3) of the 1989 Merger Regulation.

The EC based its decision on the following economic considerations: (1) product homogeneity; (2) low demand growth; (3) low price sensitivity of demand; (4) an increase in transparency; (5) symmetry and extensive commercial links between major operators; (6) the weakened ability of small tour operators and potential entrants to compete; and (7) the rapid consolidation that had taken place in the market.[61] The EC believed that these characteristics facilitated capacity coordination.[62]

Airtours challenged the decision before the General Court. The General Court annulled the decision on 6 June 2002 on the basis that the EC had failed to prove "*to the requisite legal*

[58] See Case No. COMP/M.2220, *General Electric/Honeywell*, 3 July 2001, OJ L 48, 18/02/2004, pp. 1-85, later confirmed by the General Court in Case T-210/01, 14 December 2005, *General Electric Company v Commission*, ECR II-5575.

[59] Carl Baudenbacher, *The CFI's Gencor Judgment*, supra, p. 567. As *Baudenbacher* states, the EC's willingness to stop high-profile international mergers provoked "*fundamental changes in the American understanding of European economic power*". Whereas both, "*the firms involved as well as American politicians had believed that the approval by the Commission would be more or less a formality*", the EC's decision made it clear that Europe was prepared to assert its economic clout. See pp. 558, 567.

[60] *Airtours*, para. 1.

[61] Aigner et al., *The Analysis of Coordinated Effects in EU Merger Control*, supra, pp. 7, 311; General Court, Case T-342/99, 6 June 2002, *Airtours v Commission*, ECR 2002, II-02585, paras. 87-158. The U.K. Monopoly and Merger Commission (***U.K. MMC***) stated in its December 1997 inquiry that the industry in question in *Airtours* was a "*fiercely competitive industry with no barriers to entry and expansion*". The EC explained that the market had undergone changes that removed its past dynamic character. See U.K. MMC, *Foreign Package Holidays*, CM 3813 (1997); Bishop et al, *A legal and economic consensus?*, supra, pp. 228-229.

[62] Bishop et al, *A legal and economic consensus?*, supra, p. 204, with further references.

standard that the concentration would give rise to a collective dominant position of the three major tour operators, of such a kind as significantly to impede effective competition in the relevant market".[63]

The General Court laid out that coordination is only likely if *three* cumulative conditions are met: (1) the market must be transparent enough to allow for monitoring; (2) coordination must be sustainable; and (3) the benefits from coordination must not be jeopardised by the actions of current or future competitors or customers.[64] These criteria were not an invention of the Court. They had been identified by *Stigler* in the 1960s as a prerequisite for sustained coordination, and were a fixture of the US Guidelines at the time of the *Airtours* decision.[65] The decision, therefore, was also a step towards greater homogeneity of coordinated effects analysis in the US and the EU. The decision also fuelled the discussion whether EU merger control suffered from an enforcement gap in non-coordinated effects analysis. This was because the General Court laid out in its decision that the concept of collective dominance could not be extended to cover non-coordinated effects without dominance.[66]

> *"—**first, each member of the dominant oligopoly must have the ability to know how the other members are behaving in order to monitor whether or not they are adopting the common policy.** As the Commission specifically acknowledges, it is not enough for each member of the dominant oligopoly to be aware that interdependent market conduct is profitable for all of them but each member must also have a means of knowing whether the other operators are adopting the same strategy and whether they are maintaining it. There must, therefore, be sufficient market transparency for all members of the dominant oligopoly to be aware, sufficiently precisely and quickly, of the way in which the other members' market conduct is evolving;*
>
> ***—second, the situation of tacit coordination must be sustainable over time**, that is to say, there must be an incentive not to depart from the common policy on the market. As the Commission observes, it is only if all the members of the dominant oligopoly maintain the parallel conduct that all can benefit. The notion of retaliation in respect of conduct deviating from the common policy is thus inherent in this condition.*

---

[63] General Court, Case T-342/99, *Airtours,* para. 294.
[64] Aigner et al., *The Analysis of Coordinated Effects in EU Merger Control*, supra, p. 7.
[65] George J. Stigler, *A Theory of Oligopoly*, Journal of Political Economy 72 (1964) 44-61. See also William J. Kolasky, *Coordinated Effects in Merger Review: From Dead Frenchmen to Beautiful Minds and Mavericks*, Address before the ABA Section of Antitrust Law Spring Meeting, 24 April 2002, available at: http://www.justice.gov/atr/public/speeches/11050.htm, last viewed: 31 January 2013, p. 9. On the application of the *Stigler* criteria in *Airtours*, see Fabio Polverino, *Assessment of Coordinated Effects in Merger Control: between Presumption and Analysis*, 2006, available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=901688, last viewed: 9 February 2013, p. 21.
[66] Neil Horner, *Unilateral Effects and the EC Merger Regulation – How The Commission Had its Cake and Ate it Too*, HanseLR Vol. 2 No. 1, 2006, p. 30. This dissertation discusses coordinated effects and will therefore not go into the depth of the "*gap*" discussion.

In this instance, the parties concur that, for a situation of collective dominance to be viable, there must be adequate deterrents to ensure that there is a long-term incentive in not departing from the common policy, which means that each member of the dominant oligopoly must be aware that highly competitive action on its part designed to increase its market share would provoke identical action by others, so that it would derive no benefit from its initiative […];

*—**third,** to prove the existence of a collective dominant position to the requisite legal standard, the Commission must also establish that the **foreseeable reaction of current and future competitors, as well as of consumers, would not jeopardize the results expected from the common policy**."*[67] [emphasis added by the author].

Airtours was a landmark decision and the first in which the EC extended the concept of collective dominance from mergers to duopoly to a four-to-three merger.[68] *Airtours* also significantly increased the requirements for a finding of coordinated effects, provided a clear framework and emphasised the need to base enforcement decisions on sound economic evidence.[69] A finding that the market characteristics favoured coordination was no longer sufficient. The EC had to show *how* coordination was going to work in practice. This required showing how the major market players could agree on the terms of coordination, how they could monitor whether their rivals adhered to the terms of coordination, how they could punish deviations, and that they would not be disturbed by outsider reaction. This framework made and still makes the difference between a mere structural analysis of the market conditions and a real case-by-case assessment of the effects of the merger on competition.

1.5 Impala

Impala was the last decision that significantly shaped the concept of collective dominance. Bertelsmann AG (***Bertelsmann***), an internationally active media company, and Sony Corporation of America (***Sony***), a company that is globally active in music recording and publishing, planned to contribute to three newly-created joint venture companies that would operate under the name Sony BMG.[70] The business contribution agreement provided that

---

[67] General Court, Case T-342/99, *Airtours,* para 62; Aigner et al., *The Analysis of Coordinated Effects in EU Merger Control*, supra, p. 7.

[68] Horner, *Unilateral Effects and the EC Merger Regulation*, supra, p. 30. Nevertheless, the economic analysis adopted in the decision was criticised. See for example *Bishop et al.* who state that the main question should have been whether the concentration increased the likelihood of *post-merger* coordination. Bishop et al, *A legal and economic consensus?*, supra, p. 228. For an analysis of the decision, see also Simon Bishop/Mike Walker, *The Economics of EC Competition Law*, 3rd ed., 2010, p. 408.

[69] Lars-Hendrik Röller/Pierre A. Buigues, *The Office of the Chief Competition Economist at the European Commission*, May 2005, available at: http://ec.europa.eu/dgs/competition/economist/officechiefecon_ec.pdf, last viewed: 22 April 2013, p. 4.

[70] *Sony/BMG,* paras. 3-5.

Sony BMG would be active in the discovery, development, marketing and sale of recorded music, whereas it would not be active in music publishing, manufacturing and distribution.[71]

The markets for recorded music were relatively concentrated at the time of the transaction, with five major firms accounting for approximately 72-93% of the market for the sale of owned content, and for an even larger market share in distributed sales.[72] The EEA-wide market share of the parties would have been 20-25% and would have matched the size of the largest competitor Universal Music Group (***Universal***).[73] Independent record companies accounted for roughly 15-20% of the market.[74]

The EC applied the criteria that it had developed in *Airtours*. Even though it found that the market for recorded music was relatively concentrated and that at least the carrier product, the CD or DVD, was homogeneous, it ended up with not enough evidence for a finding of a likelihood of post-merger collective dominance under the new SIEC-test.[75] With regards to the new market for online music, the EC also lacked reliable data.[76] As a result, the EC ended up approving the merger subject to conditions based on Article 8(2) of the 1989 Merger Regulation.

Impala, which had participated in the administrative procedure as an interested third party, appealed the EC's decision to the General Court. The General Court decided that the EC had failed to provide an adequately reasoned decision because it had approved the transaction even though there had been indications of a high level of market transparency and aligned prices.[77]

---

[71] *Sony/BMG*, para. 6.
[72] I.e. records distributed for independent labels, see *Sony/BMG*, paras. 47-48.
[73] *Sony/BMG*, para. 48.
[74] *Sony/BMG*, para. 48. The five majors were characterised by (1) global presence, (2) partial vertical integration, (3) upstream investment in music publishing, broadcasting and online music markets, (4) considerable financial power and (5) vast and diversified portfolio of contract artists and a significant list of existing titles, General Court, Case T-464/04, 13 July 2006, *Independent Music Publishers and Labels Association v Commission*, ECR 2006, II-2289, para. 258. The market suffered from decreasing demand. The parties to the merger believed this to be due to illegal copying and downloading. The EC, however, identified the perceived high prices for CDs and the general economic downturn to be relevant factors. See para. 58.
[75] General Court, Case T-464/04, *Sony/BMG,* paras. 111-117. For example, the EC did not know at the end of the examination whether market participants had managed to overcome market transparency deficits. Price lists generally varied and this reduced market transparency. However, at the same hit charts were being published on a weekly basis.
[76] General Court, Case T-464/04, *Sony/BMG*, paras. 165-166. Price levels were quite high given the cost-savings resulting from online distribution, but there was insufficient evidence for a finding of collective dominance, paras. 167-168.
[77] The General Court was especially critical of the delta between the EC's final decision and its earlier statement of objections in which the Commission had laid out that the market characteristics were favourable to coordination due to a substantial level of market transparency. The General Court criticized, the EC should have explained why it changed its mind in the course of the administrative procedure. ***"Such vague assertions, which fail to provide the slightest detail of, in particular, the nature of campaign discounts, the circumstances in which such discounts might be applied, their degree of opacity, their size or their impact on price transparency, cannot support to the requisite legal standard the finding that the market is not sufficiently transparent to allow a collective dominant position."*** (para. 289) The EC's findings relating to campaign discounts according to the General Court were "***imprecise, unsupported, and indeed contradicted by other observations in the Decision and***

This put the EC in a "*catch-22"* situation. If it stopped a transaction because of indications that the post-merger market structure was going to be favourable to coordination but without being able to show *how* that coordination would work, it was going to violate the *Airtours* framework. If it did not intervene, the decision would also be attacked because the EC had approved the transaction despite indications that the post-merger market structure would be favourable to coordination.[78]

The case went up to the Court of Justice which sided with the EC. It was the first time that the highest European court had the chance to consider the *Airtours* framework.[79] It emphasised that the EC could only intervene if it was able to show that the remaining competitors would be able to "*sufficiently, precisely and quickly*" monitor whether their competitors adhered to the terms of coordination (e.g., because the market was sufficiently transparent), that there was a credible deterrent mechanism and that coordination was not going to fail because of jeopardising outsider reaction.[80]

Nestlé/Perrier, Kali + *Salz and Gencor, Airtours* and *Impala* established collective dominance as a theory of harm. The difference between collective dominance and coordinated effects is that the latter does not require the showing of dominance. It has already been pointed out that the difference is negligible in practice because coordinated effects analysis in the EU and the US always focuses on the major competitors in highly concentrated market whose combined market shares would in almost all cases suffice for a finding of collective dominance.

2. The gap

Airtours raised the question whether the 1989 Merger Regulation suffered from a gap. This did not concern the concept of collective dominance. European courts clarified already

---

cannot demonstrate the opacity of the market or even of campaign discounts". General Court, Case T-464/04, *Sony/BMG*, para. 320. See also paras. 295-302 regarding the reasoning of the EC on market transparency and evidence of aligned pricing.

[78] See also the assessment of the case by Polverino, *Assessment of Coordinated Effects in Merger Control*, supra, pp. 37-38.

[79] Court of Justice (Grand Chamber), Case C-413/06 P, 10 July 2008, *Bertelsmann AG and Sony Corporation of America v Independent Music Publishers and Labels Association (Impala)*, ECR (2008) I-4951, para. 124.

[80] Court of Justice, Case C-413/06 P, para. 123. The Court of Justice decided that the General Court had "*misconstrued the principles which should have guided its analysis*" concerning market transparency and hence had committed an error of law. See paras. 133-134. On the factors favourable to collective dominance, the Court stated: *"Such correlative factors include, in particular, the relationship of interdependence existing between the parties to a tight oligopoly within which, on a market with the appropriate characteristics, in particular in terms of market concentration, transparency and product homogeneity, those parties are in a position to anticipate one another's behaviour and are therefore strongly encouraged to align their conduct on the market in such a way as to maximise their joint profits by increasing prices, reducing output, the choice or quality of goods and services, diminishing innovation or otherwise influencing parameters of competition. In such a context, each operator is aware that highly competitive action on its part would provoke a reaction on the part of others, so that it would derive no benefit from its initiative."* See para. 121.

before the new 2004 Merger Regulation was introduced that the creation or strengthening of a collective dominant position was covered by Article 2 of the 1989 Merger Regulation.[81]

The gap-discussion instead concerned situations in which the merged company could profitably raise its prices or reduce its production capacities unilaterally, even though it was not the largest company in the market. This situation mostly occurred in differentiated product markets.[82] In such a market, if two firms with highly substitutable products and only few other competitors merge, it will be rational for the combined entity to raise its prices by some degrees to increase its profits.[83] The remaining firms in the market may respond to the price increase by raising their own prices.[84]

The gap highlighted the limits of the market definition in merger control to delineate the range of interchangeable products from a demand-side perspective. This is why competition authorities are increasingly using diversion ratios, which offer greater possibilities to assess the competitive dynamics of the market (e.g., using price scanner or survey data), to predict the proportion of customers that will be lost based on a given price increase.[85] The drawback is that extending the concept of unilateral anti-competitive effects to include the unilateral behaviour of non-dominant firms creates substantial uncertainty for the merging parties. They can no longer be sure that a merger that does not result in a (collective) dominant position will not be challenged based on unilateral effects.

The US case *Heinz* also fuelled the gap-discussion.[86] The parties to the transaction, Heinz Co. (***Heinz***) and Beech-Nut Corporation (***Beech-Nut***) competed for the second shelf position for jarred baby food in supermarkets besides the undisputed market leader Gerber Products Company (***Gerber***). Gerber, Heinz and Beech-Nut had market shares of 65%, 17.4% and 15.4%, respectively.[87] The FTC and the Court of Appeal for the District of Columbia Circuit agreed that Heinz and Beech-Nut vigorously competed for the second shelf position with a winner-takes-it-all quality which the transaction threatened to eliminate.[88] Under the dominance test of the 1989 Merger Regulation, the EC would not have been able to

---

[81] See also L.H. Röller/A. Strohm, *Ökonomische Analyse des Begriffs "significant impediment to effective competition*", available at: http://ec.europa.eu/dgs/competition/economist/muenchner_kommentar.pdf, last viewed: 8 January 2013, para. 6.

[82] Röller et al., *Ökonomische Analyse des Begriffs "significant impediment to effective competition*", supra, para 8. See also Bundeskartellamt, *Marktbeherrschungs- und SIEC-Test*, Eine Bestandsaufnahme, Tagung des Arbeitskreises Kartellrecht, 24 September 2009, Hintergrundpapier, available at: http://www.bundeskartellamt.de/wDeutsch/download/pdf/Diskussionsbeitraege/09_Proftagungspapier.pdf, last viewed: 8 January 2013, p. 2.

[83] Horner, *Unilateral Effects and the EC Merger Regulation,* supra, p. 26, with further reference. Among those who recognised the existence of the "*gap*", there was a discussion whether the resulting under-enforcement was preferable to the effects of extending the coverage of EU merger law. Supra, p. 34.

[84] Horner, *Unilateral Effects and the EC Merger Regulation*, supra, p. 27.

[85] Horner, *Unilateral Effects and the EC Merger Regulation*, supra, p. 27.

[86] Röller et al., *Ökonomische Analyse des Begriffs "significant impediment to effective competition*", supra, para 9.

[87] *FTC v. H.J. Heinz Co.* 246 F.3d 708 (D.C. Cir. 2001), p. 4.

[88] *Heinz*, p. 16. See also Horner, *Unilateral Effects and the EC Merger Regulation*, supra, p. 27.

challenge a similar transaction in the absence of a likelihood of anti-competitive coordinated effects.[89] Heinz will be discussed in more detail in Chapter 2.

The 2004 Merger Regulation clarified that the EC was competent to intervene in unilateral effects cases without dominance. Recital 25 of the 2004 Merger Regulation provides that its Article 2 applies to unilateral anti-competitive effects that do not create or strengthen a dominant position:

> *"[…] However, under certain circumstances, concentrations* ***involving the elimination of important competitive constraints*** *that the merging parties had exerted upon each other, as well as a reduction of competitive pressure on the remaining competitors, may, even in the absence of a likelihood of coordination between the members of the oligopoly, result in a significant impediment of effective competition. The Community courts have, however, not to date expressly interpreted Regulation (EEC) No 4064/89 as requiring concentrations giving rise to such non-coordinated effects to be declared incompatible with the common market. Therefore, in the interests of legal certainty, it should be made clear that this Regulation permits effective control of all such concentrations by providing that any concentration which would significantly impede effective competition, in the common market or in a substantial part of it, should be declared incompatible with the common market. The notion of "significant impediment to effective competition" in Article 2(2) and (3)* ***should be interpreted as extending, beyond the concept of dominance, only to the anti-competitive effects of a concentration resulting from the non-coordinated behaviour of undertakings which would not have a dominant position on the market concerned."*** [emphasis added by the author]

Since the introduction of the 2004 Merger Regulation, there have been very few gap-cases. *T-mobile/Tele.ring*[90], *Hutchison*[91] und *UPS*[92] are three examples.

Most gap-cases could also be assessed using coordinated effects as they occur in highly concentrated oligopolies.[93] However, there is a difference between testing whether market conditions are altered in a way that enables coordination and make such coordination sustainable, and testing whether especially intense competition between two companies that

[89] Ulrich Schwalbe/Daniel Zimmer, *Law and Economics in European Merger Control*, 2009, p. 183.
[90] Case No. COMP/M.3916, 26 April 2006, *T-Mobile Austria/Tele.ring*, OJ L 88, 29/03/2007, pp. 44-46. On *Tele.ring*, see Heinrich Kühnert, *Widening the gap – The impact of the T-Mobile / tele.ring decision*, Competition Law Insight, 16 January 2007, pp. 9-10.
[91] Case No. COMP/M.6497, 12 December 2012, *Hutchison 3G Austria/Orange Austria*, OJ C 224/12, 03/08/2013, pp. 12-17.
[92] Case No COMP/M.6570, 30 January 2013, *UPS/TNT Express*. The non-confidential version of the prohibition decision has not yet been published.
[93] Horner, *Unilateral Effects and the EC Merger Regulation*, supra, p. 27.

are each other's closest substitutes is being removed. The two tests therefore focus on different theories of harm, coordination and head-to-head competition. The gap-discussion will not be analysed in more detail because it does not provide any more added value to the analysis of coordinated effects.

3. SIEC

The introduction of the SIEC-test was also (and perhaps primarily) the result of a political discussion about the orientation of the EU's substantive test. "*SIEC*" is an abbreviation for a "*substantial impediment of effective competition*". The UK was strongly in favour of introducing the US test for a "*substantial lessening of competition*" (***SLC-test***) in European merger control.[94] Germany wanted to keep the dominance-test. The SIEC-test was a compromise.

In summer 2003, the Working Group of the Council of the European Union discussed the introduction of a new substantive test in Article 2.[95] The EC brought in a new French/Spanish proposition which favoured a test for a "*significant impediment to effective competition*".[96] In November 2003, Germany finally gave up its opposition to the introduction of this new test. On 20 January 2004, the 2004 Merger Regulation with the new SIEC-test replaced the old 1989 Merger Regulation.[97]

There was indeed a need for greater convergence with the US SLC-test which resulted from the increased number of large-scale transactions that had to be simultaneously notified in the US and the EU. In 2001, a diverging decision of the EC and the DoJ had already resulted in transatlantic tension.[98] The DoJ and the Canadian Competition Bureau had agreed to clear the merger subject to conditions.[99] The EC then announced its decision to prohibit the transaction, with the result that the deal was also dead in the US.[100] Both merging parties were US firms and the merger would have been the biggest industrial merger in US

---

[94] See Michael Baron, *Vorbemerkungen zur FKVO*, in: Langen/Bunte, Kommentar zum deutschen und europäischen Kartellrecht, Band 2, Europäisches Kartellrecht, 11th ed., 2010, para. 9.
[95] Baron, *Vorbemerkungen zur FKVO*, supra, para. 13.
[96] Baron, *Vorbemerkungen zur FKVO*, supra, para. 13.
[97] Baron, *Vorbemerkungen zur FKVO*, supra, para. 15.
[98] See *General Electric/Honeywell*, pp. 1-85, later confirmed by the General Court in Case T-210/01, 14 December 2005, *General Electric Company v Commission*, ECR II-5575.
[99] DoJ, Press Release, *Justice Department Requires Divestitures in Merger Between General Electric and Honeywell*, 2 May 2001, available at: http://www.justice.gov/atr/public/press_releases/2001/8140.pdf, last viewed: 8 January 2013.
[100] See Donna E. Patterson/Carl Shapiro, *Transatlantic Divergence in GE/Honeywell: Causes and Lessons*, Roundtable Commentary, Antitrust, Fall 2001, available at: http://faculty.haas.berkeley.edu/shapiro/divergence.pdf, last viewed: 8 January 2013. See also James Langenfeld, *Non-Horizontal Merger Guidelines in the United States and the European Commission: Time for the United States to Catch Up?,* 16 Geo. Mason L. Rev. 851, p. 865; Philippe Corruble, *Le droit communautaire de la concurrence dans les relations euro-américaines*, Défense Nationale, 2003, vol. 59, n° 4, pp. 28-30.

history.[101] The EC intervention therefore dealt an especially heavy blow to US industrial policy.

It was in fact the first time ever that the EC had prohibited a merger between two US firms that US antitrust agencies had cleared.[102] William J. Kolasky, at that time Deputy Assistant Attorney General at the DoJ's antitrust division, describes the immediate reactions:

> "*Immediately following the decision, Charles James, the newly appointed Assistant Attorney General for Antitrust, issued a press statement that criticized the Commission's decision, saying it "reflect[ed] a significant point of divergence" between the two competition authorities. This divergence prompted the US Department of Justice Antitrust Division ("the Department") to take the unusual step of issuing a detailed explanation of its decision not to challenge the merger in a White Paper it submitted to the Organization for Economic Cooperation and Development ("OECD") for a roundtable on conglomerate mergers in October 2001. That White Paper drew a detailed response from the Commission in a paper presented by the head of its Merger Task Force at the Fordham Corporate Law Institute later the same month. This, in turn, led the Department to further explain its views through a paper by this Author presented at a George Mason University School of Law symposium in November.*"[103]

Painful from an EU perspective were US accusations that the EC's economic analysis was not up to scratch.[104] This accusation primarily concerned the EC's conglomerate effects analysis. However, the more profound question was raised as to whether the EC really cared about protecting competition or rather focused on protecting competitors. These tensions coincided with the General Court's *Airtours* decision. Outside the area of coordinated effects,

---

[101] See Patterson et al., *Transatlantic Divergence in GE/Honeywell,* supra.
[102] William J. Kolasky, *GE/Honeywell: Continuing the transatlantic dialog*, U. Pa. J. Int'l Econ. L., 23:3, available at: https://www.law.upenn.edu/journals/jil/articles/volume23/issue3/Kolasky23U.Pa.J.Int'lEcon.L.513(2002).pdf, last viewed: 8 January 2013, p. 513.
[103] Kolasky, *GE/Honeywell*, supra, pp. 513-514; Kolasky, *Conglomerate Mergers and Range Effects: It's a long way from Chicago to Brussels*, Address before the George Mason University Symposium, available at: http://www.justice.gov/atr/public/speeches/9536.htm, last viewed: 8 January 2013. See also the statement by then Assistant Attorney General of the Antitrust Division of the DoJ Charles A. James*, International Antitrust in the Bush Administration*, Address before the Canadian Bar Association, 21 September 2001, available at: http://www.justice.gov/atr/public/speeches/9100.htm, last viewed: 8 January 2013; Deborah Platt Majoras, *GE: Honeywell: The US Decision*, Remarks before the Antitrust Law Section, State Bar of Georgia, 29 November 2001, available at: http://www.justice.gov/atr/public/speeches/9893.htm, last viewed: 8 January 2013. For the European reaction, see EC Press Release, *Commissioner Monti dismisses criticism of GE/Honeywell merger review and rejects politicization of the case*, IP/01/855, available at: http://europa.eu/rapid/press-release_IP-01-855_en.htm, last viewed: 8 January 2013. See also Jürgen Basedow, *The Modernization of European Competition Law: A Story of Unfinished Concepts*, Tex. Int'l L.J., Vol. 42, Nr. 3, 2007, p. 429, who argues that the change in European legislation and the adoption of a "*more economic approach*" was caused by an "*increased American and Anglo-Saxon influence on European competition law*".
[104] Killick et al., *Horizontal and Vertical Mergers in the Reformed EC Merger Control*, supra, Ch. 11 Bi, p. 438

the EU courts overruled several other EC prohibition decisions.[105] Shocks to the EC's enforcement practice therefore came from within the system as well as from across the Atlantic.

All of this, and the feeling that the dominance test suffered from an enforcement gap, led to the introduction of a new substantial test for merger control, the SIEC-test. After lengthy discussions, the new Merger Regulation 139/2004, and with it the new test, was finally introduced. Article 2(3) of Regulation 139/2004 reads:

> *"A concentration which would* ***significantly impede effective competition****, in the common market or in a substantial part of it,* ***in particular*** *as a result of the* ***creation or strengthening of a dominant position,*** *shall be declared incompatible with the common market."* [emphasis added by the author]

The test reversed the order of the old dominance test. That test had set out with the finding of dominance. The impediment to competition resulting from the dominance had been the second step of the analysis. The SIEC-test now starts with the impediment of competition which may result "*in particular*" as a result of the creation or strengthening of a dominant position. Dominance therefore plays a major role also in the SIEC-test. However, it is no longer a prerequisite for a finding of anti-competitive effects.

It should be mentioned that the US' test in section 7 of the Clayton Act also contains a structural element. Section 7 states that a concentration has to be enjoined if it tends to create a monopoly. Therefore, in both the Merger Regulation 139/2004 and section 7 of the Clayton Act, the structural element plays a substantial role. EU and US Merger Guidelines also still use concentration levels as a starting point of the merger control analysis. That said the new 2010 US Guidelines accord less weight to market shares in unilateral effects analysis.[106] It should be mentioned that the structural presumption is increasingly eroded by the use of unilateral effects analysis without dominance.[107]

---

[105] See General Court, Case T-342/99, *Airtours*; Case T-310/01, *Schneider Electric v Commission* [2002] ECR II-4071; Case T-5/02, *Tetra Laval v Commission* [2002] ECR II-4381, affirmed by the Court of Justice in C-12/03P [2005] ECR I-1113. Tomaso Duso/Klaus Gugler/Florian Szücs, *An empirical assessment of the 2004 EU merger policy reform*, DICE Discussion Paper, No. 58, 2012, available at: http://hdl.handle.net/10419/59505, last viewed: 8 January 2013, p. 1; Killick et al., *Horizontal and Vertical Mergers in the Reformed EC Merger Control*, supra, Ch. 11 A, p. 436. See also Christiansen, *Der More Economic Approach in der EU Fusionskontrolle*, supra, pp. 59-73.

[106] However, the importance of concentration levels has not changed for coordinated effects analysis. This will be discussed in more detail in Chapter 2.

[107] There are still significant differences regarding the treatment of vertical mergers as antitrust authorities in the US are less inclined than the EC to believe that a vertical merger is going to impede competition. The difference is due to different economic theories applied in the US on the one hand and in the EU on the other. However, under

4. EU Non-horizontal Merger Analysis

Mergers between companies that are active in the same market are "*horizontal mergers*". They directly reduce the number of competitors in the market. Mergers between companies that are active in vertically related or adjacent markets are referred to as "*non-horizontal*" mergers. Non-horizontal mergers do not directly reduce the number of competitors. They are therefore generally considered to be less harmful than horizontal mergers. However, some non-horizontal mergers do create competition problems. For instance, some vertical mergers alter the market conditions and thereby change the incentive structure of the firms in the affected market in a way that increases the likelihood of successful coordination.

The main texts on non-horizontal merger analysis in the EU and the US are the Non-Horizontal Merger Guidelines. The EC published the first non-horizontal merger guidelines at the end of 2008 after year-long reviews and discussions. The EU Non-Horizontal Merger Guidelines follow the so-called "*more economic approach*". They focus on the effects of the specific merger rather than on concentration levels or the number of remaining competitors in the affected market.

The EU Non-Horizontal Merger Guidelines distinguish between vertical mergers and conglomerate mergers. Vertical mergers involve companies that are active on different levels of the supply chain (e.g., the merger between a producer of moulded door-skins and a producer of moulded doors).[108] Conglomerate mergers are mergers between companies that are neither in a horizontal nor in a vertical relationship. The focus in merger control is on mergers between companies in closely related markets (e.g., different geographic markets for the same product).[109]

Non-horizontal mergers raise competition concerns if they result in non-coordinated or coordinated anti-competitive effects. The main non-coordinated effect of a non-horizontal merger is foreclosure. Foreclosure occurs where the access of actual or potential rivals to the affected market is hampered or eliminated by the vertically integrated firm's unilateral action. An example is input foreclosure.[110] The new entity may be able to restrict access to products or services post-merger that it would otherwise have supplied.[111] Unilateral anti-competitive effects also occur if the merged entity is able to gain access to commercially sensitive information regarding its upstream or downstream rivals through vertical integration.[112]

---

the influence of "*post-Chicago*" economic theory, it has been increasingly argued that in-depth reviews of certain vertical concentrations should occur more frequently.

[108] EU Non-Horizontal Merger Guidelines, para. 4.

[109] EU Non-Horizontal Merger Guidelines, paras. 5, 91.

[110] EU Non-Horizontal Merger Guidelines, para. 29.

[111] EU Non-Horizontal Merger Guidelines, para. 31.

[112] EU Non-Horizontal Merger Guidelines, para. 78.

The framework for the analysis of coordinated effects in the 2008 Non-Horizontal Merger Guidelines follows the *Airtours* framework which the EC also incorporated in the 2004 Horizontal Merger Guidelines. Competitors in the affected market have to be able to agree on the terms of coordination, monitor the behaviour of their rivals and punish deviation, and coordination should not be disturbed by outsider reaction.[113] The basic test for coordinated effects is therefore the same in the EU's Horizontal and Non-Horizontal Merger Guidelines. The reason for this is that coordinated effects analysis is always a horizontal analysis of the interaction between competitors. Coordinated effects analysis of non-horizontal mergers only adds another layer to the analysis by bringing in vertically or otherwise related markets.

Coordinated effects analysis in the context of non-horizontal mergers is a relatively novel exercise. The complex game-theoretic analysis that is required for a sound economic coordinated effects assessment becomes even more complex in non-horizontal merger settings because the interaction of the main players in several related markets has to be taken into account.

This is the main reason why coordinated effects analysis did not play a significant role in non-horizontal merger analysis in the EU. The EU 2008 Non-Horizontal Merger Guidelines devote a separate section on coordinated effects and with that promise more rigorous merger enforcement where coordinated effects are concerned in non-horizontal merger cases.[114]

5. The new role of economists in the EU

The introduction of the SIEC-test and the corresponding adoption of a "*more economic approach*" increased the importance of economics-based merger analysis at the Directorate General for Competition (***DG Comp***). One of the major structural changes that came with the reform of 2004 was the creation of an office of the Chief Competition Economist (***CCE***) on 1 September 2003. The Office of the CCE consists of the CCE himself and his team of economists.[115]

The introduction of the CCE was the achievement of the then EU Commissioner for Competition Mario Monti, later Prime Minister of Italy. Commissioner Monti advocated radical

[113] See EU Non-Horizontal Merger Guidelines, paras. 82-90.
[114] See EU Non-Horizontal Merger Guidelines, paras. 79-90.
[115] Killick et al., *Horizontal and Vertical Mergers in the Reformed EC Merger Control*, supra, Ch. 11 A, p. 436.

reform of the EU merger control system, which he believed was necessary to ensure the EU's continued economic success.[116]

At the Fordham Annual Conference on International Antitrust Law and Policy in October 2002, Commissioner Monti stressed the need for an economic approach to competition policy.[117]

> *"We are increasingly confronted with the need to investigate complex cases, which require in-depth fact-finding and rigorous economic and/or econometric analysis. The CFI Judgments [Airtours, Impala etc.] confirm this need. We are therefore discussing measures aimed at further strengthening the economic expertise capabilities of Competition DG. […] We are, in particular, envisaging the creation of a new position of Chief Competition Economist within the DG. […] [The role] needs to be closely associated with day-to-day work of our case teams, giving guidance on analytical methodology, advice on the direction of investigation and direct assistance in the most complex cases. At the same time, it will provide the Competition Commissioner with an independent opinion on the economic aspects of a case before he proposes a final decision to the Commission."*[118]

DG Comp also promised to increase the recruitment of industrial economists to its case teams and promised to also make greater use of outside economic expertise.[119] It is not surprising that the reforms were instigated during the tenure of a competition commissioner who is himself an economist. Before joining the EC, Mr Monti was professor at Bocconi University in Milan, taly, working mainly in monetary economics, central banking, fiscal policy and European integration.[120] After his two terms as Commissioner, first for the internal market, 1995-1999, and then for competition, 1999-2004, Mr Monti became President of Bocconi University.

In his final speech as Commissioner, Mr Monti stated:

> *"I have been very conscious of the fact that competition policy influences investment decisions, business acquisitions, pricing policies and economic performance.*

---

[116] Mario Monti, EU Commissioner for Competition, 7 November 2002, cited in: Duso et al., *An empirical assessment of the 2004 EU merger policy reform*, supra, p. 1.

[117] Röller et al., *The Office of the Chief Competition Economist at the European Commission*, supra, p. 5.

[118] Mario Monti, *EU Competition Policy*, Fordham Annual Conference on International Antitrust Law and Policy, 31 October 2002, available at: http://europa.eu/rapid/press-release_SPEECH-02-533_en.htm, last viewed: 9 January 2013, cited in Röller et al., *The Office of the Chief Competition Economist at the European Commission*, supra, pp. 5-6.

[119] See Mario Monti, *EU competition policy after May 2004*, Speech at the Fordham Annual Conference on International Antitrust Law and Policy, 24 October 2003, available at: http://europa.eu/rapid/press-release_SPEECH-03-489_en.htm, last viewed: 9 January 2013.

[120] Michael J Reynolds, *A Discussion with Professor Mario Monti*, Competition Law International, April 2010, available at: http://www.ibanet.org/Article/Detail.aspx?ArticleUid=D445EF78-2889-4280-983C-75AFCA33EC7D#10, last viewed: 8 January 2013, p. 77.

Therefore, a major trend of this mandate has been to ensure that competition policy is fully compatible with economic learning. Furthermore, competition policy is an instrument to foster economic growth, to promote a good allocation of resources and to strengthen the competitiveness of the European industry for the benefit of the citizens. These objectives would only be randomly achieved, at the expense of numerous errors, if we were to ignore economic thinking and market dynamics."[121]

Important leadership during the reform process was also provided by then Director-General at DG Comp Philip Lowe.[122] Director-General Lowe is also an economist, as is the current Director-General at DG Comp Alexander Italiener.[123]

The first CCE was Professor Lars-Hendrik Röller.[124] After the expiry of his non-renewable three-year mandate, he was replaced by Professor Damien Neven who was succeeded by Kai-Uwe Kühn.[125] The current CCE is Massimo Motta. Massimo Motta is ICREA Research Professor at Universitat Pompeu Fabra and Research Professor of the Barcelona Graduate School of Economics. He founded the GSE's Competition and Market Regulation Program.[126]

The CCE is part of the EC's DG Comp. He assists the case team in the evaluation of the impact of its actions. He also provides "*independent guidance on methodological issues in economics and econometrics in the application of EU competition rules*".[127] Amongst the eligibility criteria for the CCE are a university degree and a doctorate in a branch of economics or econometrics relevant to competition policy and at least 15 years of postgraduate professional experience of which at least ten years of experience must have been gained at a senior level in fields relevant to competition policy.[128]

---

[121] Mario Monti, *A reformed competition policy: achievements and challenges for the future*, Speech, Center for European Reform, 28 October 2004, available at: http://europa.eu/rapid/press-release_SPEECH-04-477_en.htm, last viewed: 8 January 2013, also cited in Röller et al., *The Office of the Chief Competition Economist at the European Commission*, supra, p. 3.
[122] Röller et al., *The Office of the Chief Competition Economist at the European Commission*, supra, p. 3.
[123] Röller et al., *The Office of the Chief Competition Economist at the European Commission*, supra, p. 3. The current Director General Alexander Italiener has a graduate degree in econometrics and a Ph.D. in economics from the University of Groningen, the Netherlands. See theantitrustsource, *Interview with Dr. Alexander Italiener*, supra, p. 1.
[124] Killick et al., *Horizontal and Vertical Mergers in the Reformed EC Merger Control*, supra, Ch. 11 A, p. 436.
[125] Killick et al., *Horizontal and Vertical Mergers in the Reformed EC Merger Control*, supra, Ch. 11 A, p. 436.
[126] See the webpage of the CCE at DG Comp, available at: http://ec.europa.eu/dgs/competition/economist/role_en.html, last viewed: 5 December 2013.
[127] Webpage of the CCE at DG Comp, supra.
[128] EC, *Publication of the post of Chief Competition Economist,* supra, p. A2. To provide further support to DG Comp in improving the economic reasoning in competition policy analysis and to generally strengthen the communication between academics and DG Comp, an Economic Advisory Group on Competition Policy (***EAGCP***) was created. Members of the EAGCP are proposed by the CCE and nominated by the Competition Commissioner. Current members of the EAGCP are Bruno Cassiman, Giacinta Cestone, Vincenzo Denicolò, Natalia Fabra, Xavier Freixas, Chiara Fumagalli, Roman Inderst, Bruno Julien, Patrick Legros, Bruce Lyons, Volker Nocke, Martin Peitz, Patrick Rey, Otto Toivanen, Tommaso Valletti, Frank Verboven and Christine Zulehner. Almost all of them have also published extensively on economic questions of competition law. See the

To help the case team's assessment of complex mergers requiring a sophisticated quantitative analysis, an economist from the CCE's team of economists may also be seconded to the case team.[129]

An insight into the role of the CCE is provided in the Mandate of the CCE:[130]

*"**When does the Chief Competition Economist (and his team) get involved in the assessment of cases?***

- ***Director(s) may ask** the Chief Competition Economist to examine a case or a specific economic issue arising in a case or in a policy issue by submitting a request to him in writing which sets out the perceived economic problems and the priority of the case. **The Director-General will decide the cases the Chief Competition Economist will examine**, on the basis of a proposal from him, and having consulted the directors concerned.*

- *With the agreement of the Director-General, the Chief Competition Economist **may also follow a case or a policy issue at his own initiative**. He will inform the Director concerned **but does not need his approval**.*

- *He may also be requested by the Director-General to give assistance in the defence of cases pending before the Community Courts.*

[…]

Interaction with DG COMP services

*[…] He may assign one or more members of his staff to follow a case. The tasks of his staff will be to act as a member of the case team and, where the case team and the Chief Competition Economist are in agreement, to contribute on request actively to investigations and the preparation of intermediate and final decisions. The staff of the Chief Competition Economist will focus on economic issues, **in particular quantitative analysis**. Within the case team the members seconded from the Chief Competition Economist's team have a **specific and independent status** and report directly to the Chief Competition Economist on the line they take.*

*When the Chief Competition Economist's team is asked to examine a case, it will have **access to all information** gathered by the case team to obtain specific data or*

---

webpage of the CCE, available at: http://ec.europa.eu/dgs/competition/economist/eagcp.html, last viewed: 13 December 2013.

[129] Monti, *EU competition policy after May 2004*, supra.

[130] Excerpt provided in Röller et al., *The Office of the Chief Competition Economist at the European Commission*, supra, pp. 20-22.

other information necessary for quantitative analysis. ***Contacts with the parties or with third parties*** *will normally take place in the context of the meetings held by the case team and/or by the hierarchy of DG COMP with such parties. The Competition Economist team will also attend the oral hearing and participate in the internal review panel debates.*

Participation in the internal deliberation process

From the beginning of the case, the Chief Competition Economist may report his opinion on any case or any other issue at any time to the Director-General after having consulted the Director concerned. Where divergences arise, he must do so at the earliest possible stage.

Any opinion of the Chief Competition Economist is part of the internal deliberation process within the Competition DG. However, the Director-General may decide to make his opinion available to other Commission services. ***In any event, it shall not be communicated to the parties or third parties and no access shall be granted under the rules for access to file or access to documents.***

The Chief Competition Economist shall attend the weekly meeting with the Commissioner in order to present his views on a case or a policy issue that he has been following. He or a member of his team may attend the weekly meeting for all other agenda points.

[…]

Final advice of the Chief Competition Economist

In agreement with the Director-General, or at the Director-General's request, the Chief Competition Economist will provide a written opinion on a formal proposal which is to be submitted for decision to the Commissioner and which relates to a case [or policy issue] which he has followed up to the final stages.

In such cases his final advice on proposals to be submitted to the Commission ***will be made available to the Commissioners.****"* [emphasis added by the author]

This excerpt from the Mandate of the CCE shows that the CCE and his team have a strong advisory and support function within DG Comp.[131] Their assessment guides the case team and the Commissioners in cases in which the economic analysis is complex.[132]

However, the economic advice of the CCE and his team has no binding effect on the case team or the Commissioners. In the worst case scenario, it can be ignored and DG Comp can render a diverging decision.

The team of economists at DG Comp also tends to be understaffed and suffers from frequent changes within the team of advisors. Some advisors only stay for two to three years and then move on to other positions outside DG Comp. Some of the advisors have only been working in academia prior to their position at DG Comp.

Merging parties have also complained that the analysis of the economists at DG Comp lacks transparency. The merging parties do not have a right to access the documents produced by the team of economists. To assure a level playing field, written documents produced by the CCE and his team in connection with a specific case, should be made available to the notifying parties. They are directly affected by the EC's decision and need to know the details of the economic analysis that was undertaken, of its results and whether the case-team relied on it. This information is vital to enable informed negotiations with the EC and to prepare legal actions against a commitment of prohibition decision. The fact that the notifying currently have no right to access these materials restricts their rights of the defence.

In complex merger cases, it can make sense for the notifying parties to proactively provide an economic expert opinion on the effects of the merger to DG Comp (e.g., provided by economic consultancies such as NERA or Frontier Economics). It is important for the parties to know how this economic analysis compares to the internal analysis conducted by the CCE and his team as this would allow the merging parties to focus on the details of the economic concerns of DG Comp and query whether they are well-founded. The meeting between the case team and the merging parties and oral hearings are not a sufficient replacement, as it is unlikely that the CCE and his team will openly challenge the analysis of the case team in a meeting with the notifying parties.

Access to communication between the CCE and the case team would also enable the merging parties to identify whether the merger met resistance for political reasons. Transparency of the internal review process would also give DG Comp a strong incentive to conduct a sound analysis to avoid criticism. It is therefore regrettable that the parties do not

[131] Röller et al., *The Office of the Chief Competition Economist at the European Commission*, supra, pp. 7-9.
[132] Complex competition cases necessitate a joint decision of the EC Commissioners.

have access to the advice of the CCE and his team and that the CCE and his team have not been given greater weight within DG Comp.

For comparison, the Bureau of Economics of the FTC employs more than 55 non-managerial career staff economists, most of them with a PhD in economics.[133] At least one economist is assigned to each merger case and works with the case team from the start of the investigation.[134] This assures that the economists working for the FTC are involved at every stage of the review process.[135]

6. Submission of economic evidence

On 17 October 2011, the EC published the current version of the "*Best practices for the Submission of Economic Evidence and Data Collection*".[136] The Best Practices apply to the submission of data in merger control proceedings as well as in proceedings on the basis of Articles 101 and 102 TFEU.

The Best Practices provide information on the content and presentation of economic and econometric submissions by the merging parties regarding the formulation of the relevant questions, the selection of data, the choice of empirical methodology, the reporting and interpreting of the results and the use of robustness tests.[137] The aim of the Best Practices is to ensure that the economic evidence that is provided to the EC fulfils a certain standard and makes a useful contribution to the EC's analysis.

The reason for the promulgation of the Best Practices was that the EC had been receiving increasingly technical and sophisticated contributions from the merging parties.[138] There was a need to lay out how the content and the substance of the economic and econometric analysis should be presented to allow the EC to replicate the results.[139] The Best Practices therefore facilitate the handling of economic data and lay out what the EC expects to receive

---

[133] Röller et al., *The Office of the Chief Competition Economist at the European Commission*, supra, p. 9. For an internal view of the EC's work and the interplay between DG Comp, the merging parties and their lawyers, see Philippe Corruble, *Négocier avec la task-force concentrations – les flexibilités d'une procedure réglementaire*, Revue des Affaires Européennes / Law & European Affairs, 1997, no 4, p. 500 et seq.

[134] Röller et al., *The Office of the Chief Competition Economist at the European Commission*, supra, p. 9.

[135] Röller et al., *The Office of the Chief Competition Economist at the European Commission*, supra, p. 9. However, *Röller* states that the interdisciplinary approach may reduce the quality of the economic analysis. However, the economists at the FTC have organizational independence from the lawyers and report to their "*economic hierarchy*" which should assure that the economic analysis is not negatively affected by the permanent work within the case-team.

[136] EC, *Best Practices for the Submission of Economic Evidence and Data Collection in Cases Concerning the Application of Articles 101 and 102 TFEU and in Merger Cases*, Staff Working Paper, 17 October 2011, available at: http://ec.europa.eu/competition/antitrust/legislation/best_practices_submission_en.pdf, last viewed: 9 January 2013.

[137] EC, *Best Practices for the Submission of Economic Evidence*, pp. 5-12. The Best Practices also provide information on the answering of data requests of the EC, pp. 14 et seq.

[138] theantitrustsource, Interview with Dr. Alexander Italiener, supra, p. 10.

[139] theantitrustsource, Interview with Dr. Alexander Italiener, supra, p. 10.

from the merging parties. They are also part of the EC's general attempt to improve its interaction with the merging parties during the merger control process. To this end, the EC now also conducts more frequent "*state of play*" meetings with the merging parties.[140]

7. Time-line of EC merger review

Concentrations with a community dimension have to be notified to the EC prior to their implementation (Article 4(1) of the 2004 Merger Regulation). The EC publishes a summary of the notification (Article 4(3) of the Regulation).[141]

The EC then has an initial 25 working days to assess the transaction (***Phase I***). The period begins on the working day following the receipt of the notification or, if the notification is incomplete, the working day following the receipt of the complete information (Article 10(1) of the Regulation). If the EC receives a request from a Member State for referral (Article 9(2)) or if the parties to the merger offer commitments (Article 6(2) of the Regulation), the period increases to 35 working days (Article 10(1) of the Regulation).

If the EC finds that the concentration does not raise serious doubts as to its compatibility with the common market, the merger will then be cleared (Article 6(1)(b) of the Regulation). If the EC has serious doubts regarding the compatibility of the concentration with the common market, it will initiate proceedings (Article 6(1)(c) of the Regulation) (***Phase II***). The Phase II review period is 90 working days, starting from the date on which the proceedings are initiated (Article 10(3) of the Regulation). However, Article 10(2) of the Regulation provides that the EC should clear the merger before the expiry of the 90 working day period as soon as the competition concerns have been removed.

If the merging parties offer commitments, the Phase II review period increases to 105 working days from the date of the initiation of proceedings, unless these commitments have been offered less than 55 working days after the initiation of proceedings (Article 10(3) first subparagraph of the Regulation).

The Phase II review period is also extended if the notifying parties make a request to that effect not later than 15 working days after the initiation of proceedings. The notifying parties can only make one such request (Article 10(3) second subparagraph of the Regulation). The EC can further extend the Phase II period with the agreement of the notifying parties for a maximum of 20 working days (Article 10(3) second subparagraph of the Regulation).

---

[140] theantitrustsource, Interview with Dr. Alexander Italiener, supra, p. 9.
[141] On referrals, see Articles 4(4), (5), 9 of the 2004 EC Merger Regulation.

An in-depth merger investigation at the EC can, therefore, take up to 175 working days (35 weeks). At the end of the Phase II investigation, the EC may declare the transaction compatible with the common market (Article 8(1) of the Regulation); if the parties have offered modifications to the transactions or have agreed with the EC on commitments, the EC will issue a decision on the basis of Article 8(2) of the Regulation, to which it may attach conditions and obligations. If the EC believes that the transaction constitutes a significant impediment to effective competition and no commitments or modifications have been agreed as to the removal of the competition concern, the EC will issue a prohibition decision (Article 8(3) of the Regulation). If the EC's decision is appealed to the General Court, another four years will pass by before a final decision is rendered.[142]

An important difference between US and EU merger review is that the EC can render an administrative decision that a merger is incompatible with the common market. The parties to the merger and other interested parties can only appeal the decision at the General Court. The DoJ and FTC, on the other hand, need to seek an injunction of the Federal Court in order to enjoin the merger. The first decision is, therefore, judicial, whereas in the EU, the first binding decision is of an administrative nature.[143]

8. Enforcement statistics

Only a very few mergers pose a threat to competition and have to be challenged. The table on the next page has been taken from the EC's webpage[144] and shows its enforcement statistics from 21 September 1990 to 30 November 2013.[145] During that time-period, a total of 5,403 cases have been notified, of which only 402 entered Phase II. Since the introduction of the 2004 Merger Regulation, only five mergers were prohibited. Four of them were prohibited during Commissioner Almunia's tenure. The most recent merger that was prohibited was the acquisition of Aer Lingus by Ryanair (*Ryanair/Air Lingus III*).[146] It should be mentioned that this dissertation focuses on the small number of cases that were subject to an in-depth review. It is therefore not representative for merger control in general. Most cases are approved relatively quickly and without an in-depth review.

[142] The average review period for competition cases at the General Court was 50,5 months in 2011. See General Court, Statistics concerning the judicial activity of the General Court, available at: http://curia.europa.eu/jcms/upload/docs/application/pdf/2012-06/ra2011_statistiques_tribunal_en.pdf, last viewed: 22 April 2013.

[143] See also Corruble, *Le droit communautaire de la concurrence dans les relations euro-américaines,* supra, pp. 22-23.

[144] Available at: http://ec.europa.eu/competition/mergers/statistics.pdf, last viewed: 5 December 2013.

[145] It is available at: http://ec.europa.eu/competition/mergers/statistics.pdf, last viewed: 17 February 2013.

[146] Case No. COMP/M.6663, *Ryanair/Air Lingus III*, 27 February 2013, OJ C 216, 02/08/2012, pp. 22-30. See also Rupert Neate, *Ryanair expects EU to block Aer Lingus takeover bid*, guardian.co.uk, 12 February 2013, available at: http://www.guardian.co.uk/business/2013/feb/12/ryanair-eu-block-aer-lingus-takeover, last viewed: 17 February 2013.

21 September 1990 to 30 November 2013

I.) NOTIFICATIONS

November

	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	Total
Number of notified cases	11	64	59	59	95	110	131	168	224	276	330	335	277	211	247	318	356	402	348	259	274	309	283	257	5403
Cases withdrawn - Phase 1	0	0	3	1	6	4	5	9	5	7	8	8	3	0	3	6	7	5	10	6	4	9	4	1	114
Cases withdrawn - Phase 2	0	0	0	1	0	0	1	0	4	5	5	4	1	0	2	3	2	2	3	2	0	1	1	0	37

II.) REFERRALS

November

	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	Total
Art 4(4) request (Form RS)															2	14	13	5	9	8	6	10	13	11	91
Art 4(4) referral to Member State															2	11	13	5	9	6	7	10	12	8	83
Art 4(4) partial referral to Member State															0	0	0	1	0	0	0	1	0	2	4
Art 4(4) refusal of referral															0	0	0	0	0	0	0	0	0	0	0
Art 4(5) request (Form RS)															20	28	38	51	23	23	26	18	22	12	261
Art 4(5) referral accepted															16	24	39	50	22	25	24	17	22	10	249
Art 4(5) refusal of referral															2	0	0	2	0	0	1	0	1	0	6
Art 22 request	0	0	0	1	0	1	1	1	0	0	0	0	2	1	1	4	4	3	2	1	3	1	3	1	30
Art 22(3) referral (Art 22. 4 taken in conjunction with article 6 or 8 under Reg. 4064\89)	0	0	0	1	0	1	1	1	0	0	0	0	2	1	1	3	3	2	3	1	2	2	2	1	27
Art 22(3) refusal of referral																1	1	0	0	0	1	0	1	0	4
Art 9 request	0	1	1	1	1	0	3	7	4	9	4	9	8	10	4	7	6	3	5	3	11	2	2	2	103
Art 9.3 partial referral to Member State	0	0	1	0	1	0	0	6	3	2	3	6	7	1	1	3	1	1	2	0	3	0	1	0	42
Art 9.3 full referral	0	0	0	1	0	0	3	1	1	3	2	1	4	8	2	3	1	1	2	1	4	2	1	0	41
Art 9.3 refusal of referral	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	1	1	0	0	0	6

III.) FIRST PHASE DECISIONS

November

	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	Total
Art 6.1 (a) out of scope Merger Regulation	2	5	9	4	5	9	6	4	4	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	52
Art 6.1 (b) compatible	5	47	43	49	78	90	109	118	196	225	278	299	238	203	220	276	323	368	307	225	253	299	254	215	4718
Art 6.1(b) compatible, under simplified procedure (figures included in 6.1(b) compatible above)	0	0	0	0	0	0	0	0	0	0	41	141	103	110	138	169	211	238	190	143	143	191	170	140	2128
Art 6.1 (b) in conjunction with Art 6.2 (compatible w. commitments)	0	3	4	0	2	3	0	2	12	16	26	11	10	11	12	15	13	18	19	13	14	5	9	10	228

IV.) PHASE II PROCEEDINGS INITIATED

November

	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	Total
Art 6.1 (c)	0	6	4	4	6	7	6	11	11	20	18	21	7	9	8	10	13	15	10	5	4	8	10	5	218

V.) SECOND PHASE DECISIONS

November

	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	Total
Art 8.1 compatible (8.2 under Reg. 4064/89)	0	1	1	1	2	2	1	1	3	0	3	5	2	2	2	2	4	5	9	0	1	4	1	2	54
Art 8.2 compatible with commitments	0	3	3	2	2	3	3	7	4	7	12	9	5	6	4	3	6	4	5	3	2	1	6	2	102
Art 8.3 prohibition	0	1	0	0	1	2	3	1	2	1	2	5	0	0	1	0	0	1	0	0	0	1	1	2	24
Art 8.4 restore effective competition	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4

VI.) OTHER DECISIONS

November

	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	Total
Art 6.3 decision revoked	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Art 8.6 decision revoked	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Art 14 decision imposing fines	0	0	0	0	0	0	0	0	1	4	1	0	1	0	1	0	0	0	0	1	0	0	0	0	9
Art 7.3 derogation from suspension (7.4 under Reg. 4064/89)	1	1	2	3	3	2	4	5	13	7	4	7	14	8	10	6	2	3	6	5	1	3	1	0	111
Art 21	0	0	0	0	0	1	0	1	0	1	1	0	1	0	0	0	2	1	0	0	0	0	0	0	8

V. Coordinated effects in the US.

1. Different approaches to merger policy

The US has the oldest existing competition law system in the world.[147] US antitrust and merger control rules have influenced numerous other competition law systems, not least that of the EU.[148]

Even though US and the EU merger control have converged to a significant extent since the introduction of the SIEC-test, certain important differences remain. US competition law focuses on the protection of competition because the US believes that the free play of market forces will render the best possible results for the economy and thereby for US citizens. The belief that businesses within a free market environment will act to the greater good of the society and the belief that it is well-deserved to gain market shares through successful competition is an important feature of the US approach to merger control. The focus tends to be on the protection of a market environment that facilitates entrepreneurial behaviour.

EU competition policy also acknowledges the importance of the free market and entrepreneurship, and vows to protect competition, not competitors. However, EU competition policy also acts as a tool to reach a wider range of priorities, most notably the so-called "*flagship initiatives*" set out in the Europe 2020 strategy.[149] Furthermore, in many areas of business, EU-wide competition is hindered by the existence of national markets, national and regional monopolies and other boundaries to competition.[150] In many markets, especially the former state monopolies, competition requires active intervention (i.e., the common market needs to be "*built*").

---

[147] Dan Wei, *China's Anti-Monopoly Law and its Merger Enforcement: Convergence and Flexibility,* 14 J. Int'l Econ. L. (2011) 812.

[148] The EU has grown into a role-model in its own right. Chinese competition law, for example, was influenced to a greater extent by EU competition law than US competition law. A reason was that the EU had greater experience with former state-run monopolies. Wei, *China's Anti-Monopoly Law*, supra, p. 813.

[149] See Alexander Italianer, *Competition Policy in support of the EU 2020 policy objectives*, Vienna Competition Conference 2010 "Industry vs. Competition?", available at: http://ec.europa.eu/competition/speeches/text/sp2010_05_en.pdf, last viewed: 22 April 2013, p. 3. The „*flagship initiatives*" include innovation, a digital agenda for Europe, a resource-efficient economy, an industrial policy to tackle globalisation, and new skills and jobs. As Mr Italianer states in his address, competition is "*key to ensure that the vision of growth and dynamism comes true*" which in turn is a prerequisite to attain the flagship initiatives that are linked to the EU's industrial sectors. See also Wei, *China's Anti-Monopoly Law*, supra, p. 812.

[150] See also Communication from the Commission, *Single Market Act – Twelve levers to boost growth and strengthen confidence*, April 2011, COM(2011) 206 final, available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0206:FIN:EN:PDF, last viewed: 22 April 2013; *Single Market Act II – Together for new growth*, October 2012, COM(2012) 573 final, available at: http://ec.europa.eu/internal_market/smact/docs/single-market-act2_en.pdf, last viewed: 22 April 2013. The experience with former state monopolies is one of the reasons for China's interest in the EU competition law system. Another reason are the broad enforcement powers of the EC. See Wei, *China's Anti-Monopoly Law*, supra, p. 810.

2. Merger analysis at the DoJ and the FTC

The DoJ and the FTC are jointly responsible for federal US merger analysis. They will usually decide among themselves which agency has more expertise to review a specific merger.[151] Under the Hart-Scott Rodino Act, business transactions of a certain size have to be notified to the antitrust authorities before closing.[152] If the transaction requires notification, the merging parties have to submit information about their business operations and wait for a specific period of time before they consummate the merger. [153]

The DoJ or the FTC will initiate a civil action to enjoin the transaction if they conclude that the transaction is likely "*to increase prices to consumers.*"[154] As in the EU, the political focus is on consumer protection.

2.1. DoJ

During the first phase of the investigations, the staff of the Antitrust Division will ask the parties for information on a voluntary basis and may conduct interviews with them as well as with market participants, suppliers and consumers.[155]

Depending on the outcome of the investigation, the Antitrust Division may issue a second request. During the second phase of the investigation, the Antitrust Division determines whether or not it will challenge the acquisition and will be collecting information and conducting depositions.[156]

Once the parties have complied with the second request, an extended waiting period begins, which expires 30 days after substantial compliance by both parties.[157] The waiting period enables the attorneys to conduct interviews and to use other forms of compulsory processes to obtain information.[158]

Before the extended waiting period expires, the agency must seek to enjoin the concentration in a federal district court or gain a voluntary commitment from the parties not to

[151] Ilene Gable Gotts, *The Merger Review Process: A Step-By-Step Guide to Federal Merger Review,* ABA Section of Antitrust Law, p. 27.
[152] FTC, *Hart-Scott-Rodino Premerger Notification Program: Introductory Guide I: What is the Premerger Notification Program? An Overview*, Revised: March 2009*,* available at: http://www.ftc.gov/bc/hsr/introguides/guide1.pdf, last viewed: 31 January 2013, p. 1.
[153] Usually 30 days. The waiting period is 15 days for cash tenders or offers or bankruptcy sales. FTC, *Hart-Scott-Rodino Premerger Notification Program,* supra*,* p. 1.
[154] Antitrust Division, *About the Division,* available at: http://www.justice.gov/atr/about/mission.html*,* last viewed: 31 January 2013.
[155] Gotts, *The Merger Review Process*, supra, p. 27.
[156] Gotts, *The Merger Review Process*, supra, pp. 27-28.
[157] Gotts, *The Merger Review Process*, supra, p. 28.
[158] FTC, *Hart-Scott-Rodino Premerger Notification Program,* supra*,* p. 13.

close pending further review. If the Assistant Attorney General concludes that the concentration is likely to violate Section 7 of the Clayton Act, he or she will authorise his or her staff to file a suit in the appropriate federal district court and seek a preliminary or permanent injunction on the basis of Section 15 of the Clayton Act.[159] If the DoJ asks for a preliminary injunction, the court will try to balance the likelihood of the government's success on the merits, the likelihood of irreparable harm, the likelihood that any interested parties will be harmed by the injunction and the public interest.[160] If the extended waiting period expires without challenge in a federal district court or a voluntary commitment, the parties are free to consummate the concentration.[161] During the investigation, the investigative staff may also discuss a settlement.[162] The settlement would then have to be approved by the Assistant Attorney General.[163]

2.2. FTC

Like the DoJ, the FTC has jurisdiction to investigate mergers and acquisitions and to challenge concentrations if it reaches the conclusion that the combination is likely to have a substantial competitive impact.[164] The procedure is similar to that of the DoJ. The FTC's Bureau of Competition investigates the competitive effects of the proposed merger and, if appropriate, recommends that the FTC take enforcement actions.[165]

In its analysis of merger cases, the FTC's Bureau of Competition works *in tandem* with the FTC's Bureau of Economics.[166] If the Bureau of Competition finds, after the 30 day waiting period, that the concentration still raises substantial competitive concerns, it will open enforcement actions. If the staff recommends enforcement actions, the Commissioners at the FTC will pass a vote according to 16 C.F.R. §14.4(b).[167] If the FTC decides to seek a preliminary injunction, the parties can decide not to consummate the concentration prior to its determination. In the alternative, the FTC needs to obtain a temporary restraining order.[168] Section 13(b) of the FTC Act states that a preliminary injunction may be granted if "*weighing*

---

[159] Gotts, *The Merger Review Process*, supra, p. 30. The transaction may also violate Section 1 and 2 of the Sherman Act, in which case enforcement actions are taken on the basis of Section 4 of the Sherman Act.
[160] Often, however, preliminary and permanent injunction procedures are consolidated and evidentiary hearings on the merits are held. See Justin J. Hakala, *The Case for Different Preliminary Injunction Standards in Merger Challenges*, E-Newsletter, available at: http://www.michbar.org/antitrust/newsletter/march09.pdf, last viewed: 23 April 2013, p. 7.
[161] Gotts, *The Merger Review Process*, supra, p. 29.
[162] FTC, *Hart-Scott-Rodino Premerger Notification Program,* supra*,* p. 14.
[163] FTC, *Hart-Scott-Rodino Premerger Notification Program,* supra*,* p. 14.
[164] Gotts, *The Merger Review Process*, supra, p. 22.
[165] FTC, *Competition Enforcement,* available at: http://www.ftc.gov/bc/enforcement.shtm, last viewed: 31 January 2013.
[166] FTC, *Competition Enforcement,* supra.
[167] 16 CFR §14.4(b); ABA Section on Antitrust Law, *FTC Practice and Procedural Manual* (2007), p. 128.
[168] Fed. R. Civ. P. 65(b); ABA, *FTC Practice and Procedural Manual*, supra, p. 128.

*the equities and considering the Commission's likelihood of success, such action would be in the public interes*t".[169] The FTC and the parties to the merger can lodge an appeal against the decision.[170] It may also close the investigation or discuss a settlement.[171] A settlement would then have to be presented to the Commission and would have to be accepted by a majority vote.[172]

2.3. Enforcement statistics

According to the FTC's Competition Enforcement Database, the FTC took 23 merger enforcement actions in 2013. Of these, 16 ended in Part 2 consent decrees, in only five cases did the FTC obtain a federal injunction, there were no Part 3 administrative complaints and two of the 23 challenged transactions were subsequently abandoned. In 2012, there were 25 enforcement actions. Of these, 15 ended in Part 2 consent decrees. There were two federal injunctions and one Part 3 administrative complaint. Seven projects were abandoned. In 2011, there were 18 enforcement actions, nine of which led to Part 2 consent decrees, three in federal injunctions and six were abandoned.[173]

Therefore, the majority of the merger enforcement actions are settled in Part 2 Consent Decisions. Consent decrees are the result of a settlement between the FTC's administrative law judge and the parties to the merger (§ 3.25 FTC Rules Part 4).[174]

3. US coordinated effects analysis

Merger analysis in the US is based on section 7 of the Clayton Act. The Clayton Act was enacted in 1914 and later revised in 1950. Section 7 of the Clayton Act states:

> *"No person engaged in commerce or in any activity affecting commerce shall acquire, directly or indirectly, the whole or any part of the stock or other share capital [...] the whole or any part of the assets of another person [...], where in any line of commerce*

[169] ABA, *FTC Practice and Procedural Manual*, supra, p. 133.
[170] ABA, *FTC Practice and Procedural Manual*, supra, p. 135.
[171] See ABA, *FTC Practice and Procedural Manual*, supra, p. 127 for more details. FTC, *Hart-Scott-Rodino Premerger Notification Program,* supra*,* p. 14.
[172] FTC, *Hart-Scott-Rodino Premerger Notification Program,* supra*,* p. 14.
[173] The data goes back to 1996. See FTC, FTC Competition Enforcement Database, available at> http://www.ftc.gov/bc/caselist/merger/index.shtml, last viewed: 5 December 2013.
[174] Applicable to Part 3 proceedings initiated before 14 January 2009, which, however, is the case for many of the FTC decisions that are analysed in this section. Interim Final Rules are currently open for public comment. See http://www.ftc.gov/os/adjpro/index.shtm, last viewed: 31 January 2013.

[...], the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly."[175]

The "*substantial lessening of competition*" allows for a relatively flexible approach to merger policy based on the actual effects of the merger on competition. The use of the words "*may be*" is deliberate and indicates that Congress was concerned about "*probabilities, not certainties*."[176] US merger control distinguishes between unilateral and coordinated effects.[177] The 2010 Horizontal Merger Guidelines of the DoJ and the FTC define coordinated interaction as conduct by multiple firms that is profitable for each of them only as a result of the accommodating reactions of the others.[178]

Coordinated effects analysis was at the core of US merger enforcement from early on. As the then Deputy Assistant Attorney General of the DoJ's Antitrust Division, William J. Kolasky, pointed out in an address to the ABA Section on Antitrust Law, Judge Richard Posner had written as early as 1986 that the "*ultimate issue*" in reviewing a merger under the antitrust laws is "*whether the challenged acquisition is likely to hurt consumers, by making it easier for firms in a market to collude, expressly or tacitly, and thereby force prices above or farther above the competitive level*."[179] While the focus of the EC was (and still is) on unilateral effects, the US quickly adopted a two-pronged approach in which coordinated effects played an important role from the start, while the importance of unilateral effects analysis increased over time and especially since the introduction of the 1992 Horizontal Merger Guidelines.[180]

VI. Some points of comparison

Before we turn to Chapter 2 and to the details of coordinated effects analysis, I want to concentrate on some further factors that affect merger control. These are (1) competition authorities' enforcement powers, (2) the professional background of the chief competition enforcers, and (3) politics.

1. Enforcement powers

---

[175] Clayton Antitrust Act § 7, USC § 18.
[176] *Brown Shoe Co. v United States,* 370 US 294, 323 (1962), also referred to in *Heinz*, at 7.
[177] Examples of the trend in US jurisprudence during this time include the early decisions of the US Supreme Court in *US v American Tobacco Co*, 221 US 106 (1911); US *v Yellow Cab Co.*, 322 US 218 (1947) and the later decisions in *Brown Shoe Co., Inc. v U.S.*, 370 US 294 (1962); *Ford Motor Co. v U.S.,* 286 F. Supp. 407 (E.D. Mich. 1968). Vertical mergers were also thought to harm competition by raising barriers to entry and facilitating promotional product differentiation. Killick et al., *Horizontal and Vertical Mergers in the Reformed EC Merger Control*, supra, Ch. 11 II.D., p. 474.
[178] 2010 Horizontal Merger Guidelines, § 7, p. 24.
[179] William J. Kolasky, *Coordinated Effects in Merger Review*, supra.
[180] Kolasky, *Coordinated Effects in Merger Review,* supra.

An important difference between EU and US merger control concerns enforcement powers. The EC is competent to directly enjoin a merger that it deems anti-competitive. If the DoJ and the FTC are concerned that a concentration substantially lessens competition, they have to ask for injunctive relief in court.[181]

In the US, the finding of law therefore happens in court, whereas in the EU, it happens within the EC.[182] This does pose the risk of prosecutorial bias.[183] It is also problematic because it does not grant the company a fair hearing in front of a neutral judge or hearing officer.[184] The final decision in high-profile cases is taken by the vote of 27 politically appointed Commissioners who have not personally attended the hearing, except for the Competition Commissioner.[185]

The EC's enforcement powers are especially problematic because the parties do not have access to communication between the CCE and the case team. This means that they lack information that would enable them to check the soundness of the EC's economic analysis. This, together with the high costs firms incur in lengthy merger investigations, means that there is not a level playing field between the merging parties and the EC.

2. Professional background

Another striking difference is that the heads of US competition authorities tend to be recruited from private practice whereas the head of DG Comp mostly comes from politics or academia. Almost all of the (Acting) Attorney Generals of the DoJ have been working in private practice and/or have been holding positions in the public sector before they took up their post at the Antitrust Division: Christine A. Varney was a partner at Hogan & Hartson LLP, now Hogan Lovels, in Washington DC, and a member of the Antitrust Practice Group of the firm.[186] Sharis A. Pozen was also a partner in the Washington DC office of Hogan & Hartson LLP and served as Director of the firm's Antitrust Practice Group.[187] Joseph F. Wayland had been working in the law firm Cravath Swaine & Moore as a partner for almost 25 years before he took up his position at the DoJ.[188] Renata B. Hesse worked at Brobeck, Phleger & Harrison

[181] See also Corruble, *Le droit communautaire de la concurrence dans les relations euro-américaines*, supra, pp. 22-23.
[182] Ronald W. Cotterill, *Antitrust Economic Analysis in Food Marketing Channels*, Presented at the 27th Annual Association of Agricultural Economists Conference, Beijing, China, 18 August 2009, p. 4.
[183] See The Economist, *Prosecutor, judge and jury*, 18 February 2010, available at: http://www.economist.com/node/15545914, last viewed: 9 January 2013.
[184] The Economist, *Prosecutor, judge and jury*, supra.
[185] The Economist, *Prosecutor, judge and jury*, supra.
[186] See the webpage of the DoJ, available at: http://www.justice.gov/atr/about/cvarneybio.html, last viewed: 17 February 2013.
[187] See the webpage of ICN, available at: http://www.icn-thehague.org/page.php?id=319&, last viewed: 17 February 2013.
[188] Peter Lattman, *New Acting Antitrust Chief at Justice Dept. is Named,* supra.

LLP in San-Francisco prior to her career at the DoJ.[189] The current Assistant Attorney General William J. Baer was a partner at Arnold & Porter LLP in the firm's Antitrust Group. He was named one of the "*The Decade's Most Influential Lawyers*" by the National Law Journal.[190] He was sworn in on 3 January 2013.[191]

By comparison, the current EU Commissioner for Competition, Joaquín Almunia, has been an Associate Lecturer at the University of Alcalá de Henares in Madrid, Spain, on Employment and Social Security Law. He is a founder of a progressive think tank and a research programme on "*Equality and redistribution of income*".[192] Almost from the start of his career (1979-2004), Commissioner Almunia has been a Member of the Spanish Socialist Party (***PSOE***) and of the Spanish Parliament.[193] He has held several posts in the Spanish government (Minister of Employment and Social Security, 1982-1986; Minister of Public Administration, 1986-1991) and has been EC Commissioner for Competition since 2004. However, he has never worked in private practice or in competition law.[194]

The former Commissioner for Competition, Neelie Kroes, worked for six years as an Assistant Professor at Erasmus University in Rotterdam (the Netherlands), following her graduation there.[195] She joined the Rotterdam Municipal Council and was elected as a member of the Dutch Parliament for the liberal VVD party in 1971.[196] From 1982 to 1989, Kroes served as a Minister for Transport, Public Works and Telecommunication in the Netherlands.[197] Following her political career in the Netherlands, she was appointed President of Nyenrode University (the Netherlands) from 1991-2000, and also served on several company boards, including Lucent Technologies, Volvo and P&O Nedlloyd.[198] In

---

[189] See the webpage of the DoJ; available at: http://www.justice.gov/atr/public/hearings/single_firm/bio/222452.htm, last viewed: 17 February 2013.
[190] See the webpage of Arnold & Porter, available at: http://www.arnoldporter.com/professionals.cfm?action=view&id=289, last viewed: 27 December 2012.
[191] See the webpage of the DoJ, *Meet the Assistant Attorney General*, available at: http://www.justice.gov/atr/about/baer.html, last viewed: 5 January 2013.
[192] See Commissioner Almunia's CV on the EC's webpage, available at: http://ec.europa.eu/commission_2010-2014/almunia/about/cv/almunia_cv_en.pdf, last viewed: 22 April 2013. The current Director-General of DG Comp is Dr. Alexander Italianer. He was appointed to the post of Director General for Competition on 18 February 2010. Prior to his appointment as Director-General for Competition, he served as Deputy Secretary General in charge of the Better Regulation Agenda and Chairman of the EC's Impact Assessment Board. He also worked for a number of years in the EC's Directorate-General for Economics and Financial Affairs (including from 2002 to 2004 as the Director for International Economic and Financial Affairs). He also served in the Cabinets of the President of the EC Jacques Santer and recently José Manuel Barroso as well as the cabinets of the Commissioners Günter Verheugen and Pavel Telicka. For all of the information in this footnote, see theantitrustsource, *Interview with Dr. Alexander Italiener, Director general for Competition, European Commission*, theantitrustsource, April 2011, available at: www.antitrustsource.com, last viewed: 9 January 2013, p. 1.
[193] Almunia, CV, supra.
[194] Almunia, CV, supra.
[195] See Commissioner Kroes' CV on the EC's webpage, available at: http://ec.europa.eu/commission_2010-2014/kroes/about/cv/index_en.htm, last viewed: 22 April 2013.
[196] Kroes, CV, supra.
[197] Kroes, CV, supra.
[198] Kroes, CV, supra.

2004, she became Competition Commissioner, a post which she held until 2010, when she became Vice-President of the EC responsible for the Digital Agenda for Europe.[199]

The previous Competition Commissioner, Mario Monti, served as a President of Société Universitaire Européenne de Recherches Financières (***SUERF***) and of the Italian Treasury Ministry's Committee from 1982 to 1985.[200] In the late 1980s, he helped to draft Italy's first competition law as a member of the Industry Ministry's Committee.[201] He is the author on many publications on monetary and financial economics, fiscal policy and European integration. He was a member of the board of directors of several companies and taught at the Universities of Trento and Turin, and Milan's Bucconi University (where he was Professor of Economics and Director of the Institute of Economics and - from 1989 to 1994 - Dean of the University).[202] He became a member of the EC in charge of Competition from 1999 to 2005.[203] Commissioner Monti is an exception because he had in-depth competition law experience when he took up his post as Competition Commissioner.

Comparing the curriculum vitae of the former EU Competition Commissioners and the (Acting) Assistant Attorney Generals also shows that, in the US, experience in private practice is highly regarded and will often be a prerequisite for an important government post. In the EU, on the other hand, the highest posts in competition law enforcement are reserved for politicians and for people from academia. The obvious drawback is that the chief competition enforcers of the EC have limited experience in private practice. Some have not even had a career in competition law or competition economics before taking up the post as Competition Commissioner.

It should be mentioned that the Attorney Generals who head the DoJ, and are one step in the hierarchy above the Assistant Attorney General, have also all previously been working in private practice. The current Attorney General, Eric H. Holder, Jr., worked as a partner at Covington & Burling. Among his clients were the National Football League, Chiquita Brands International and Merck.[204] He had also gathered extensive experience in the public sector, having worked as a US attorney for the District of Columbia, as a federal judge on the Superior Court bench in Washington, and as a prosecutor in the DoJ's public integrity section.

[199] Kroes, CV, supra.
[200] See Commissioner Monti's CV, available at: http://www.concurrences.com/auteur/monti?lang=en, last viewed: 17 February 2013.
[201] Monti, CV, supra.
[202] Monti, CV, supra.
[203] Monti, CV, supra.
[204] The New York Times, Online Edition, *The 44th President, The New Team,* 18 December 2012, available at: http://projects.nytimes.com/44th_president/new_team/show/eric-holder, last viewed: 22 April 2013.

Eric Holder's predecessor, Michael B. Mukasey, worked for the law firm Patternson, Belknap, Webb & Tyler from 1976 to 1987, before being appointed to the US District Court for the Southern District of New York by President Ronald Regan, where he served until 2006.[205] Most of his predecessors also gained experience in private practice prior to being appointed to their posts.[206]

3. The politics of merger control

Politics play a huge role in merger enforcement. Conservative administrations tend to favour a "*free-market*" or a "*laissez-faire*" approach to merger control, whereas more left-wing administrations are in favour of a stronger and more proactive state. The "*free-market approach*" is based on the assumption that the market will help itself in most situations and that public intervention risks getting it wrong because we know too little about the forces that are at play. Wrongful interference deters beneficial entrepreneurial risk-taking, ultimately damaging our society.

When Barack Obama came into office in 2009, he vowed to reinvigorate merger enforcement. Before his election, he criticised the Republican George W. Bush's administration for its lax merger enforcement, as compared to enforcement under predecessor Clinton.[207] Once in office, President Obama appointed Christine A. Varney, a former FTC Commissioner, as Assistant Attorney General of the DoJ. Christine A. Varney promised "*vigorous antitrust enforcement*" during her time in office.[208]

What has happened since, however, is a rapid succession of Acting Assistant Attorney Generals in the Antitrust Division: Assistant Attorney General Varney was replaced by Sharis

---

[205] See Kathy Gill, US *Attorney Generals*, About.com, available at: http://uspolitics.about.com/od/usgovernment/tp/AG_1980_2007.htm, last viewed: 22 April 2013.

[206] Roberto Gonzales (Attorney General between 2005 and 2007) had been a partner at the law-firm Vinson & Elkins L.L.P. See The White House, President George W. Bush, Alberto Gonzales, available at: http://georgewbush-whitehouse.archives.gov/government/gonzales-bio.html, last viewed: 22 April 2013. John Ashcroft (Attorney General between 2000 and 2005).

[207] Barack Obama, Senator, *Statement for the American Antitrust Institute*, 27 September 2007. The statement used to be available at: http://www.antitrustinstitute.org/archives/files/aai-%20Presidential%20campaign%20-%20Obama%209-07_092720071759.pdf. In the meantime, the link has gone inactive. Sean Gates, amongst others, quotes from the statement in: *Obama's Antitrust Enforcers: What Can We Expect?*, theantitrustsource, April 2009, available at: http://www.americanbar.org/content/dam/aba/publishing/antitrust_source/Apr09_Gates4_28f.authcheckdam.pdf, last viewed: 17 February 2013.

[208] Christine A. Varney, *Vigorous Antitrust Enforcement in this Challenging Era*, 11 May 2009, Remarks as Prepared for the Center of American Progress, available at: http://www.justice.gov/atr/public/speeches/245711.pdf, last viewed: 17 February 2013. See also Sanford M. Litvack/Eric J. Stock/Jason J. Porta, *Antitrust Enforcement under the Obama Administration: Change? Really?*, 12 Sedona Conf. J. (2011) 227.

A. Pozen as Acting Assistant Attorney General on 4 August 2011.[209] Acting Assistant Attorney General Pozen was replaced by Joseph F. Wayland as Acting Assistant Attorney General.[210] Joseph F. Wayland was replaced by Renata B. Hesse as Acting Assistant Attorney General in November 2012.[211] She herself has been replaced by Bill Bear from Arnold & Porter's Antitrust Practice Group as Assistant Attorney General.[212]

The DoJ has, therefore, lacked consistent leadership during the Obama administration. The Acting Assistant Attorney Generals only had an interim mandate and have not had enough time to leave a footprint at the division. Nevertheless, the political direction of the DoJ during the Obama administration has been set towards stronger merger control enforcement, as will be shown in detail in Chapters 2 and 3.

Whereas changes in administration lead to changes at the helm of the DoJ's antitrust division, the changes in the staffing of the FTC are more subtle. FTC Commissioners are appointed by the US President and confirmed by the US Senate. [213] However, the FTC is bipartisan. Not more than three of its members may belong to the same political party.[214] The President can only designate a Chairman from among the Commissioners. The Chairman of the FTC will therefore usually change whenever the Presidential administration changes.[215] The Chairman serves as a chief executive of the FTC and appoints high-ranking, policy-making Commission personnel, such as the Director of the Bureau of Economics. [216] However, due to the bipartisan structure and the limited influence of the Chairman, the FTC's decision-making practice can be expected to change less with different administrations than that of the DoJ.

Political changes not only affect the decision-making practice of US competition authorities. Different Commissioners at DG Comp also have different political agendas.

Near the end of his term in office, Mario Monti espoused far-reaching reforms of EC competition laws and of DG Comp. The reforms promoted by Commissioner Monti finally led to the introduction of the SIEC-test and the adoption of a "*more economic approach*" towards competition enforcement in general and also to merger control. When Mr Monti was replaced

---

[209] Dep'mt of Justice, Press Release, *Acting Assistant Attorney General Pozen Announces Departure From Antitrust Division,* available at: http://www.justice.gov/atr/public/press_releases/2012/279471.htm, last viewed: 22 April 2013.

[210] Peter Lattman, *New Acting Antitrust Chief at Justice Dept. is Named,* The New York Times, Online edition, 5 April 2012, available at: http://dealbook.nytimes.com/2012/04/05/new-acting-antitrust-chief-at-justice-dept-is-named/, last viewed: 22 April 2013.

[211] See the webpage of the DoJ, available at: http://www.justice.gov/atr/, last viewed: 22 April 2013.

[212] Marc Jacoby*, Bill Bear Nominated to Lead Antitrust Division, Main Justice*, 4 February 2013, available at: http://www.mainjustice.com/2012/02/04/bill-baer-nominated-to-lead-antitrust-division/, last viewed: 22 April 2013.

[213] ABA Section of Antitrust Law, *FTC Practice and Procedure Manual*, 2007, p. 57.

[214] ABA, *FTC Practice and Procedure Manual*, supra, p. 57.

[215] ABA, *FTC Practice and Procedure Manual*, supra, p. 58.

[216] ABA, *FTC Practice and Procedure Manual*, supra, p. 58.

by Neely Kroes, this did not result in a significant policy change at DG Comp because Mrs Kroes was committed to pursuing the reforms that Mr Monti had started. The continuity was likely due to the outstanding reputation of Commissioner Monti and the fact that, as an economist, Mr Monti probably aligned with Mrs Kroes, a liberal, on many merger policy questions.

During her time in office, Commissioner Kroes advocated rigorous merger enforcement wherever she believed a merger would be likely to harm competition.[217] She also placed economic reforms and the contribution of competition policy towards these goals at the top of her agenda.[218] However, she remained committed to vigorous economics and intervention that was limited to cases in which harm to competition could be sufficiently proven.

On 9 February 2010, Joaquín Almunia took over Neelie Kroes' position as Commissioner for Competition. His approach to merger policy clearly differs from that of the liberal Commissioner Kroes. Mr Almunia's mission statement included "*rigorous scrutiny of proposed mergers*".[219] As a former leader of the Spanish PSOE, his approach to mergers was expected to be more interventionist and he has so far lived up to that expectation. Merger control has been considerably toughened during Joaquín Almunia's first three years in office. He has blocked four mergers: the plan of Aegean Airlines to merge with Olympic Air,[220] Ryanair's third attempt to purchase Air Lingus,[221] UPS' $6.9 billion bid for TNT Express,[222] and the merger between Deutsche Boerse and NYSE Euronext,[223] which would have created the world's biggest exchange.[224] Commissioner Almunia has also crossed

[217] She also took a self-confident posture regarding transatlantic admonitions. *Baudenbacher* remembers that she told American Senators that admonished the Commission to speed up its investigation of the *Oracle/Sun* merger to mind their own business. See Carl Baudenbacher, *The Legacy of Neelie Kroes,* Journal of European Competition Law & Practice, 2010, Vol. 1, No. 3, p. 169.

[218] Lars-Hendrik Röller, *Economic Analysis and Competition Policy Enforcement in Europe*, in: Peter A.G. van Bergeijk/Erik Kloosterhuis, Modelling European Mergers: Theory, Competition Policy and Case Studies, 2005, p. 11, article available at: http://www.google.de/search?q=economic+analysis+and+competition+policy+enforcement+in+europe&aq=f&oq=economic+analysis+and+competition+policy+enforcement+in+europe&sugexp=chrome,mod=10&sourceid=chrome&ie=UTF-8, last viewed: 9 January 2013, p. 12.

[219] Joaquín Almunia, *Commissioner for Competition, Vice President of the European Commission, Mandate*, available at: http://ec.europa.eu/commission_2010-2014/almunia/about/mandate/index_en.htm, last viewed: 17 February 2013.

[220] Case No COMP/M.5830, 26 January 2011, *Olympic/Aegean Airlines*, OJ C 195, 03/07/2012, pp. 11-17.

[221] Case No COMP/M.6663, 27 February 2013, *Ryanair/Aer Lingus III*, OJ C 216, 30/07/2012, pp. 22-30. The second attempt to purchase Aer Lingus ended with Ryanair withdrawing the notification (Case No COMP/M.5434, 23 January 2009, *Ryanair/Aer Lingus II*).

[222] Case No COMP/M.6570, 30 January 2013, *UPS/TNT Express*, prohibition decision has not yet been published. On the reasons for the prohibition decision, see the remarks of Commissioner Almunia at a press conference on 30 January 2013, *Introductory remarks on UPS/TNT Express merger*, SPEECH/13/84, available at: http://europa.eu/rapid/press-release_SPEECH-13-84_en.htm, last viewed: 17 February 2013.

[223] Case No COMP/M.6166, 1 February 2012, *Deutsche Boerse/NYSE Euronext*. The non-confidential version of the prohibition decision, is available at: http://ec.europa.eu/competition/mergers/cases/decisions/m6166_20120201_20610_2711467_EN.pdf, last viewed: 22 April 2013.

[224] Aoife White, *European Union antitrust chief turns tough on mergers*, The Record, 15 January 2013, available at: http://www.guelphmercury.com/news/business/article/870141--european-union-antitrust-chief-turns-tough-on-mergers, last viewed: 17 February 2013.

swords with Google for alleged antitrust infringements. The EC continues to demand commitments even after the FTC closed its investigation into Google's alleged abuse of its dominant position in the search engine market.[225]

Nevertheless, the transition from one Commissioner to the next tends to be more peaceful in the EU than in the US. This is due to differences in the institutional system. The European Council, acting by a qualified majority, proposes to the European Parliament a candidate for the President of the EC (Article 17(7) first subparagraph TEU).[226] The proposition is the result of negotiations between the Member States which, however, takes into account the results of the elections to the European Parliament (Article 17(7) first subparagraph TEU). The President of the EC will therefore usually be a member of either the European People's Party (***EPP***) or the Party of European Socialists.

The Council of the EU, by common accord with the President-elect, then adopts a list of persons it proposes as Commissioners of the EC (Article 17(7) second subparagraph TEU). The Commissioners are chosen from among the nationals of the Member States on the basis of a system of strictly equal rotation between the Member States (Article 17(5) second subparagraph TEU). As a result, the Member States each *de facto* proposes a Commissioner (see also Article 17(7) subparagraph 2 TEU).[227] The list of Commissioners is then either approved or rejected by the European Parliament (Article 17(8) TEU).

Other factors in EU merger politics that should be mentioned include the policy objectives of the EC. The EC commits itself to achieving certain targets set within a specified time-period. Within the Lisbon agenda, for example, the EC has promised to improve the EU's economic performance until 2010.[228] This has increased the awareness that the EC's competition analysis needs a firm grounding in economics.[229]

---

[225] See Alex Barker, *Antitrust chief holds aces in Google case*, Financial Times (online ed.), 10 January 2013, available at: http://www.ft.com/cms/s/0/42a827b2-5b24-11e2-8d06-00144feab49a.html#axzz2LAQJg8fD, last viewed: 17 February 2013; Charles Arthur, Google responds to European Commission's antitrust chief, The Guardian, 31 January 2013, http://www.guardian.co.uk/technology/2013/jan/31/google-antitrust-chief, last viewed: 17 February 2013. In the context of the Google investigation, the EC has been criticised for not publicly articulating the applicable framework on which it bases its conviction that Google is abusing its dominant position. See Alfonso Lamadrid, Where's the Law?, 2013, Chillin'Competition, available at: http://chillingcompetition.com/2013/01/19/wheres-the-law-or-google-and-the-european-commission/, last viewed: 17 February 2013. For the FTC's statement regarding its decision to close the investigation into Google's alleged abuse of its dominant position in the market for search engines, see *Statement of the FTC In the Matter of Google Inc.*, FTC File No. 111-0163, 3 January 2013, available at: http://www.ftc.gov/os/2013/01/130103googlesearchstmtofcomm.pdf, last viewed: 17 February 2013.

[226] Treaty on the European Union, Consolidated Version, OJ 83, 30/03/2010, pp. 13-45.

[227] See Angelika Hable, Article 17, in Mayer/Stöger (eds.), *EUV/AEUV*, 2012, para. 70.

[228] Röller, *Economic Analysis and Competition Policy Enforcement in Europe*, supra, p. 12.

[229] Röller, *Economic Analysis and Competition Policy Enforcement in Europe*, supra, p. 20, who argued that increased reliance on economic analysis is essential to contribute towards the Lisbon agenda.

Unfortunately, the current Agenda 2020 no longer includes competition and competitiveness as a target for 2020.[230] It is still too early to tell whether this will affect competition enforcement and, more specifically, merger control in the EU.

VII. Uncertainty of merger control economics

It has been explained that the importance of economics and econometrics in merger control has significantly increased during the last decade. It has also been explained that, as far as coordinated effects analysis is concerned, the increase is the result of better game-theoretic modelling techniques and greater confidence in getting the analysis of coordinated effects right, as well as a commitment to adopting a "*more economic approach*" to merger enforcement.

However, greater reliance on economics also generates problems: for one, even within the present framework provided by the guidelines and other secondary materials, finding a common economic approach to merger analysis is difficult. Different models for predicting the future behaviour of market players will yield different results. If everyone agrees on the model, numerous input variables still have to be identified to avoid distortions.

Former CCE Lars-Hendrik Röller summed up the problem associated with the need to simplify the analysis by using assumptions and having to choose the right economic theory:

> *"Economic theory is not meant to provide the answer by itself. There is nothing that can be true in general. As a result, every theory needs assumptions. […]*
>
> *An effective economic analysis in the context of a case has to be based on empirical analysis, which in turn needs to be rooted in solid economic principles. The key challenge is to identify a particular theory (or behaviour) from other alternatives."*[231]

An efficient economic analysis is necessary to ensure that merger control decisions are objective. Objectivity is necessary to avoid distortions through politicised decision-making. However, results may be distorted if incorrect methods are chosen or if the input is incorrect or incomplete. There is, therefore, a substantial risk of error.

Nevertheless, the only way for competition authorities to render "*correct*" merger control decisions is to render them "*in line with economic reality*" (i.e., to correctly predict the economic effects of the merger on the affected market). Whether this is the case will usually

[230] See EC, Europe 2020 Targets, available at: http://ec.europa.eu/europe2020/pdf/targets_en.pdf, last viewed: 10 January 2013.
[231] Röller, *Economic Analysis and Competition Policy Enforcement in Europe*, supra, pp. 16-17.

only be answered with hindsight. At the same time, successful merger enforcement is all about conducting a successful *ex-ante* assessment. Whenever the DoJ, the FTC or the EC get the assessment wrong, consumers in the affected market - and ultimately our society - will be worse off. The most important rule of merger control decisions is "*you have to get it right*".

Economic modelling today allows for a relatively sophisticated *ex-ante* assessment of future real-life situations on the basis of game-theoretic modelling. There remains a risk of error due to the complexity of the analysis and the large data requirements. Nevertheless, the chances of modelling correctly what will happen in the market post-merger are much better than they ever were before.

The current discussion about the shortcomings of economics in the aftermath of the 2008/2009 financial crisis has had an affect also on this dissertation. After all, whether competition authorities are confident in analysing coordinated effects on the basis of game-theoretic modelling depends upon whether competition authorities are prepared to let themselves be guided by economics and economists. Most economic models depend upon rational actor theories. They use the simplifying assumption that market players will act individually rationally (e.g., that they will enter a market if it would be profitable to do so and that the barriers to entry are sufficiently low). It is difficult to predict the future actions of market participants if they do not act on the basis of rational decision-making. However, the rational actor theory has come under attack following the financial crisis.[232]

Nonetheless, the author believes that the lessons of the financial crisis for competition economics should not be overstated. First of all, it can at least be questioned whether the financial crisis was the result of the irrational actions of market players. Richard Posner, for example, suggests that many banks actually saw that there was a small risk of bankruptcy as a result of the risks they were taking but that they were making a huge amount of money in the meantime. To limit their activity to the less risky business meant losing out to the more daring competitors and foregoing profits.[233] This would not have been rational behaviour. Second, even if we accept that market participants do not always act rationally in financial markets, this may still have limited implications for the real-economy.

The same applies to the lessons provided by behavioural economics. Behavioural economists question whether companies are always rational market players and apply methods from neuroscience and the social sciences, such as psychology and sociology, to

---

[232] See Amanda P. Reeves/Maurice E. Stucke, *Behavioral Antitrust*, 86 Ind. L.J. (2011), pp. 1527-1528, with further references.
[233] Richard A. Posner, *A Failure of Capitalism*, Harvard University Press, 2009, pp. 321, 333.

understand the limits of rationality in the conduct of market players.[234] Behavioural economists argue that human motivation is more complex than the "*simplistic assumption of self-interest*".[235] Companies are made up of individuals and, therefore, cannot be expected to act rationally either. Behavioural economists call the results of simplistic assumptions as to merger control based on individual rational action into question.[236] However, they do not provide an alternative solution or an alternative approach to conducting an *ex-ante* merger assessment. As behavioural economists themselves acknowledge, antitrust law "*must comport as much as feasible with rule of law principles*". [237] It must provide legal certainty for the actors involved and it must provide a common language for competition authorities across the globe.[238] For this, simplifying assumptions are indispensable, even though they will not always get it right. Behavioural economics does not provide us with an alternative approach to merger control. It only teaches us humility with regards to our ability to conduct a successful *ex-ante* assessment.

VIII. Conclusion

The preceding sections have given a basic insight into coordinated effects analysis and merger control in the EU and the US and have explored some of the differences between the EU and the US. Chapter 2 goes into the details of coordinated effects analysis in horizontal merger situations in the EU and the US. Chapter 3 extends the analysis to vertical and conglomerate mergers. The results are then summarised in Chapter 4.

---

[234] Reeves et al., *Behavioral Antitrust*, supra, p. 1532.
[235] Reeves et al., *Behavioral Antitrust*, supra, p. 1536.
[236] Reeves et al., *Behavioral Antitrust*, supra, p. 1543.
[237] Reeves et al., *Behavioral Antitrust*, supra, p. 1544.
[238] Reeves et al., *Behavioral Antitrust*, supra, p. 1544.

Chapter 2: Horizontal EU and US coordinated effects analysis

I. Introduction

Coordinated effects analysis differs depending on whether the merger is (1) horizontal or (2) non-horizontal. Non-horizontal mergers require the consideration of additional factors because the related vertical or adjacent market levels affect the behaviour of the competitors in the analysed market. As a result, the economic analysis differs. Non-horizontal mergers often require a more complicated, data intensive analysis than horizontal mergers. This dissertation therefore first analyses horizontal mergers' coordinated effects analysis (Chapter 2) and then focuses on non-horizontal mergers' coordinated effects analysis (Chapter 3).

The following chapter begins with an overview of modern coordinated effects economics in horizontal merger situations. It then focuses on coordinated effects analysis in the EU and US guidelines, and in the case-by-case assessment of the EC, the DoJ and the FTC.

II. Economics

1. The role of concentration levels

Concentration levels played a role in coordinated effects assessments from the start.[239] The primarily concentration-based analysis of coordinated effects relies on the "*dinner party analogy*". The greater the number of guests who are invited to a dinner party, the more difficult it is to find a date that accommodates them all. In the context of markets, coordination among multiple players becomes more difficult with an increase in the number of participants. Similarly, tacit coordination among firms in an industry becomes more difficult as the number of firms in the market increases. This is due to the fact that a greater number of varying incentives has to be accounted for in order to reach a common understanding about the terms of coordination. Higher levels of market concentration mean that fewer firms hold large market shares. In this situation, coordination needs only to take a small number of varying incentives into account and will be easier to establish and sustain.

However, the "*dinner party analogy*" is but one of the factors that determine the success of coordination. There may be highly concentrated markets in which firms are unable to agree on the terms of coordination. One example may be found in highly asymmetric oligopolies,

---

[239] Early "*Structure-Conduct-Performance*" theorists almost exclusively relied on concentration levels to assess the likelihood of coordination in a given market. For an overview, see Margaret Levenstein/Valerie Suslow, *What Determines Cartel Success*? Journal of Economic Literature, Vol. XLIV (March 2006), p. 46, with further references.

where a few firms with significantly varying market shares or cost-structures are unable to coordinate due to different incentive structures. A merger that significantly increases the market share of the largest competitor in the market may also increase the level of asymmetry and thereby reduce the likelihood of collusion. A high level of product differentiation can also hinder coordination in concentrated markets. The existence of an industry maverick may also make coordination unsustainable.

1.1. It's all about game theory

The "*dinner party theory*" is a game-theoretic approach to coordination. It is a variation of the so-called "*prisoner's dilemma*". Economists tend to analyse coordination in markets with homogeneous – as well as differentiated – products using non-cooperative game theory with the Nash-Bertrand price-setting game as the central concept.[240] Nash equilibrium is the equilibrium outcome that will naturally result from a multi-level, non-cooperative game with each player acting according to his own incentives while remaining perfectly informed about, and taking into account, the incentives of the other players.

The game works without coalition or communication and, therefore, characterises tacit coordination.[241] *Nash* found that in a multi-round game, the different individual incentives will lead to the establishment of at least one equilibrium in which the players do not obtain their favoured result but rather reach an outcome that is close enough to each individual's favourite result to render deviation from the equilibrium unprofitable.[242]

The "*prisoner's dilemma*" refers to a situation in which two players have partly aligned and partly opposed incentives. If each were to act totally rationally, the outcome would be the worst case result for both of them. Rational conduct from the point of view of a one-round game is therefore likely to be detrimental.[243] The prisoner's dilemma is typically described as

---

[240] Aigner et al., *The Analysis of Coordinated Effects in EU Merger Control*, supra, p. 311, p. 3; Coate, *Alive and Kicking: Collusion Theories in Merger Analysis at the Federal Trade Commission*, 1 January 2008, available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1030067, last viewed: 22 April 2013, p. 5. In Cournot oligopoly settings, products are assumed to be homogeneous. In Bertrand competition they are heterogeneous. See Sidak, *Expert testimony before the Federal Communications Commission in Washington D.C. in the matter of EchoStar Communications Corporation*, CS Dkt. No. 01-348, paras. 39, 42. In a Bertrand model, firms compete on price rather than output. If products are homogeneous and the firms in the market can supply the entire market demand, the model predicts an equilibrium price that equals marginal costs even in a duopoly. This means that under Bertrand competition, there is no relationship between the number of firms in the market and price as long as there are at least two firms. Results change if the firms produce differentiated products, are capacity constrained or face increasing marginal costs so that they cannot supply the entire market. Kolasky, *Coordinated Effects in Merger Review,* supra, p. 5.

[241] Nash, *Non-Cooperative Games*, Annals of Mathematics, Vol. 54, No. 2, 1951, p. 286.

[242] Nash, *Non-Cooperative Games*, supra, p. 286. Nash won the Nobel Prize for the proof contained in his 27-page doctoral dissertation written at the age of 20. See Kolasky, *Coordinated Effects in Merger Review,* supra, p. 6.

[243] Anatol Rapoport/Albert Chammah, *The Prisoner Dilemma: A Study In Conflict and Cooperation*, University of Michigan Press, 1970, p. 13. For the development of the theory, see Merrill Flood, *Some Experimental Games,* Management Science, Vol. 5, No. 1 (Oct. 1958), pp. 5-26; Melvin Dresher*, Games of Strategy*, Mathematics

follows: Prisoners X and Y have to decide whether or not they will inform on each other. If neither informs on the other, both will walk free.[244] X will only get a six months prison sentence if he informs on Y on the condition that Y does not inform on X. In this case, Y faces an eight year prison sentence. Y will only get a nine months prison sentence if he informs on X on the condition that X does not inform on Y. In this case X will be sentenced to six years in prison. If both inform on each other, X will face a three year sentence and Y will face a four year sentence. If neither informs on the other, both walk free.

The table below illustrates the trade-off:

		Prisoner Y	Prisoner Y
		Informs	Does Not Inform
Prisoner X	Informs	3 years (X)/4 years (Y)	6 months (X)/8 years (Y)
Prisoner X	Does Not Inform	6 years (X)/9 months (Y)	Both Walk Free

In a one-off game, individually rational behaviour will lead Prisoner X to inform on Prisoner Y and Prisoner Y to inform on Prisoner X.[245] Both would therefore end up informing on each other and the situation would be that of the upper left quadrant: X will receive a sentence of 3 years in prison and Y will be sentenced to 4 years. The outcome is sub-optimal compared to the outcome resulting from coordination in the lower-right quadrant, wherein both X and Y could walk away scot-free.

Whereas coordination is likely to fail in a one-off game, repetition produces a learning effect. Prisoner X and Prisoner Y begin to understand that better results can be achieved through cooperation and begin to take each other's reaction into account. In a repeated setting, prisoners X and Y may, therefore, be able to reach the optimal result and walk free if both refuse to inform on each other.

The game-theoretic setting in the prisoner's dilemma yields some basic insights into the difficulties firms face when trying to maximise profits in an interdependent environment: both firms may raise their profits through successful cooperation. At the same time, a firm in this environment fears the worst-case scenario in which the other side unilaterally defects from cooperation. If market competitors act individually, they will gain profits that are lower than

Magazine, Vol. 25, No. 2 (Nov.-Dec., 1951), pp. 93-99; William Poundstone, *Prisoner's Dilemma: John von Neumann, Game Theory and the Puzzle of the Bomb*, Anchor Books, 1993.

[244] The figures can be changed. The essential factor is the trade-off between the choices and the resulting psychological dilemma.

[245] "X" and "Y" stand for two random prisoners. They could also be called "Prisoner 1" and "Prisoner 2". The letters "X" and "Y" are only used for the purpose of distinction.

the level of profit that could be realized through successful coordination, yet higher than the level that would result from deviation by the other side. The situation is therefore comparable to the prisoner's dilemma.[246] In a multi-round game, firms are likely to take the reaction of their competitors into account (i.e., the likelihood of retaliation). Coordination over a longer period of time is therefore more likely to be successful.[247]

George Stigler showed that sustained coordination involves much more than just agreeing on a price, including product homogeneity and the homogeneity of market transactions. He won the Nobel Prize for his analysis of what market conditions would be conducive to coordinated pricing.[248] Stigler's assessment relied on the assumption that firms in the market will be acting rationally and will seek to maximise profits.[249] He stated that the major obstacles to coordination were the costs of information and contracting.[250] Problems associated with the lack of information will be discussed in more detail in 2.3.

1.2. How many market players are necessary for competition?

There is a consensus that high levels of concentration paired with an even distribution of market shares among the remaining market players favour collusion.[251] It is also generally agreed that competition usually increases with the number of firms.[252] However, economists have not yet been able to agree on *how many* players are needed to sustain competition in the affected market.

Breshnahan/Reiss, for example, argued in 1991 that three players are sufficient to sustain some degree of competition.[253] They also argued that there are significant intermediate ranges where a basic degree of competition remains with prices lower than would be the case in a monopoly or a duopoly, yet significantly higher than they would be in a market with low concentration levels. *Breshnahan/Reiss* came to the conclusion that this situation generally exists when there are three to five players in the market.[254]

---

[246] See also Bishop et al, *A legal and economic consensus?*, supra, p. 201.
[247] See also Schwalbe et al., *Law and Economics in European Merger Control,* supra, p. 244.
[248] On *Stigler's* contribution, see Kolasky, *Coordinated Effects in Merger Review*, supra, p. 7.
[249] Stigler, *A Theory of Oligopoly,* supra, p. 57. This assumption is now questioned by behavioural economists.
[250] See Kolasky, *Coordinated effects in merger review*, supra, p. 7.
[251] Bishop et al, *A legal and economic consensus?*, supra, p. 208. As will be seen in the section on the Merger Guidelines, the 2010 Guidelines of DoJ and FTC put less emphasis on concentration levels as far as unilateral effects are concerned. For coordinated effects, however, concentration levels remain a major part of the analysis. The number of firms in the market, therefore, remains an essential point of the analysis. See Herbert Hovenkamp, *Harm to Competition Under the 2010 Horizontal merger Guidelines*, Rev Ind Organ 39 (2011) 13.
[252] For an early statement to this effect, see Stigler, *A Theory of Oligopoly,* supra, p. 57.
[253] Timothy Breshnahan/Peter Reiss, *Entry and Competition in Concentrated Markets*, Journal of Political Economy, 1991, vol. 99, no. 5, p. 1006. In some bidding markets, even two players may be sufficient to sustain a basic degree of competition, see Bishop et al., *A legal and economic consensus?*, supra, p. 209, cit. 25.
[254] Breshnahan et al., *Entry and Competition in Concentrated Markets*, supra, p. 1006.

2. *Other factors*

In modern merger control economics, concentration levels are the starting point of the coordinated effects analysis. However, the analysis does not stop there. Economists have identified a number of other factors: (1) the homogeneity of the product and the purchase commitment, (2) the ease of entry into the market, (3) demand elasticity, (4) the number of different price classes, (5) the possibility of auditing transaction prices, (6) a stable buyer identity, (7) the possibility of multi-market sanctions, (8) past experiences with coordination, and (9) a stable economic environment.[255] The list is not comprehensive and the market transparency and homogeneity of firm sizes should also be added.

2.1. *Maverick firms*

Economists warn that mergers that eliminate an industry maverick may typically increase the risk of successful post-merger coordination. Maverick theories are not new and, indeed, have been around for a long time.

Baker made a significant contribution to the understanding of the effects of mergers involving or creating industry mavericks. His economic analysis demonstrated that the structural presumption that mergers increasing the level of concentration in the market do not necessarily facilitate coordination was not always correct.[256] Instead, he structured the assessment of the likelihood of coordinated effects around the role of the maverick firm. A merger that neither involved a maverick nor significantly altered an industry maverick's incentives would be unlikely to facilitate coordination in the post-merger market situation. The maverick would simply continue its maverick behaviour, and price rises in the post-merger setting would not be sustainable. Instead, *Baker* suggested that merging parties should argue that the continued presence of the maverick with its unchanged incentive structure kept them from significantly increasing their prices post-merger.[257]

---

[255] Stigler, *A Theory of Oligopoly*, supra, pp. 45-48.

[256] He pointed out that basing the assessment of the effects of mergers on concentration levels was like predicting the weather based on past observations. While it is possible to predict a result with some likelihood of success from past experience, this procedure does not offer an explanation for the forces that are behind these observations. Similarly, we know that firms in a market are more likely to coordinate their behaviour given a certain level of concentration. However, *Baker* showed that concentration levels do not give us an explanation as to why this is the case. He therefore suggested restructuring merger analysis to focus primarily on maverick firms. See Jonathan Baker, *Mavericks, Mergers, and Exclusion: Proving Coordinated Competitive Effects Under The Antitrust Laws*, 77 N.Y.U.L. Rev. 155-156.

[257] Baker, *Mavericks, Mergers and Exclusion*, supra, p. 180. *Baker* refers to *New York v Kraft General Foods, Inc.* as an example of a situation in which the merging parties alleged that their merger was unlikely to facilitate collusion due to the continued presence of a maverick in the industry, see 926 F. Supp. 321 (S.D.N.Y. 1995). New York State's merger challenge failed because the State was unable to explain why the acquisition of Nabisco as a non-maverick was likely to facilitate coordination in the post-merger situation. Baker, *Mavericks, Mergers and Exclusion*, supra, p. 182. See also the section on US jurisprudence on coordinated effects in this chapter.

Baker showed that mergers may decrease the likelihood of coordination if they create a new industry maverick. This may be the case if the merger generates substantial efficiencies that allow the merged entity to undercut rivals' prices.[258] A lower cost structure will alter the incentives of the merged entity. The result may be that the merged entity finds it profitable to deviate from coordination. In this case, the merger has produced a new industry maverick and reduced the likelihood of coordinated behaviour.

Conversely, a merger may facilitate coordination if it enables the merged entity to exclude a maverick from the market. In this case, the remaining firms will find it easier to align their conduct. Similarly, a merger may discourage the maverick from deviating in the post-merger situation if it significantly increases the level of market transparency. In this case, deviation is more likely to be detected. This may alter the maverick's incentive structure in a way that encourages it to abstain from deviation in the future.[259]

However, the transaction may also result in the creation of a new maverick (i.e., a firm with a better cost structure and an incentive to undercut its rivals' prices). This may be the case if the merger produces substantial efficiencies. This means that post-merger there may be more competition in the affected market.[260]

2.2. Asymmetry of firm sizes

Companies of a similar size and structure are likely to have similar incentives and will find it easier to align their behaviour. Mergers that increase the level of symmetry in the market are therefore more likely to facilitate coordination than those that decrease the level of symmetry. On the other hand, companies with different structures will find it more difficult to reach an agreement on the terms of coordination.[261] The merged entity may also have an increased

[258] Baker, *Mavericks, Mergers and Exclusion*, supra, p. 182.

[259] Baker, *Mavericks, Mergers and Exclusion*, supra, pp. 186-188. Of course, the analysis of the effects of mavericks on the likelihood of coordination is closely related to the analysis of the effects of asymmetric firm structures on the likelihood of coordination. Mavericks will usually be firms that are more efficient and that expect higher gains from deviation than from coordination. Markets in which firms have varying cost structures are more likely to contain aggressive mavericks than are markets with highly symmetrical firm structures.

[260] This theory has also found its way into the EU Horizontal Merger Guidelines which state the following: "*In the context of coordinated effects, efficiencies may increase the merged entity's incentive to increase production and reduce prices, and thereby reduce its incentive to coordinate its market behaviour with other firms in the market. Efficiencies may therefore lead to a lower risk of coordinated effects in the market.*" Para. 82. Similarly, the US Horizontal Merger Guidelines state that "*merger-generated efficiencies may enhance competition by permitting two ineffective (e.g., high cost) competitors to become one effective (e.g., lower cost) competitor*" in the section on efficiencies. According to the Guidelines, "*in a coordinated interaction context, incremental cost reductions may make coordination less likely or effective by enhancing the incentive of a maverick to lower price or by creating a new maverick firm.*" § 10.

[261] Helder Vasconcelos, *Tacit collusion, cost asymmetries, and mergers,* RAND Journal of Economics Vol. 36, No. 1 (2005) 39.

incentive to deviate from existing coordination post-merger because its incentive structure has changed, deviation profit has increased or the profit expected from continued coordination has decreased.[262] A merger that reduces the degree of firm structure symmetry may make successful coordination less likely despite higher concentration levels.[263]

2.3. Market transparency

Market transparency is a very important factor in coordinated effects analysis. The higher the degree of market transparency, the greater the likelihood that competitors will be able to monitor the behaviour of rivals, which enables them to punish deviation. Market transparency increases if the number of competing firms decreases. Conversely, factors that add complexity make markets less transparent (e.g., a large number of products, numerous or infrequent negotiations, and secret bidding auctions). Other important factors that affect market transparency include demand fluctuations.

Unfortunately, economic models tend use a high degree of market transparency as a simplifying assumption to predict the likelihood of post-merger coordination. This is problematic because one of the major reasons why coordination often does not work is the cost of information.[264] Competitors will only demand information up to the point where the benefits of the additional information equal its costs.[265] If the cost of policing whether or not others adhere to the terms of coordination exceed the benefits of coordination, firms will stop monitoring and coordination will break down. If firms know that random demand and cost fluctuations limit market transparency, they will seek to maximise their private returns by deviating from coordination.[266]

An exception is the analysis by *Olczak*. *Olczak* tested the stability of tacit collusion and the effects on consumer welfare under an assumption of low market transparency introduced by demand uncertainty.[267]

---

[262] Bishop et al, *A legal and economic consensus?*, supra, p. 218.
[263] Vasconcelos, *Tacit collusion, cost asymmetries, and mergers,* supra, p. 55. Oliver Compte/Frédéric Jenny/Patrick Rey, *Capacity constraints, mergers and collusion*, European Economic Review 46 (2002), p. 2; Kai-Uwe Kühn, *Closing Pandora's Box? Joint Dominance After the Airtours Judgment*, in Konkurrensverket Swedish Competition Authority (ed.), The Pros and Cons of Merger Control [2002], Ch. 3, p. 46.
[264] Kolasky, *Coordinated Effects in Merger Review*, supra, p. 7. On the requirements of successful coordination, see Sigler, *A Theory of Oligopoly*, supra.
[265] Kolasky, *Coordinated Effects in Merger Review*, supra, p. 8.
[266] Andrew R. Dick, *When are Cartels Stable Contracts?*, Journal of Law and Economics, Vol. 39, No. 1, 1996, p. 243.
[267] Matthew Olczak, *Unilateral versus Coordinated Effects: Comparing the Impact on Consumer Welfare of Alternative Merger Outcomes,* 2009, ESRC Centre for Competition Policy Working Paper 10-3, available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1543750, last viewed: 31 January 2013, p. 3.

He found out that coordination was subject to repeated breakdowns under the assumption of demand uncertainty if competitors assumed that a smaller firm was likely to deviate from coordination. The size of the firm mattered given the assumption that the smaller firm did not have the capacity to satisfy all of the additional demand. The other competitors were, therefore, not always sure whether the changes in demand they witnessed were the result of demand fluctuations or deviation by the smaller rival. As such, in some instances they would return to competitive output or pricing (*retaliation*) in the absence of deviation.[268]

Olczak draws from this the idea that, under the said conditions, coordinated effects may be less welfare-reducing than unilateral effects, because coordination breaks down regularly in situations of low demand transparency. It therefore makes sense to compare unilateral and coordinated effects in order to determine which theory of harm the remedies should focus on in the specific case.[269]

2.4. The problem of past coordination

Competition authorities like to look at past evidence of successful coordination or cartelised behaviour when analysing the likelihood of post-merger coordination. This is a useful way to proceed if the merger strengthens the very same factors that facilitated coordination in the pre-merger situation. For example, if the market was highly transparent pre-merger and firms were able to discourage deviation, a merger that further increases the level of market transparency will be likely to further stabilise coordination. In this case, past coordination will be an indicator of likely post-merger coordination, assuming all other factors remain unchanged.

However, there is a risk that competition focuses too much on past coordination and goes easy on the necessary vigorous analysis of the present market characteristics. The market structure may have changed since the last incident of coordination. Coordination may have proven to be unsustainable and the market players may have stopped trying to coordinate, or the merger itself may alter the market structure in a way that makes post-merger coordination unlikely.[270] It should also be considered that EU and US merger laws require a

---

[268] Olczak, *Unilateral versus Coordinated Effects*, supra, p. 12.
[269] Olczak, *Unilateral versus Coordinated Effects*, supra, pp. 28-31. The analysis revisits the model with which *Compte et al*. tested the commitments imposed by the EC in *Nestlé*. *Compte et al.* reached the conclusion that the commitments increased the likelihood of post-merger collusion. *Olczak's* analysis reaches a more favourable outcome as the unilateral effects that would have resulted from the merger absent the commitment would have been worse. Supra, p. 30. For the analysis of *Compte et al.* which this dissertation already referred to, see Compte et al., *Capacity Constraints, Mergers and Collusion*, supra.

[270] *Kwoka* attempts to show that firms have the greatest incentive to use a merger to eliminate a rival in healthy markets with a high degree of competition. Mergers add less profit in markets where firms are already able to

likelihood that the market structure will *deteriorate* as a result of the transaction (see "*significant* ***impediment*** *to effective competition*", "*substantial* ***lessening*** *of competition*" – Article 2(3) EU Merger Regulation/section 7 of the Clayton Act). Pre-merger coordination on its own therefore only justifies intervention in exceptional cases.

2.5. Non-price coordination

Coordination does not necessarily have to be limited to prices. Firms may find it easier to coordinate their output or allocate customers. The DoJ has started to focus more on these forms of coordination. As *Gregory J. Werden*, at that time Senior Economic Counsel at the Antitrust Division of the DoJ, put it, customer allocation merits greater attention in coordinated effects analysis as it is easier to achieve and can actually be found in many cartel cases.[271]

2.6. Efficiencies

Efficiencies and their effects on post-merger competition have mostly been analysed using non-collusion models. There are, therefore, fewer materials on the impact of efficiencies on the likelihood of successful coordination.[272]

Efficiencies destabilise coordination. If a merger creates substantial cost efficiencies, the merged entity has an altered incentive structure that makes it profitable to deviate from the terms of coordination or else not to coordinate its behaviour with that of its competitors in the first place.[273]

---

coordinate their behaviour. He assumes that rivals' opposition to mergers in concentrated markets is likely to stem from fear of a more efficient firm or from the belief that the merged entity will engage in predatory or strategic behaviour post-merger. John Kwoka Jr., *The Private Profitability of Horizontal Mergers with Non-Cournot and Maverick Behaviour,* Int. J. Ind. Org., Vol. 7, 1987, pp. 403, 407. This would suggest two things: First, antitrust authorities need to be especially careful when they assess rivals' statements on the likely effects of a merger in industries which have experienced past coordination Second, antitrust authorities would have more reason for concern about a merger-specific increase in the likelihood of successful coordination in highly competitive markets than they would in markets with evidence of past coordination.

[271] Gregory J. Werden, in: theantitrustsource, *Coordinated Effects Analysis: The Arch Coal Decision, ABA Section of Antitrust Brown Bag Program*, 27 October 2004, published online in March 2005, available at: http://www.crai.com/uploaded/Files/RELATING_MATERIALS/Publications/Consultant_publications/Dick/files/Coordinated%20Effects%20Analysis%20-%20The%20Arch%20Coal%20Decision.pdf, last viewed: 22 April 2013, p. 13.

[272] Frank Verboven, *Corporate Restructuring in a Collusive Oligopoly,* Int. J. Ind. Organ. 13 (1995) 337, with reference to the extensive literature on non-collusion models, most notably the famous paper by *Farrell and Shapiro*, *Horizontal Mergers: An Equilibrium Analysis,* The American Economic Review (1990) 108-126. In this paper, *Farrell and Shapiro* analysed horizontal mergers in the setting of Cournot oligopoly. They reached the conclusion that mergers that do not create synergies, tend to raise prices. P. 107.

[273] Christian Fackelmann, *Dynamic Efficiency Considerations in EC Merger Control – An Intractable Subject or a Promising Chance for Innovation,* The University of Oxford Centre for Competition Law and Policy , Working Paper (L) 09/06, available at: http://denning.law.ox.ac.uk/lawvle/users/ezrachia/CCLP%20S.%2009-06.pdf, last viewed: 22 April 2013, p. 9, with further reference.

Röller, Stennek and *Verboven* argue that a merger in an industry with a history of pre-merger collusion may reduce the likelihood of coordination if it results in output rationalisation. Let us assume that two firms in the affected market have bargained pre-merger to allocate production such that the coordinated price is between their respective hypothetical monopoly prices.[274]

Assuming that the hypothetical monopoly price of Firm A is not insignificantly lower than the hypothetical monopoly price of Firm B, the two firms may rationalise production post-merger by transferring production to Firm A. The post-merger price level is therefore likely to be the hypothetical monopoly price of Firm A.[275]

In collusive markets, the level of cost reductions needed to lead to a reduction in post-merger price levels is likely to be lower than in competitive markets. The reason for this is not that mergers in collusive markets offer a special potential for efficiency gains but – as *Röller, Stennek and Verboven* point out – rather that the lack of pre-merger competition created particular inefficiencies which that merger partly eliminates.[276]

In an earlier paper, *Verboven* stated that horizontal mergers may lead to lower prices in the affected market even if they do not create any synergies.[277] He argued that the synergies required for price reductions were lower in collusive markets than in markets without collusion. In collusive markets, even mergers that did not produce synergies reduced prices.[278]

The most important insight gleaned from these studies is that efficiency gains resulting from a merger have to be integrated into the first part of the test, as they directly reduce the likelihood of successful coordination.[279] This is due to the fact that coordination between firms necessitates stability. Changes to the incentive cost structure of a market participant alter its incentives and increase the likelihood that this market participant will deviate from the terms of coordination.

It should be mentioned that there is a vigorous debate about the role that efficiencies should play in merger control. Economists tend to argue for a stronger recognition of efficiencies. Competition authorites, in which jurists still have a greater say than economists, generally do

[274] Lars-Hendrik Röller/Johan Stennek/Frank Verboven, *Efficiency Gains from Mergers,* The Research Institute of Industrial Economics, Working Paper No. 543, 2000, available at: http://econpapers.repec.org/paper/wzbwzebiv/fsiv00-09.htm, last viewed: 22 April 2013, p. 28-29.
[275] Röller et al., *Efficiency Gains from Mergers,* supra, p. 28-29.
[276] Röller et al., *Efficiency Gains from Mergers,* supra, p. 28-29.
[277] Verboven, *Corporate Restructuring in a Collusive Oligopoly,* supra, p. 335.
[278] Verboven, *Corporate Restructuring in a Collusive Oligopoly,* supra, pp. 336-337. The model that was used in this study was a static Cournot model in which firms set the quantities.
[279] Florian Schuhmacher, *Effizienz und Wettbewerb*, 2011, p. 402.

not think that it would be a good idea to clear otherwise anti-competitive mergers because they create efficiencies.[280]

The role of efficiencies also depends on the choice of welfare standards. In the US and the EU, the consumer welfare standard has dominated merger control.[281] This only takes those efficiencies into account that directly benefit consumers.[282] Economists, and most notably Nobel Prize laureate *Oliver Williamson*, have argued that an antitrust defence under a total welfare standard would have been preferable.[283] Such a defence would take all efficiencies into account regardless of what part of the economy they occur in (e.g., profits realised by shareholders). Canada relies on the total welfare standard for efficiency analysis.[284] Other suggestions have included relying on the consumer welfare standard as a standard of last resort if the total welfare analysis becomes too complex.[285] The discussion about the pros and cons of a total welfare analysis exceed the scope of this dissertation. It suffices to state, that the debate remains alive and kicking.[286]

Recent studies in behavioural economics have shown that a reluctance to accept efficiency claims made by merging parties may have some justification, as the merging parties tend to overstate the efficiencies that will result from their project (see II.3).

2.7 What do these factors tell us?

The factors considered above show what industry characteristics contribute to successful coordination. However, they do not predict when coordination will happen. *Andrew R. Dick* analysed the likelihood of cartelisation between firms that profited from the Webb-Pomerene Export Trade Act of 1918.[287] He found that factors such as firm and product homogeneity,

---

[280] Arguing for a more permissive approach towards efficiencies, Daniel A. Crane, *Rethinking Merger Efficiencies*, Mich. L. Rev., Vol. 110, 2011, p. 347.

[281] For the EU, see also Rainer Nitsche, *Wettbewerbsökonomische Analyse der Auswirkungen von Fusionen*, in: Jürgen Schwarze, Recht und Ökonomie im Europäischen Wettbewerbsrecht, Baden-Baden, 2006, pp. 53-70. He rightly points out that the EU Guidelines of 2004 do not distinguish between an „*impediment of competition*" and an „*impediment of consumer welfare*", p. 55. Eleanor Fox, *The Efficiency Paradox*, in: Robert Pitofsky (ed.), How the Chicago School Overshot the Mark, 2008, p. 78.

[282] Another requirement in merger control is that the realised efficiencies benefit consumers *in the affected markets*.

[283] Oliver E. Williamson, *Economies as an antitrust defense: The Welfare Tradeoffs,* The American Economic Review, Vol. 58, No. 1 (March 1968), pp. 18-36; Oliver E. Williamson, *Economies as an Antitrust Defense Revisited,* University of Pennsylvania Law Review, Vol. 125, No. 4 (April 1977), pp. 699-736.

[284] *Commissioner of Competition v Superior Propane Inc.*, 2000 Canada Comp Trib 16 (2002), excerpts in Einer Elhauge/Damien Geradin, *Global Competition Law and Economics*, 2007, Ch. 7, Sec. A4, p. 892. See also Thomas W. Ross/Ralph A. Winter, *The Efficiency Defense in Merger Law: Economic Foundations and Recent Canadian Developments,* 72 Antitrust L.J., 2004-2005, p. 478.

[285] Ross et al., *The Efficiency Defense in Merger Law*s, supra*,* p. 480. For similar suggestions, see also Louis Kaplow/Steven Shavell, *Any Non-Welfarist Method of Policy Assessment Violates the Pareto Principle,* The Journal of Political Economy, Vol. 109, No. 2 (2001), p. 281.

[286] For a recent discussion, see Crane, *Rethinking Merger Efficiencies*, supra, p. 347.

[287] Andrew R. Dick, *If Cartels were Legal, When Would Firms Fix Prices?*, in: Peter Z. Grossman, How Cartels Endure and How They Fail: Studies of Industrial Collusion, 2004, pp. 144-173; Dick, *When Are Cartels Stable*

past coordination and demand fluctuations, had an effect on the likelihood of cartelisation. However, the correlation was often too small to provide a reliable basis for antitrust authorities to screen industries for potential anti-competitive conduct.[288]

Instead he found that what mattered was the purpose of coordination. Price-fixing cartels tended to be much less stable than cartels that had as their main purpose the realisation of cost savings.[289] The reason that *Dick* identified was that as prices and profits rose, the likelihood of market entry increased. The threat of market entry destabilised the price-fixing cartel and led to its breakdown. The market entry problem was something cost saving cartels did not have to deal with.[290] These cartels therefore lived on.

Price-fixing cartels were most likely to form in highly concentrated markets in which the members of the cartel controlled a large proportion of the market, whereas cost saving cartels tended to form in industries with a large number of small competitors.[291] Slowness of entry, product standardisation, growing demand, dispersed buyers and a history of cartelisation also contributed to price-fixing cartelisation.[292]

This tells us that we know a great deal about the factors that are necessary for coordination but that we know very little about the factors that are sufficient for coordination.[293] Antitrust authorities have a difficult time *predicting* when coordination will occur and be sustainable on the basis of the factors enumerated in the guidelines, except in the extreme case where a merger reduces the number of competitors in the market from three to two. [294] Economists have provided numerous models with which competition authorities can assess the likelihood of post-merger coordination, but there is no all-inclusive model that comprises all the factors enumerated in the US and EU guidelines and which also works without substantial simplifications.[295] Even with modern models, It would therefore be impossible to prove that coordination will happen in the post-merger market.

Contracts?, supra, pp. 241-283. The Webb-Pomerene Export Trade Act of 1918 legalised price-fixing and market allocation agreements between US exporting firms. It therefore effectively eliminated the legal costs of collusion which enables researches to analyse whether firms will collude if they just have to weigh the expected private returns and the private costs of organising and enforcing a price-raising agreement. Dick, *If Cartels were Legal, When Would Firms Fix Prices?*, supra, p. 144.

[288] Dick, *If Cartels were Legal, When Would Firms Fix Prices?*, supra, p. 160. The rate of success at predicting whether a cartel had formed in a given industry based on market power, costs of contracting between firms, entry conditions and prior experience with collusion was between 71.8% and 79.7%. Supra, p. 158.

[289] Dick, *If Cartels were Legal, When Would Firms Fix Prices?*, supra, pp. 151-154.

[290] Dick, *If Cartels were Legal, When Would Firms Fix Prices?*, supra, pp. 151-154.

[291] Dick, *If Cartels were Legal, When Would Firms Fix Prices?*, supra, p. 153.

[292] Dick, *If Cartels were Legal, When Would Firms Fix Prices?*, supra, p. 160.

[293] Kolasky, *Coordinated Effects in Merger Review,* supra, p. 10.

[294] Kolasky, *Coordinated Effects in Merger Review,* supra, p. 10.

[295] William E. Kovacic/Robert C. Marshall/Leslie M. Marx/Steven P. Schulenberg, *Quantitative Analysis of Coordinated Effects*, 76 Antitrust Law Journal No. 2, 2009, p. 425. Kovacic et al. propose a model of differentiated products price competition which is usually used for unilateral effects analysis.

This is why intervention by the EU and US competition authorities does not require certainty regarding post-merger coordination. According to the EU General Court in *Airtours*, for example, the EC has to show *how* coordination would work, but it does not have to prove that the predicted events will take place which would be impossible to achieve. A plausible demonstration that the merger risks significantly impeding competition will suffice.[296]

Economic models do not therefore eliminate the doubt that is inherent in complex *ex-ante* assessments. The doubts about our ability to predict whether competitors will coordinate in the post-merger market setting is even greater if we get rid of the rational-actor presumption.

3. Behavioural economics

As has been explained, behavioural economists question whether market actors always act rationally. Competition economics relies on the simplifying assumption that market actors act rationally and in their self-interest. A rational market actor does not forego profits if he or she does not receive an equivalent indemnification for foregoing them. However, behavioural economics provides several examples where the reality in the merger world apparently does not match these assumptions. An in-depth analysis of the subject would fill a separate dissertation. This dissertation will therefore limit itself to the statement that market actors may not always act in the way that we expect them to.

An example is the assumption in neoclassical antitrust analysis that rational profit maximizers will defeat the exercise of (collective) market power in markets with low entry barriers.[297] Behavioural economists point to the finding that entry does not always occur when it should. Some markets show signs of excess entry. In others, entry does not occur even though entry barriers are low and the companies in the market enjoy excess profits.[298]

Similar caution seems to be warranted if the merging parties state that the project will lead to significant efficiencies. It has just been stated in II.2.6. that post-merger coordinated effects are unlikely to arise if the merger creates substantial efficiencies. The combined firm may have a better cost structure, which gives it an incentive to act as a new maverick firm in the market. However, behavioural economists caution that the merging parties tend to overstate efficiencies because of personal bias. They may believe that their project will yield the claimed efficiencies, but they may be suffering from a lack of information or over-confidence,

---

[296] See Schuhmacher, Effizienz und Wettbewerb, supra, p. 398.
[297] Reeves et al., *Behavioral Antitrust*, supra, p. 1554.
[298] Reeves et al., *Behavioral Antitrust*, supra, pp. 1556-1559. They provide an explanation for excess entry which they call "*optimism bias*". Firms may be overly optimistic about their ability to succeed in a given market. A related bias is the "*desirability bias*". Individuals running firms may predict favourable outcomes over which they have no control but the outcome may nevertheless affect their self-perception. Sparse entry, on the other hand, may result from lack of information about the profits earned in the entry market or lack of confidence.

or else they may underestimate the chance component.[299] This suggests that the promised efficiencies will sometimes not materialise.

The problem is that economists and competition authorities have no chance to account for irrational behaviour in their *ex-ante* analysis. Behavioural economics, therefore, does not provide an immediate solution to the problem. However, a sensible suggestion is that competition authorities should systematically review what happens post-merger.[300] The predictions of the agency in the closing statements should be tested against the situation in the market some years after the merger has been implemented.[301] Laws should be put in place that ensure that the competition authority has access to confidential information in order to test the validity of its assumptions.[302] This would allow the competition authority to identify factors, such as efficiencies, that most often fall prey to irrational assessments of the merging parties. At the same time, these measures would temper the parties' incentives to exaggerate efficiency claims.

Another interesting suggestion is that publicly held companies that rely on an efficiency defence before competition authorities should be required to publicly report their claimed efficiencies to the financial regulatory authority (e.g., the US Securities and Exchange Commission – ***US SEC***) in subsequent filings.[303] This would probably be a useful means of tempering the efficiency claims of company executives and should provide valuable ex-post information to competition authorities.[304]

Apart from ex-post reviews, however, the present benefits of behavioural economics for merger analysis are limited. It tells us that life is messier than the simplifying assumptions of competition economists suggest.[305] However, simplification is needed to construct rules that merging firms can rely upon. Behavioural economics does not provide an alternative to conducting *ex-ante* merger reviews. It highlights the importance of factual evidence.[306] However, economic modelling can only take as much factual information into account as is feasible given the limited time and resources for the review and the ensuing complexity. Therefore, the best lesson that we can draw from behavioural economics in the context of the *ex-ante* analysis in merger control is humility about the reliability of our predictions.

---

[299] Reeves et al., *Behavioral Antitrust*, supra, pp. 1560-1563. Crane adds that mergers may be driven by "*kingdom building*" rather than maximising shareholder value and may therefore from the outset be driven by distorted incentives. Crane, *Rethinking Merger Efficiencies*, supra, p. 376, citing studies that show that many corporate mergers create negative shareholder returns.
[300] Reeves et al., *Behavioral Antitrust*, supra, p. 1574.
[301] Reeves et al., *Behavioral Antitrust*, supra, p. 1574.
[302] Reeves et al., *Behavioral Antitrust*, supra, p. 1575.
[303] Reeves et al., *Behavioral Antitrust*, supra, p. 1575.
[304] Reeves et al., *Behavioral Antitrust*, supra, p. 1575.
[305] Reeves et al., *Behavioral Antitrust*, supra, p. 1577.
[306] Reeves et al., *Behavioral Antitrust*, supra, p. 1581.

4. Conclusion

Even though economists have identified a list of factors that contribute to coordination and the models to test whether firms in the affected market will be able to agree and sustain coordination, our current knowledge is not sufficient to enable us to predict *whether* coordination will actually happen. If we doubt that actors act individually rationally, our ability to accurately predict what will happen in the market post-merger is even more limited.

III. Guidelines

1. 2004 EU Horizontal Merger Guidelines

Regulation 139/2004 does not mention coordinated effects. The EC's approach to coordination has instead been laid out in the 2004 Horizontal Merger Guidelines. The following section goes through the different criteria that play a role in coordinated effects analysis in the EU and the US Guidelines.

1.1. Concentration levels

Concentration levels are the starting point of coordinated effects analysis in the Guidelines:

> *"A merger in a concentrated market may significantly impede effective competition through the creation or the strengthening of a collective dominant position, because it increases the likelihood that firms are able to coordinate their behaviour in this way and raise prices, even without entering into an agreement or resorting to a concerted practice within the meaning of Article 81 of the Treaty."*[307]

A merger may facilitate collusion for firms that were already coordinating their behaviour before the merger by making coordination more robust or by permitting coordination at higher prices.[308] This part of the analysis essentially follows the old "*dinner party analogy*", which states that a small number of companies will find it easier to coordinate their actions than a

[307] 2004 EU Horizontal Merger Guidelines, para. 39. In the Guidelines, the Commission relies on *Gencor* and *Airtours*, see cit. 55 of the EU Horizontal Merger Guidelines. General Court, Case T-102/96, *Gencor v Commission* [1999] ECR II-753, para. 277; General Court, Case T-342/99, *Airtours v Commission* [2002] ECR II-2585, para. 61.
[308] 2004 EU Horizontal Merger Guidelines, para. 39. The Guidelines also state in para. 42 that the reduction in the number of firms in the market arising from the merger may itself facilitate coordination.

larger one.[309] In this respect the Guidelines state that "*[t]he reduction in the number of firms in a market may, in itself, be a factor that facilitates coordination*".[310]

However, the guidelines do not specify how many competitors have to remain in the market for sustained competition. To provide a figure would be impossible because the number of competitors needed to prevent successful coordination depends upon the characteristics of the market in question. Instead, the EC uses market shares and concentration levels as a screening mechanism. Concentration levels are measured by the Herfindahl-Hirschman Index (***HHI***). The HHI is calculated by adding the squares of the market shares of all the firms in the market.[311]

If the post-merger HHI in the market is below 1,000, the merger will usually be approved without an intensive analysis.[312] The EC is also unlikely to find competition concerns in markets with a "*post-merger HHI between 1,000 and 2,000 and a delta below 250, or a merger with a post-merger HHI above 2,000 and a delta below 150*". In this intermediary range, only exceptional circumstances warrant an in-depth analysis.[313] The exceptional circumstances are defined in the Guidelines: the elimination of a potential entrant or an important innovator, significant cross-shareholdings amongst market participants, the elimination of a maverick firm, the indication of past or ongoing coordination or facilitating practices, and pre-merger market shares of one merging party of 50% or more.[314]

1.2. The Airtours criteria in the Guidelines

The Guidelines use the *Airtours test* established by the General Court in its *Airtours decision.*[315]

> *"In addition, three conditions are necessary for coordination to be sustainable. First the coordinating firms must be able to monitor to a sufficient degree whether the terms of coordination are being adhered to. Second, discipline requires that there is some form of credible deterrent mechanism that can be activated if deviation is detected. Third, the reaction of outsiders, such as current and future competitors not*

[309] In the case of the dinner party, the matter of coordination is to find a common date to meet for dinner.
[310] 2004 EU Horizontal Merger Guidelines, para. 42.
[311] Ivo Van Bael/Jean-François Bellis, *Competition Law of the European Community*, 2005, p. 801.
[312] 2004 EU Horizontal Merger Guidelines, para. 19.
[313] 2004 EU Horizontal Merger Guidelines, para. 20.
[314] 2004 EU Horizontal Merger Guidelines, para. 20.
[315] General Court, Case T-342/99, *Airtours v Commission* [2002] ECR II-2585, para. 62.

participating in the coordination, as well as customers, should not be able to jeopardise the results expected from the coordination."[316]

The EC therefore acknowledges that it has to show how coordination will work and be sustainable if it wants to intervene against a merger. This ensures an economics-based, case-by-case approach to merger analysis.

1.3. Mavericks and market complexity

The Guidelines make clear that the Commission will take "*into account all available relevant information on the characteristics of the markets concerned, including […] structural feature*s."[317] Some of the most important characteristics mentioned in the Guidelines are listed here.

The Guidelines accord a lot of weight to maverick theories. This is because maverick theories are an established part of coordinated effects analysis. They are, therefore, well-suited to be included in the Guidelines:

> *"A merger may involve a "maverick" firm that has a history of preventing or disrupting coordination, for example by failing to follow price increases by its competitors, or has characteristics that give it an incentive to favour different strategic choices than its coordinating competitors would prefer. If the merged firm were to adopt strategies similar to those of other competitors, the remaining firms would find it easier to coordinate, and the merger would increase the likelihood, stability or effectiveness of coordination."*[318]

The Guidelines also mention firm structure symmetry. The symmetry of the major firms in the market affects the likelihood that competitors in the market will be able to arrive at a common perception on the terms of coordination. Competitors need to be able to arrive at a common perception as to how coordination will work.[319] In particular, "*the less complex and the more stable the economic environment*" is, the easier it will be arrive at a common perception:[320]

---

[316] 2004 EU Horizontal Merger Guidelines, para. 41.
[317] 2004 EU Horizontal Merger Guidelines, para. 43.
[318] 2004 EU Horizontal Merger Guidelines, para. 42.
[319] 2004 EU Horizontal Merger Guidelines, para. 44.
[320] 2004 EU Horizontal Merger Guidelines, para. 45.

"Firms may find it easier to reach a common understanding on the terms of coordination if they are relatively symmetric, especially in terms of cost structures, market shares, capacity levels and levels of vertical integration."[321]

Efficiency gains may play a role in the assessment whether or not a merger increases the symmetry of the structure between various firms in the market.[322] Mergers that, for example, produce significant productive efficiencies may alter the cost structure of the merged entity. If the cost structure of the main competitors in the market has been relatively uniform before the merger took place, coordination may have become less likely post-merger because the level of asymmetry has actually increased as a result of the merger. [323]

Product homogeneity is also taken into account. The Guidelines state that "the less stable and the more complex the economic environment" is, the easier will it be for firms to reach an agreement on the terms of coordination. In this context, the EC mentions that the sellers of many different and differentiated products may find it hard to reach an agreement on the terms of coordination.[324]

The EC also mentions other factors that contribute to making the market less complex and making demand and supply conditions more "*stable*".[325] These factors are a lack of volatile demand and/or substantial internal growth, lack of frequent entry and lack of innovation.[326]

However, companies may overcome coordination problems stemming from market complexity. One example is the reduction of market complexity resulting from a large number of differentiated products by establishing simple pricing rules. [327] The Guidelines give as an example the situation where competitors establish a small number of pricing points to reduce the coordination problem or a fixed relationship between a base price and a number of other prices. Other factors that may facilitate coordination in complex environments are the public availability of key information, trade associations acting as an information channel, cross-shareholdings and participation in joint ventures.[328]

---

[321] 2004 EU Horizontal Merger Guidelines, para. 48, with reference to the decision of the General Court, Case T-102/96, *Gencor*, para. 222 and the decision of the EC in *Nestlé*, paras. 63-123. The Guidelines add that *"[s]tructural links such as cross-shareholding or participation in joint ventures may also help in aligning incentives among the coordinating firms"*.

[322] 2004 EU Horizontal Merger Guidelines, footnote 63, with reference to para. 82.

[323] 2004 EU Horizontal Merger Guidelines, para. 82. For the beneficial effects of efficiencies that may "*counteract*" the effects on competition and "*in particular the potential harm to consumers*", see paras. 76 et seq.

[324] 2004 EU Horizontal Merger Guidelines, para. 45.

[325] 2004 EU Horizontal Merger Guidelines, para. 45.

[326] 2004 EU Horizontal Merger Guidelines, para. 45

[327] 2004 EU Horizontal Merger Guidelines, para. 47.

[328] 2004 EU Horizontal Merger Guidelines, para. 47.

There is a sliding-scale situation in that more complex markets will require more transparency or communication between competitors for coordination to work.[329] Competitors have to find a way to overcome that coordination problem if there is to be successful coordination.[330]

1.4. Market transparency

Market transparency is vital so that coordinating firms can monitor whether their competitors are adhering to the terms of coordination. The Guidelines therefore give much room to market transparency in their explanation of when the coordinating companies will be able to monitor each other's behaviour. Paragraphs 49 to 51 of the Guidelines are all about market transparency.

Transparency in the market increases if the number of participants is reduced.[331] Other factors, apart from the number of competitors and market shares, that the Guidelines refer to are whether transactions take place in the market on the basis of public outcry auctions or are confidentially negotiated on a bilateral basis.[332] Another factor is whether the environment is generally stable. If not, it might be difficult for the firm to know whether lost sales result from an *"overall low level of demand or [are] due to a competitor offering particularly low prices. Similarly, when overall demand or cost conditions fluctuate, it may be difficult to interpret whether a competitor is lowering its price because it expects the coordinated prices to fall or because it is deviating."*[333]

Companies may overcome coordination problems stemming from market transparency by different means: meeting-competition or most-favoured-customer clauses, the voluntary publication of information, announcements, trade associations, cross-directorships, joint ventures or similar arrangements.[334]

> *"In some markets where the general conditions may seem to make monitoring of deviations difficult, firms may nevertheless engage in practices which have the effect of easing the monitoring task, even when these practices are not necessarily entered into for such purposes. These practices, such as meeting-competition or most-favoured-customer clauses, voluntary publication of information, announcements, or exchange of information through trade associations, may increase transparency or*

[329] 2004 EU Horizontal Merger Guidelines, para. 47.
[330] 2004 EU Horizontal Merger Guidelines, para. 47.
[331] 2004 EU Horizontal Merger Guidelines, para. 50.
[332] 2004 EU Horizontal Merger Guidelines, para. 50.
[333] 2004 EU Horizontal Merger Guidelines, para. 50.
[334] 2004 EU Horizontal Merger Guidelines, para. 51.

> *help competitors interpret the choices made. Cross-directorships, participation in joint ventures and similar arrangements may also make monitoring easier."*[335]

Transparency also plays a role in the effectiveness of the deterrence mechanism. The Guidelines indicate that the EC will consider the level of market transparency in its assessment of whether the deterrence mechanism can be implemented with sufficient speed if a competitor deviates from the terms of coordination. If the firms in the market will only observe the actions of the competitor after a substantial delay, their actions will be delayed, which will reduce the credibility of the deterrence.[336]

1.5. Multi-market contacts

Multi-market contacts may make it easier for oligopolists to retaliate against a deviating firm. The Guidelines recognise this and state that retaliation does not necessarily have to take place in the same market as the deviation.[337] Instead, the retaliation can happen in another market in which the firms meet. The Guidelines list several examples: the cancellation of joint ventures or other forms of cooperation, or the selling of shares in jointly-owned companies.[338]

1.6. Evidence of past coordination

The EC is likely to take evidence of past coordination into account when it assesses the future effects of a merger on competition in the affected market. The Guidelines state that the EC will take "*all relevant information on the characteristics of the markets concerned*" into account in its assessment, including the "*past behaviour of firms*" in the market.[339]

However, the Guidelines caution against an excessive focus on past coordination. Such evidence only matters if the market characteristics are still comparable to the way they were when coordination took place and are not likely to change substantially as a result of the merger.[340] Evidence of coordination will therefore only be considered if market conditions at the time of coordination were comparable to the market situation at the time of the notification.

---

[335] 2004 EU Horizontal Merger Guidelines, para. 51.
[336] 2004 EU Horizontal Merger Guidelines, para. 53.
[337] 2004 EU Horizontal Merger Guidelines, para. 55.
[338] 2004 EU Horizontal Merger Guidelines, para. 55.
[339] 2004 EU Horizontal Merger Guidelines, para. 43.
[340] 2004 EU Horizontal Merger Guidelines, para. 43.

However, the EC will also take instances of coordination in other than the affected market into account. The Guidelines state that *"evidence of coordination in similar markets may be useful information"*.[341] The statement is problematic because it will be very difficult for the EC to decide whether market conditions in the market in which the instance of coordination has occurred were comparable to the situation in the market affected by the merger proposal. It has already been explained that whether or not coordination occurs depends on numerous factors. It is therefore highly complex and prone to error to deduce from past coordination in one market that coordination is also likely to occur in another market because the market structures are "*similar*". The risk is that the assessment misses the peculiarities of these markets that in fact reduce the likelihood of successful coordination.

Interestingly, whereas the Guidelines usually cite decisions of European courts and/or the EC to support their statements, there is no footnote for the statement that coordination in other than the affected markets should be taken into account. This indicates that the statement is not supported by European Court decisions or the decision- making practice of the EC. Altogether, it might be a good idea to remove the statement about coordination in other than the affected market from the Guidelines.

1.7. Lack of jeopardising outsider reactions

Deviation is not the only threat to coordination. Outsiders may also jeopardise coordination. For example, outsiders may respond to coordinated output reductions by raising their own capacity.[342] Other forms of outsider reaction that can jeopardize coordination are market entry and countervailing buyer power.[343] The Guidelines state that coordination aimed at reducing the capacity in the market will only harm consumers if the non-coordinating firms are either unable or have no incentive to increase their own capacity to an extent that is sufficient to prevent a net decrease in capacity.[344] This, of course, relies heavily on the assumption that non-coordinating firms with spare capacity are acting rationally and will increase their output to scoop up the excess demand. As has been shown in II.3., the rise of behavioural economics has called into question whether this will always be the case.

On jeopardising outsider reactions, the Guidelines state that buyers that offer to *"concentrate a large amount of [their] requirements with one supplier or [offer] long-term contracts, […] may make coordination unstable by successfully tempting one of the coordinating firms to*

[341] 2004 EU Horizontal Merger Guidelines, para. 43.
[342] 2004 EU Horizontal Merger Guidelines, para. 57.
[343] 2004 EU Horizontal Merger Guidelines, para. 58.
[344] 2004 EU Horizontal Merger Guidelines, para. 57.

deviate in order to gain substantial new business".[345] The EC defines countervailing buyer power as the bargaining strength that a buyer enjoys in relation to the seller in negotiations. This may stem from the buyer's size and commercial significance (e.g., a producer of an important brand), and their ability to switch to an alternative supplier.[346]

The Guidelines are highly detailed on countervailing buyer power. They explain that the threat of a large buyer's vertical integration into the upstream market or of his sponsoring of upstream expansion or entry by persuading a potential entrant to enter the market (e.g., by committing to place large orders with this company) may destabilise upstream coordination.[347] Large and sophisticated customers will be more likely to wield the necessary power than small firms in a fragmented industry. Buyer power may also be exercised by refusing to buy other products of the supplier or by delaying purchase in the case of perishable products. [348]

However, the EC will not find that buyer power sufficiently off-sets the potential adverse effects of the merger if it is limited to a customer segment. Furthermore, the buyer power must continue to exist post-merger.[349]

1.8. Merger with a potential competitor

As with the removal of a maverick, a merger with a potential competitor may significantly impede competition in the affected market, both by increasing the likelihood of post-merger unilateral and coordinated effects. This is the case if the potential competitor posed a significant constraint on the behaviour of firms in the affected market prior to the merger.[350]

A potential competitor will exercise constraints on the market if it is perceived to be able to enter the market successfully on short notice. The Guidelines refer to a potential competitor that possesses "*assets that could easily be used to enter the market without incurring significant sunk costs*" by way of example.[351]

However, the EC does not believe that mergers with potential competitors will have significant anti-competitive effects unless two conditions are fulfilled: (1) the potential

[345] 2004 EU Horizontal Merger Guidelines, para. 57. The Guidelines discuss buyer power in more detail in paras. 64 et seq.
[346] 2004 EU Horizontal Merger Guidelines, para. 64.
[347] 2004 EU Horizontal Merger Guidelines, para. 65.
[348] 2004 EU Horizontal Merger Guidelines, para. 65.
[349] 2004 EU Horizontal Merger Guidelines, para. 67.
[350] 2004 EU Horizontal Merger Guidelines, para. 59.
[351] 2004 EU Horizontal Merger Guidelines, para. 59. Or where the "*merging partner is very likely to incur the necessary sunk costs to enter the market in a relatively short period of time after which this company would constrain the behaviour of the firms currently active in the market*".

competitor must already exert a "*significant constraining influence*" on the affected market. This requires that there is a significant likelihood that it would grow into an effective competitive force.[352] The EC may, therefore, consider evidence of substantial market entry in the near future;[353] (2) an absence of other potential competitors that would keep up the competitive pressure after the merger.[354]

1.9. Likelihood of entry

The likelihood of future entry into the affected market plays a substantial role in the EC's assessment of the effects of the concentration on competition. Firms in a market will refrain from setting prices at supra-competitive levels if they expect that supra-normal profits will attract market entry.

The EC will consider the likelihood of market entry if such entry is "*likely, timely and sufficient*". The parties to the merger can show that this is the case by referring to successful entries that have taken place in the affected markets in recent times or by submitting public information (e.g., press articles) about the plans of other firms to enter into the market.

Proof of the likelihood of entry will usually remove competition concerns.[355] Of course, this assumes that firms are acting rationally and will enter the market if it is possible and profitable to do so (see II.3).

Whether or not firms will enter the market to scoop up supra-normal profits depends upon the existence of entry barriers. These are defined in the Guidelines as "*specific features of the market which give incumbent firms advantages over potential competitors*".[356] To estimate the size of entry barriers, the EC also looks at historical examples of entry into and exit from the industry.[357]

The Guidelines list different forms of entry barriers: these may result from legal advantages, such as regulatory barriers or tariffs, technical advantages (access to essential facilities, natural resources, innovation and R&D, intellectual property rights, patents, economies of scale, distribution or sales networks, access to important technologies), the reputation of the existing market players (due to a high degree of customer or brand loyalty and the

[352] 2004 EU Horizontal Merger Guidelines, para. 60.
[353] 2004 EU Horizontal Merger Guidelines, para. 60.
[354] 2004 EU Horizontal Merger Guidelines, para. 60.
[355] 2004 EU Horizontal Merger Guidelines, para. 68.
[356] 2004 EU Horizontal Merger Guidelines, para. 70.
[357] 2004 EU Horizontal Merger Guidelines, para. 70.

importance of promotion and advertising), or large excess production capacities on the part of existing market players.[358]

However, the EC will not limit its assessment to the current market situation. The analysis will be forward looking and will take the expected developments within the market into account.[359] The Guidelines state that entry will be more likely to be profitable in high-growth markets than in mature or even declining markets.[360]

An entry analysis also requires taking the situation of other markets into account. The EC promises to consider production facilities in other markets "*that could be used to enter the market in question, thus reducing the sunk costs of entry*".[361] Entry also has to be timely and it has to be sufficient in "*scope and magnitude to deter or defeat the anti-competitive effects of the merger*".[362]

1.10. Efficiencies

Few aspects of merger control analysis have been as intensively disputed as that of efficiencies. An interesting part of the debate is the extent in which competition authorities can take efficiencies into account without exceeding the limits of their resources or their ability to predict what will happen to the market in the future. After all, the merging parties will often assure the administration that the notified transaction will result in efficiencies. Whether this is true will often only be clear with hindsight.

The merging parties may not even know for sure whether the merger creates the anticipated efficiencies. Productive, cost or even dynamic efficiencies may be at the heart of the project. Nevertheless, the management of the acquiring firm usually relies on projections. It does not know for sure whether the concentration will yield the expected benefits. For example, the acquirer will often have limited access to the data of the other company before the merger has been consummated, and can only guess as to what extent the teams in the two companies will be able to work together successfully. There is, therefore, always an element of entrepreneurial risk-taking in a management decision to pursue a merger. Many mergers do not produce the expected efficiencies.

The EC takes the uncertainty associated with efficiency claims into account. Efficiencies can "*counteract the effects [of the concentration] on competition and in particular the potential*

[358] 2004 EU Horizontal Merger Guidelines, para. 71.
[359] 2004 EU Horizontal Merger Guidelines, para. 72.
[360] 2004 EU Horizontal Merger Guidelines, para. 72.
[361] 2004 EU Horizontal Merger Guidelines, para. 73.
[362] 2004 EU Horizontal Merger Guidelines, paras. 74-75.

harm to consumers".[363] They may therefore offset the merger's negative effects on competition.

However, in order to be considered, the claimed efficiencies must be (1) beneficial to consumers, (2) merger-specific, and (3) verifiable.[364]

The first requirement incorporates the consumer welfare standard into the Guidelines. The Guidelines state that "*[t]he relevant benchmark in assessing efficiency claims is that consumers will not be worse off as a result of the merger.*"[365]

Efficiencies also have to be "*substantial and timely*".[366] The Guidelines do not specify when efficiencies are going to be treated as "*timely*". There will be a "*sliding-scale approach*" to this requirement:

> *"[T]he later the efficiencies are expected to materialise in the future, the less weight the Commission can assign to them."*[367]

The Guidelines also state that the efficiencies should "*in principle benefit consumers <u>in those relevant markets</u> where it is otherwise likely that competition concerns would occur*".[368]

This means that efficiencies arising in one market cannot generally offset anti-competitive merger-related effects arising in another market. While these efficiencies will generally not be included in the overall assessment of the effects of the merger on competition, the use of the term "*in principle*" suggests that there may be cases in which they will be recognized. An efficiency defence based on efficiencies arising in other markets does not therefore seem to be out of the question. However, it is likely to meet tough scrutiny.

The EC recognises various types of efficiencies.[369] They do not necessarily have to result in lower prices for consumers. They may benefit consumers in other ways, such as greater quality or more choice. This enables the notifying parties to claim that the transaction creates *dynamic efficiencies"* that result in the creation of new and better products.[370]

However, the notifying parties will have a hard time arguing that the merger creates dynamic efficiencies. They would have to submit proof that these efficiencies will arise (verifiability),

---

[363] 2004 Merger Regulation, recital 29.
[364] 2004 Horizontal Merger Guidelines, para. 78.
[365] 2004 Horizontal Merger Guidelines, para. 79.
[366] 2004 Horizontal Merger Guidelines, para. 79.
[367] 2004 Horizontal Merger Guidelines, para. 81.
[368] 2004 Horizontal Merger Guidelines, para. 79.
[369] 2004 Horizontal Merger Guidelines, para. 80.
[370] On dynamic efficiencies, see 2004 Horizontal Merger Guidelines, para. 81.

would also have to show that these efficiencies would be timely[371] and "*[w]here reasonably possible"* would have to quantify them.[372]

Dynamic efficiencies result from innovation and research and development (***R&D***), amongst other factors. They need time to materialize and cannot be reliably quantified *ex-ante.* There is always an element of uncertainty. Take, for example, mergers between competitors in high-tech companies. Each firm will have its own expertise with regards to certain technologies. Combining the two teams may result in the production of new or better products. However, it is difficult to predict whether this will be the case. Innovation is, by its nature, difficult to forecast.

The Guidelines express a preference for variable cost reductions as opposed to fixed cost reductions. Reductions in variable or marginal costs are more likely to be considered than reductions in fixed costs since the former are more likely to be passed on to consumers.[373] The preference for variable or marginal cost reductions is understandable due to the difficulty posed for an antitrust authority in determining with any degree of certainty whether fixed cost savings will be passed on to consumers. These savings need longer to translate into lower prices than do savings in marginal costs. Their ultimate benefit to consumers is, therefore, even more uncertain than that of marginal costs.

The Guidelines acknowledge that efficiencies may reduce the likelihood of coordinated effects. The wording suggests that the EC does not weigh the benefits of efficiencies against the negative effects resulting from the reduction of competition in the affected market. Efficiencies are only considered if they *prevent* a reduction of competition in the affected market. My analysis of the EC's decision-making practice has confirmed this.

This means that efficiencies are considered in the first part of the test which is whether there is a likelihood of anticompetitive coordination. They are not treated as a separate countervailing factor. This is different in unilateral effects analysis. In unilateral effects analysis efficiencies are treated as a countervailing factor.

Efficiencies may thus reduce the likelihood of post-merger coordination. The underlying assumption is that a more efficient competitor profits more from actively competing than from coordinating its behaviour. The merged company's incentives will therefore change and it will prefer deviation over coordination. The merged entity will therefore become more of a maverick.

---

[371] 2004 Horizontal Merger Guidelines, para. 79.
[372] 2004 Horizontal Merger Guidelines, para. 86. The requirement is part of the "*verifiability*" of the efficiency claim.
[373] 2004 Horizontal Merger Guidelines, para. 80.

Monti points out that efficiencies call into question the first and second parts of the coordinated effects test: it becomes more difficult for the remaining firms in the market to reach an agreement, and there is an increased likelihood that existing coordination will become less stable due to an increased incentive of the merged entity to act as a maverick.[374] In this case, efficiencies counteract the anti-competitive effects of the combination.

Concerning the size of the claimed efficiencies, the Guidelines again use a "*sliding-scale approach*". The greater the expected negative effects of the acquisition on competition, the stronger the required evidence of substantial efficiencies to offset these negative effects.[375]

The merging parties will have to show that the claimed efficiencies are "*merger-specific*". This requires a showing of causality. In addition, they have to show that no less anti-competitive alternative would yield similar efficiencies (e.g., licensing agreements and cooperative joint ventures).[376] This proportionality requirement is often difficult for the merging parties to prove. Whether there are less anti-competitive alternatives to the proposed acquisition is a hypothetical question, and necessitates an *ex-ante* assessment with many unknown variables. To submit to required proof is very difficult. The Guidelines limit the alternatives to be considered to such "*that are reasonably practical in the business situation faced by the merging parties*" and business practices in that industry.[377]

The claimed efficiencies must be plausible. The claims must be "*precise and convincing*" and should be quantified.[378] Quantifying expected efficiencies is difficult. The predictions are complex and it will almost be impossible to arrive at a reliable prediction in the case of dynamic efficiencies. Many efficiency claims fail because the claimed efficiencies cannot be sufficiently quantified. The Guidelines also state that the the EC gives less consideration to efficiencies that take a longer time until they are realised[379] This makes it very difficult to claim dynamic efficiencies, which tend to materialise in the more distant future.

The Guidelines state that the onus of providing all the relevant information regarding the claimed efficiencies in due time rests with the notifying parties, since the relevant information is in their possession.[380]

---

[374] Giorgio Monti, *Merger Defences – Efficiencies, Failing Firms and Industrial Policy,* in: Giuliano Amato/Claus-Dieter Ehlermann (eds.), EC Competition Law – A Critical Assessment, Ch. 13, pp. 525.
[375] 2004 Horizontal Merger Guidelines, para. 84.
[376] 2004 Horizontal Merger Guidelines, para. 85.
[377] 2004 Horizontal Merger Guidelines, para. 85.
[378] 2004 Horizontal Merger Guidelines, para. 86. In cases in which quantification is not possible, "*it must be possible to foresee a clearly positive impact on consumers*".
[379] 2004 Horizontal Merger Guidelines, para. 86.
[380] 2004 Horizontal Merger guidelines, para. 87.

The merging parties also carry the burden of proving that the claimed efficiencies will offset the merger's adverse effects on competition – again because they are in possession of the relevant information.[381] The general rule is that the EC must conduct its own investigation into the merger's likely effects on competition.[382]

The merging parties can provide internal documents, management statements for the financial markets, and expert studies to prove the claimed efficiencies.[383] The term "*in particular*" suggests that the list is not conclusive and that the EC is prepared consider other types of evidence.

All in all, however, notifying parties find it difficult to convince the EC that the merger will create efficiencies. The EC is reluctant to accept efficiency claims. This is difficult for companies to understand because companies tend to focus on opportunities. Antitrust authorities, on the other hand, attempt to predict the effects of the concentration on the market. Their focus is on preventing harm to the market structure and to consumers. Minds therefore often clash at this point of the analysis. A restrictive take on efficiencies necessarily deters some opportunity-seeking behaviour that might have been successful. Some cost savings or innovations that might have materialised and counteracted the acquisition's alleged anti-competitive effects will not be created because the transaction was not approved. On the other hand, the critical approach to efficiencies reduces risk of wrongful non-intervention.

1.11. Conclusion

The EU Horizontal Merger Guidelines provide very detailed information on the factors that the EC will consider in its assessment of a horizontal merger. They incorporate the basic economics and explain using examples what market characteristics play a rold in the assessment.

The language of the Guidelines is simple, though technical, and can be easily understood by companies planning to merge. They are extremely detailed and, therefore, provide a comprehensive overview of what will guide the EC's assessment. They thereby ensure that the EC's decisions are as predictable as they can be given the complexity of the subject and

[381] 2004 Horizontal Merger Guidelines, para. 87.
[382] Arndt Christiansen, *The more economic approach in EU merger control – A critical assessment*, 2006, Deutsche Bank Research, Working Paper Series, Research notes 21, available at: http://www.dbresearch.de/PROD/DBR_INTERNET_DE-PROD/PROD0000000000195710/Der+%22more+economic+approach%22+in+der+EU-Fusionskontrolle+-+eine+kritische+W%C3%BCrdigung.pdf, last viewed: 22 April 2013, p. 6, 7. On the more economic approach, see also Christiansen, *Der More Economic Approach in der EU Fusionskontrolle*, 2010.
[383] 2004 Horizontal Merger Guidelines, para. 88.

the fact that market situations differ from case to case, which means that the Guidelines can only attempt to be comprehensive but will never cover every situation that might arise. Nevertheless, the EC has made a serious attempt to provide maximum transparency and certainty for market participants in their *ex-ante* assessment of a given merger proposal's likelihood of gaining approval.

At the same time, the Guidelines also act as a valuable tool for case-handlers in their individual assessments. They provide a clear framework for the analysis and act as a commentary for the assessment of market characteristics. Therefore, they make a significant contribution to the objectivity of the assessment. The EC is determined to demonstrate that its analysis of coordinated effects is based on a sound economic footing. The Guidelines also attempt to provide a comprehensive account of all the factors to be considered in coordinated effects analysis.

Taking into account that most mergers are never litigated, the Guidelines have considerable power in merger control. Most complex mergers are negotiated in a non-public dialogue between the notifying parties, their lawyers and hired economists and the case-handlers, the EC's economists and, in important cases, the Competition Commissioner.[384] The Guidelines set the stage for the administrative bargain. They are not legally enforceable, but they *de facto* have a quasi-legal influence on the merger control process by setting out accepted standards of merger control.[385] They are also a self-binding statement of the administration regarding the method that it will apply to merger cases. This assessment applies to US merger guidelines and EU merger guidelines alike.[386]

2. US 2010 Horizontal Merger Guidelines

The issuance of revised merger guidelines was one of the major components of the reinvigoration of merger control under the Obama administration. The 1992 Horizontal Merger Guidelines, in their 1997 revised version, were outdated and no longer reflected the agencies' approach to merger control. There was, therefore, a need to update the Guidelines to assure the transparency of the merger contol process.[387]

---

[384] Daniel A. Crane, *Rethinking Merger Efficiencies*, 110 Mich. L. Rev. (2011), pp. 362-363.
[385] Crane, *Rethinking Merger Efficiencies*, supra, p. 363.
[386] On de facto law-making through agency guidelines, see Hillary Greene, ***Guidelines Institutionalization: The Role of Merger Guidelines in Antitrust Discourse***, University of Connecticut School of Law Articles and Working Papers, Paper 76, 2006, available at: http://lsr.nellco.org/cgi/viewcontent.cgi?article=1075&context=uconn_wps, last viewed: 22 April 2013; Rachid Abdullah Khan/Gareth Davies, *Merger Control and the Rule of Law*, Erasmus Law Review, Vol. 2, Issue 1, 2009, p. 32.
[387] David L. Meyer/Joshua A. Hartman, *Merger Enforcement Two Years Later – What Clues does the Obama Administration's Record hold for the Years ahead?,* The Threshold, Volume XI, No. 2, Spring 2011, available at: http://www.mofo.com/files/Uploads/Images/110400-Merger-Enforcement.pdf, last viewed: 11 January 2013, p. 5;

The Obama administration used the chance to incorporate its approach to merger policy into the Guidelines.[388] The hope was that the courts would refer to the new Guidelines in their merger assessment and that this would make it easier for the DoJ and the FTC to prevail in their merger challenges before the courts.[389]

The 2010 Horizontal Merger Guidelines dramatically relaxed the standards for identifying coordinated effects. [390] Whereas the US' 1992 Horizontal Merger Guidelines were relatively similar to the EU's current Horizontal Merger Guidelines, in that they required a showing that the major competitors would be able to reach an agreement, monitor adherence to the agreement and punish deviation, similar to the *Airtours framework* of the General Court, the new Guidelines only require that the relevant market "*shows signs of vulnerability to coordinated conduct [and the agency has] a credible basis on which to conclude that the merger may enhance*" that vulnerability.[391] The 2010 Guidelines therefore removed the need to explain how coordination would work and substantially increased the agencies' discretion.[392]

We will now look at the different provisions of the 2010 Horizontal Merger Guidelines in the context of coordinated effects in detail.

2.1. Role of concentration levels

Concentration levels remain a major component of the analysis of coordinated effects. At the same time, the role of concentration levels has substantially decreased in the context of the unilateral effects analysis.[393]

Based on the Guidelines, harm to competition is only likely if a substantial part of the market engages in coordination. The greater the collective market power of those participating in coordinated conduct, the greater the prospect of harm. Small market players with little stake in the outcome may be sufficient to disturb coordination.[394]

Carl Shapiro, *The 2010 Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years,* Antitrust Law Journal, Vol. 77, pp. 709-710.

[388] Meyer et al., *Merger Enforcement Two Years Later,* supra, p. 5.

[389] Meyer et al., *Merger Enforcement Two Years Later,* supra, p. 6, with reference to Assistant Attorney General Varney's speech in the wake of the rejection of the DoJ's claim in *Oracle*, with further reference.

[390] Meyer et al., *Merger Enforcement Two Years Later,* supra, p. 8.

[391] 2010 Horizontal Merger Guidelines, § 7.1; Meyer et al., *Merger Enforcement Two Years Later,* supra, p. 8.

[392] Meyer et al., *Merger Enforcement Two Years Later,* supra, p. 8.

[393] For an assessment of the changed approach to unilateral effects analysis, see W. Stephen Smith/Fabien M. Thayamballi, *New Merger Guidelines and Enforcement Trends*, Antitrust Counselling & Compliance, 2011, 1900 PLI/Corp, p. 287.

[394] 2010 Horizontal Merger Guidelines, §7.2.

2.2. Types of coordination

The Guidelines focus on: (1) whether the market shows signs of vulnerability to coordinated conduct, and (2) whether the agencies have grounds to conclude that the merger may enhance that vulnerability.[395]

Coordinated interaction can encompass a "*range of conduct*", including the following:

> *"[…] Explicit negotiation of a common understanding of how firms will compete or refrain from competing. Such conduct typically would itself violate the antitrust laws. Coordinated interaction also can involve a similar common understanding that is not explicitly negotiated but would be enforced by the detection and punishment of deviations that would undermine the coordinated interaction."*[396]

The first kind of coordination mentioned in the Guidelines is thus the cartel, an offence according to Section 1 of the Sherman Act with criminal sanctions for the perpetrators. The second type of coordination is the "*tacit*" understanding. It requires: (1) reaching an understanding on the terms of coordination, (2) the ability to detect deviations (monitoring), and (3) punishment mechanisms.[397]

The silent understanding is not punishable under the antitrust laws. This creates the need for an *ex-ante* review of mergers that alter the market structure and result in the possibility of post-merger coordination. The Guidelines refer to a third type of coordinated interaction:

> *"Coordinated interaction alternatively can involve <u>parallel accommodating conduct</u> not pursuant to a prior understanding. Parallel accommodating conduct includes situations in which each rival's response to competitive moves made by others is individually rational, and not motivated by retaliation or deterrence nor intended to sustain an agreed-upon market outcome, but nevertheless emboldens price increases and weakens competitive incentives to reduce prices or offer customers better terms."*[398] [emphasis added by the author]

In this situation, the incentives structures of market participants align to form what would appear to be coordinated behaviour.

---

[395] 2010 Horizontal Merger Guidelines. The 2006 Commentary on the 1992 Horizontal Merger Guidelines remains a point of reference also for the new 2010 Horizontal Merger Guidelines. See Shapiro, *The 2010 Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years*, <u>supra</u>, pp. 709.
[396] 2010 Horizontal Merger Guidelines, §7.
[397] 2010 Horizontal Merger Guidelines, §7. See for comparison the European 2004 Horizontal Merger Guidelines, para. 41.
[398] 2010 Horizontal Merger Guidelines, §7.

For comparison, the 1992 Horizontal Merger Guidelines and the 2004 EU Horizontal Merger Guidelines require(d) that the Authorities demonstrate that the acquisition enables firms to: (1) reach an understanding on the terms of coordination, (2) monitor and (3) punish deviations, and (4) that coordination is not frustrated by outsider reaction for a finding of coordinated effects.[399] They did not cover individually rational behaviour without some sort of tacit understanding and deterrence mechanism. By adding parallel accommodating conduct as a third type of coordinated interaction, the new US Guidelines increase the scope for merger challenges that are based on coordinated effects.

The 1992 US Guidelines read:

> *"Coordinated interaction is comprised of actions by a group of firms that are profitable for each of them only as a result of the accommodating reactions of the others. […]*
>
> *Successful coordinated interaction entails reaching terms of coordination that are profitable to the firms involved and an ability to detect and punish deviations that would undermine the coordinated interaction. [The] detection and punishment of deviations ensure that coordinating firms will find it more profitable to adhere to the terms of coordination than to pursue short-term profits from deviating, given the cost of reprisal. In this phase of the analysis, the Agency will examine the extent to which post-merger market conditions are conducive to reaching terms of coordination, detecting deviations from those terms, and punishing such deviations."*[400]

Coordinated effects analysis should not go so far as to include parallel accommodating behaviour that does not meet the four criteria described above. First of all, "coordination" necessarily requires some sort of interaction in repeated games within the sense of the prisoner's dilemma (see II.1.1). Such interaction is missing in parallel behaviour that merely results from aligned incentives.

Secondly, the question of what constitutes a viable basis for a competition authority to assess the likelihood of post-merger parallel accommodating behaviour remains unclear. The four-step framework offered some degree of predictability and transparency in a very difficult, highly economics-driven assessment. The new US Guidelines offer no framework for the analysis of parallel accommodating behaviour. It is unclear whether the new Guidelines are the beginning of a new approach to merger policy.

---

[399] 2004 Horizontal Merger Guidelines, at 44-57; 1992 Horizontal Merger Guidelines, § 2.1.
[400] 1992 Horizontal Merger Guidelines, §2.1.

The 2010 Guidelines explain:

> *"The Agencies examine whether a merger is likely to change the manner in which market participants interact, inducing substantially more coordinated interaction. The Agencies seek to identify how a merger might significantly weaken competitive incentives through an increase in the strength, extent, or likelihood of coordinated conduct."*[401]

The DoJ and the FTC are likely to challenge a merger if three conditions are met:

> *"(1) [T]he merger would significantly increase concentration and lead to a moderately or highly concentrated market; (2) that market shows signs of vulnerability to coordinated conduct [...] and (3) the Agencies have a credible basis on which to conclude that the merger may enhance that vulnerability".*[402]

These three conditions are extremely vague and whether they will be fulfilled depends on an extremely complicated analysis. They therefore leave many questions unanswered. It seems that the DoJ's and the FTC's discretion in coordinated effects analysis has increased. It is problematic that, in these new guidelines, the DoJ and the FTC no longer commit to providing a story of *how* post-merger coordination will work. As a result, there is a risk of future over-enforcement.

2.3. Failed previous attempts at collusion

The Guidelines state that the DoJ will assume that conditions in the market in question are conducive to coordinated interaction under the following condition:

> *"[I]f firms representing a substantial share in the relevant market appear to have previously engaged in express collusion affecting the relevant market, unless competitive conditions in that market have since changed significantly. Previous express collusion in another geographic market will have the same weight if the salient characteristics of that other market at the time of the collusion are comparable to those in the relevant market. Failed previous attempts at collusion in the relevant market suggest that successful collusion was difficult pre-merger but not so difficult to deter attempts, and a merger may tend to make success more likely. Previous collusion or attempted collusion in another product market may also be given*

[401] 2010 Horizontal Merger Guidelines, §7.1.
[402] 2010 Horizontal Merger Guidelines, §7.1.

substantial weight if the salient characteristics of that other market at the time of collusion are closely comparable to those in the relevant market."[403]

The 1992 Guidelines also took past collusion into account. They stated that market conditions were going to be considered to be conducive to coordination "*when firms in the market previously have engaged in express collusion and when the salient characteristics of the market have not changed appreciably since the most recent incident*".[404]

However, the 1992 Guidelines did not include past collusion in other product markets or previous, failed attempts at collusion. Failed attempts at collusion are especially problematic. Firms in concentrated industries often feel that they would be better off colluding when they see their profit margins decrease drastically.

Collusion is thus often the outcome of especially vigorous competition in concentrated markets. Such markets tend to have characteristics (e.g., buyer power) that hinder long-term collusion – otherwise there would not have been such heavy competition in the first place. It does not take much for a firm to try to reach out to competitors in such a situation. In most industries, there will be possibilities to do so, as competitors tend to meet at fairs and trade associations.

It is not realistic to assume that competitors in industries live alongside each other without, maybe even unintentionally, meeting with the customer, at least at trade associations. Failed collusion shows that, as the Guidelines themselves state, the market in question was not conducive to coordination.

The Guidelines do not even clarify whether "*failed previous attempts at collusion*" have to be two-sided or whether it is enough that one competitor tells another that it should not sell a certain good below price X but never receives an answer, while the recipient of the advice continues to sell the good below price X. The Guidelines are thus at least unclear and they are, at worst, overly intrusive.

The fact that (attempted) coordination in other product markets is taken into account is also rather problematic. The authorities run the risk of getting this part of the assessment wrong. The assessment of the likelihood of coordinated effects is difficult enough if only one market is examined. To compare different product markets and to determine whether their "*salient characteristics*" are comparable is an enormous task that requires large amounts of data and

[403] 2010 Horizontal Merger Guidelines, §7.2.
[404] 1992 Horizontal Merger Guidelines, § 2.1. Evidence of past express collusion in other geographic markets will be taken into account if the characteristics of the other geographic market were comparable to those of the relevant market at the time of express collusion.

risks missing some information. It is even worse when mere attempted coordination prompts such an analysis.

2.4. Payoffs of coordination

A welcome change in the 2010 Guidelines is the greater focus on the payoffs of coordinated interaction.[405] The 1997 revised version of the 1992 Guidelines focused on the probability of coordinated interaction, which is difficult to quantify. A player will weigh the gains from deviation against the gains from coordination. If the gains expected from deviation, taking a possible punishment into account, outweigh the gains from continued coordination, the player in question will be likely to deviate from the terms of coordination. It therefore makes sense to shift the focus from the mere probability of coordination to coordination's actual payoffs.

2.5. Market transparency and product homogeneity

The Guidelines also list market transparency and product homogeneity as factors that favor coordination. Regular price monitoring by suppliers or customers is an indication that prices are relatively transparent.[406] The 1992 Guidelines also listed product homogeneity and the information available to firms in the market as factors that may increase the likelihood of collusion.[407]

2.6. Credible punishment mechanisms and maverick theories

Both the 2010 and the 1992 Guidelines emphasise that effective punishments increase the likelihood of successful coordination. However, while the 1992 Guidelines required the existence of effective punishment mechanisms for coordinated effects-based intervention, the 2010 Guidelines merely state that firms are "*more likely to be deterred from making competitive initiatives*" if there are effective punishment mechanisms in place. There thus seems to be room for a finding that a merger is likely to lead to coordinated effects even though the authority has not been able to prove the existence of effective punishment mechanisms.

---

[405] See Wayne-Roy Gayle, Robert C. Marshall, Leslie M. Marx, Jean-Francois Richard, *Coordinated Effects in the 2010 Horizontal Merger Guidelines*, Rev Ind Organ (2011) 39, p. 40.
[406] 2010 Horizontal Merger Guidelines, § 7.2.
[407] 1992 Horizontal Merger Guidelines, § 2.1.

For comparison, the 1992 Guidelines stated:

> *"Where market conditions are conducive to timely detection and punishment of significant deviations, a firm will find it more profitable to abide by the terms of coordination than to deviate from them. Deviation from the terms of coordination will be deterred where the threat of punishment is credible.*[408]
>
> *[…] Successful coordinated interaction entails reaching terms of coordination that are profitable to the firms involved and an ability to detect and punish deviations that would undermine the coordinated interaction. Detection and punishment of deviations ensure that coordinating firms will find it more profitable to adhere to the terms of coordination than to pursue short-term profits from deviating, given the costs of reprisal. In this phase of the analysis, the Agency will examine the extent to which post-merger market conditions are conducive to reaching terms of coordination, detecting deviations from those terms, and punishing such deviations."*[409]

The 2010 Guidelines now state the following:

> *"[C]oordinated interaction also can involve a similar common understanding that is not explicitly negotiated but would be enforced by the detection and punishment of deviations that would undermine the coordinated interaction. Coordinated interaction alternatively can involve parallel accommodating conduct not pursuant to a prior understanding."*[410]

The existence of credible punishment mechanisms is, therefore, an important but not always necessary requirement for the finding of a likelihood of coordinated effects. The 2010 Guidelines state:

> *"A market typically is more vulnerable to coordinated conduct if a firm's prospective competitive reward from attracting customers away from its rivals will be significantly diminished by likely responses of those rivals. This is more likely to be the case, the stronger and faster are the responses the firm anticipates from its rivals. The firm is more likely to anticipate strong responses if there are few significant competitors, if products in the relevant market are relatively homogenous, if customers find it relatively easy to switch between suppliers, or if suppliers use meeting-competition clauses."*[411]

[408] 1992 Horizontal Merger Guidelines, §2.1.
[409] 1992 Horizontal Merger Guidelines, §2.1.
[410] 2010 Horizontal Merger Guidelines, §7.
[411] 2010 Horizontal Merger Guidelines, §7.2.

Both Guidelines state that small and frequent transactions may make it harder for firms to deviate from the terms of coordination without their rivals noticing.[412] The 2010 Guidelines, in addition, state that firms may be discouraged from deviating if demand is relatively inelastic or if there is a time-lag until they respond that exceeds the time rivals need to respond.[413]

They also emphasise that small firms and firms that have little stake in the *status quo* are less likely to be deterred by punishments, and that deterrence may be ineffective in markets with leapfrogging technological innovation:

> *"A firm is less likely to be deterred by whatever responses occur if the firm has little stake in the status quo. For example, a firm with a small market share that can quickly and dramatically expand, constrained neither by limits on production nor by customer reluctance to switch providers or to entrust business to a historically small provider, is unlikely to be deterred."*[414]

This is a kind of reduced maverick theory that puts the emphasis on small market shares. It is unclear what, exactly, denotes a firm that "*has little stake in the status quo*". If the *status quo* in a given market is coordination, a "*classic*" maverick could be said to have little stake in the status quo, as its cost structure varies from that of other market participants in a way that makes deviation seem more profitable than coordination.

However, a maverick firm will not necessarily have small market shares. It may have similar market shares compared to its competitors. If it is more cost efficient than the competitors, it may be advisable for the maverick to sell its products at a lower price.

Even though the 2010 Guidelines state that the elimination of a maverick may increase the likelihood of coordination, they no longer discuss the opposite case, that the existence of a maverick firm in the market actually reduces the likelihood of coordination.[415] For comparison, see the following portion of the 1992 Guidelines:

> *"[I]n some circumstances, coordinated interaction can be effectively prevented or limited by maverick firms - firms that have a greater economic incentive to deviate from the terms of coordination than do most of their rivals (e.g., firms that are unusually disruptive and competitive influences in the market)."*[416]

The Guidelines admit in another section that the existence of a maverick firm may make coordination unlikely. The section on efficiencies states that incremental cost reductions may

[412] 2010 Horizontal Merger Guidelines, §7.2; 1992 Horizontal Merger Guidelines, §2.12.
[413] 2010 Horizontal Merger Guidelines, §7.2.
[414] 2010 Horizontal Merger Guidelines, §7.2.
[415] 2010 Horizontal Merger Guidelines, §7.1.
[416] 2010 Horizontal Merger Guidelines, §7.2.

make coordination less likely by a) enhancing the maverick firm's incentive to lower the price or b) by creating a new maverick firm.[417]

2.7. Destabilising effect of innovation

According to *Carl Shapiro*, first Deputy Assistant Attorney General for Economic Analysis at the Antitrust Division of the DoJ under the Obama Administration and involved in the drafting of the Guidelines, an aim of the new Guidelines was to emphasise non-price competition.[418] The Guidelines state that markets marked by leapfrogging technological innovation are less likely to fall prey to coordination.[419]

2.8. Other destabilising factors

Buyer characteristics and the nature of the procurement process affect the likelihood of successful coordination.[420] Infrequent large contracts make coordination more difficult. Small sellers may have an incentive to bid aggressively for a large contract which may overcome the fear of punishment.[421]

The existence of large buyers exerting buyer power hinders successful coordination. Large buyers may put out bids for a few large contracts rather than many smaller ones or may make their procurement decisions "*opaque*" to suppliers.[422]

2.9. Potential competition

An important change in the 2010 Guidelines is that potential competition is no longer treated as a conglomerate concern. The Guidelines recognise that potential competition has to be evaluated under horizontal merger principles.[423] Potential competitors are not active in the affected market but nevertheless exercise competitive constraints on that market because they pose a credible threat of future entry.[424] Firms active in the affected market know that

---

[417] 2010 Horizontal Merger Guidelines, §10.
[418] Shapiro, *The 2010 Horizontal Merger Guidelines*, supra, p. 736.
[419] 2010 Horizontal Merger Guidelines, §7.2.
[420] 2010 Horizontal Merger Guidelines, §7.2.
[421] 2010 Horizontal Merger Guidelines, §7.2.
[422] 2010 Horizontal Merger Guidelines, §7.2.
[423] Darren S. Tucker, *Potential Competition Analysis under the 2010 Merger Guidelines*, 12 Sedona Conf. J., 2011, pp. 273, 279. The new Guidelines also eliminate the distinction between actual and perceived competition. P. 280.
[424] Tucker, *Potential Competition Analysis under the 2010 Merger Guidelines*, supra, p. 274, with reference to Supreme Court jurisprudence on potential competition.

sustained super-competitive pricing will attract entry from these firms and will therefore try to keep prices below that level. As a result, potential competition may prevent successful coordination (*disturbing outsider reaction*).

The new approach intends to reinvigorate merger enforcement on potential competition grounds. [425] It is the first comprehensive explanation of the DoJ's and the FTC's approach to potential competition since the 1984 Guidelines. [426]

2.10. Conclusion

The 2010 Horizontal Merger Guidelines are the main achievement of the Obama administration's merger policy during its first term in office. Nevertheless, several aspects of the new Guidelines are problematic, especially the departure from the need to show how the coordinated effects will work post-merger. Against the background of the often political nature of merger enforcement, it makes sense to require competition authorities to come up with a clear story of a merger's future effects. The 2010 Horizontal Merger Guidelines have weakened this requirement and increased the DoJ and FTC's discretion.[427]

In a rare instance of outspoken criticism, the EU's former CCE *Kai-Uwe Kühn* commented at the GCR's 2nd Annual Law Leaders conference in Miami on 8 February 2013 that the theories of coordination in the new US Guidelines posed problems in real-life enforcement. He stated that he was "*very concerned with the expansion that we have in the US guidelines both when I think of it as an economist but also when I think about it in terms of application in the agencies. […] We don't even have the theoretical guidance, or the guidance from cross-sectional, empirical results, that would discipline that. And then I get really worried about the standard of evidence we might be applying.*"[428]

The statement came after the FTC's Head of Economics *Howard Shelanski* assured listeners that the US federal competition authorities "*care about coordinated effects*".[429] According to Mr Shelanski, the change in the 2010 Guidelines presented a possible solution to oligopoly markets to "*help avoid those types of markets before they form*".[430] However, the statement

---

[425] Tucker, *Potential Competition Analysis under the 2010 Merger Guidelines*, supra, p. 276, with further references.

[426] Tucker, *Potential Competition Analysis under the 2010 Merger Guidelines*, supra, p. 283.

[427] See also Meyer et al., *Merger Enforcement Two Years Later,* supra, p. 8-9.

[428] Ron Knox, *EU official: Theories of coordination in US merger review may lack evidence*, Global Competition Review, 8 February 2013, available at: http://www.globalcompetitionreview.com/news/article/33034/eu-official-theories-coordination-us-merger-review-may-lack-evidence/, last viewed: 9 February 2013.

[429] Mr. Shelanski defended the broadening of the notion of coordinated effects against criticism: "*This wasn't simply so a bunch of competition agencies could go wild and have a broader scope to fight mergers. There's been some scurrilous commentary to that effect. […] But that is actually plainly incorrect.*"

[430] Knox, *Theories of coordination in US merger review may lack evidence*, supra.

indicates a willingness to intervene against market structures rather than to prevent harm from a specific merger.

Mr Shelanski added that there were cases in which the evidence existed to make a good coordination story even in absence of a clear story of collusion in the industry. The statement drew criticism from Mr Kühn, who stated that he could not always recognise the pre-competitive equilibrium in the affected market(s) during a pre-merger review. He further emphasised his concerns about the US approach ("*It truly opens up Pandora's Box, where I can say anything because I don't have the theoretical discipline.*").

It remains to be seen whether the Guidelines are accepted by the US courts. *Meyer et al.* rightly state that the DoJ and the FTC traditionally have a hard time convincing courts of their theory of harm.[431] However, it should be noted that only a fraction of the mergers are litigated. In many instances, the merging parties will either abandon the project or agree to commitments to shorten the process. Courts therefore only act as a corrective element in the few cases in which they get the chance to review the agency's assessment.

Another criticism that should not be left out is the lack of guidance regarding how the existing secondary materials are to be used with the new Guidelines. The 2006 Commentary to the 1992 Guidelines appears to remain valid. However, it is no longer in line with the Guidelines. It would have been preferable to issue an updated commentary along with the Guidelines.

This would have enabled practitioners to accurately assess the chances of a merger proposal and would have provided greater legal certainty.[432] *Hovenkamp* has pointed out that the 1992 Guidelines were so specific that they became outdated once new developments in economic thinking took hold and finally fell out of line with agency practice. According to him, methodologies tend to be "*well developed in the literature and accessible to experts*" and "*may be consulted by those defending a merger as well as by government economists*".[433]

This dissertation disagrees with this line of argument: The gap between the enforcement practice and the text in the 1992 Guidelines (in their revised version of 1997) arose because the administration took nearly 15 years to revise the text. During these 15 years, significant developments took place. It would have been better to regularly update the Guidelines than to leave them unchanged for 15 years. The update of the Guidelines was preceeded by one

[431] Meyer et al., *Merger Enforcement Two Years Later,* supra, p. 9.
[432] Regarding unilateral effects analysis, the new 2010 Horizontal Merger Guidelines put market definition and merger effects into a proper perspective and include an upwards pricing pressure test. This addressed shortcomings of the former 1992 Horizontal Merger Guidelines. See Michael A. Salinger, *The 2010 Revised Merger Guidelines and Modern Industrial Economics,* Rev Ind Organ (2011) 39, pp. 160-163. *Salinger* was director of the Bureau of Economics of the FTC from 2005 to 2007.
[433] Herbert Hovenkamp, *Harm to Competition Under the 2010 Horizontal Merger Guidelines,* supra, p. 4.

year of consultations. Future revisions of the Guidelines could take place every five to ten years to keep them in line with the current economic approach and agency practice.

I am also not convinced by Hovenkamp's comment that those defending a merger and government economists should refer to the literature. Literature is always available to those wanting to enter the details of the discussion, but it does not provide legal certainty. The guidelines are supposed to act as an up-to-date commentary on the agency's approach, informing the parties about the competition authority's likely reaction to the merger proposal. To instead refer to the literature as a point of guidance causes utter confusion for practitioners.

IV. Coordinated effects in merger enforcement actions

This section discusses the role of coordinated effects analysis in merger enforcement. It starts with the EU and then turns to the US. The section concludes by comparing the findings in the two systems. The analysis concentrates on the most relevant merger control decisions of the recent years.

1. EU

1.1. Lengthy review periods

One of the most important differences between the EC, on the one hand, and the DoJ and the FTC, on the other, is that the EC can prohibit a proposed merger or can accept commitments from the parties that alter the nature of the transaction. Until the merger is cleared by the EC, the parties are not allowed to close the transaction. The existence of the "*stand-still obligation"*, which lasts until the end of the Phase II investigation, means that the EC does not have to seek a preliminary injunction in court to preserve the *status quo* pending further investigations. The EC is, therefore, truly "*master of the game*". Its decisions will only be second-guessed if the merging parties decide to appeal the decision. Such an appeal would be lodged at the General Court. Decisions of the General Court may be subject to a right of appeal to the Court of Justice on points of law only.

It will often *de facto* be less costly for the parties to either abandon the project altogether or to propose commitments than to litigate the merger in court. To give an idea of the time needed for a full-blown EU-level merger control assessment: the review starts with the pre-

notification period. The pre-notification period allows for an initial discussion of the most obvious formal and substantive questions and usually takes a few weeks.[434]

The official review starts with the submission of the notification. Phase I can take between 25 and 35 working days, depending upon whether the EC receives a referral request from a Member State according to Article 9(2) of the Merger Regulation (Article 10(1) of the Merger Regulation).[435] An in-depth investigation adds up to 125 additional working days to the review period.[436] The maximum time period for an in-depth review by the EC is, therefore, 160 working days.[437] If we assume that a month has, on average, 22-23 working days, this gives a maximum review period of seven to eight months.

Appealing the EC's decision to the General Court adds on average another 51 months.[438] The maximum "*review period*" is, therefore, almost 60 months, or almost 5 years.

This explains why many controversial merger control cases never make it to court. It will often be less costly for the parties to either abandon the project altogether or to make commitments to obtain clearance.

Whether the EC's assessment was correct will, therefore, often not be investigated. Mergers and acquisitions are risky projects from an entrepreneurial perspective. The parties need certainty about the regulatory situation within a short timeframe. Whether or not there is a chance to show that the EC's assessment was flawed and to win the case in court often plays a minor role against the background of the losses incurred by the parties because of the stand-still obligation. In the US, the DoJ and the FTC have to go to court to challenge the transaction. They therefore have to make sure that they can prove that the merger is anti-competitive in court. The threshold for intervention therefore tends to be higher in the US than in the EU.

Companies' reluctance to challenge merger control decisions in court is understandable seen from the angle of entrepreneurial risk taking. The assessment period in merger control is "*lost time*" for the merging parties. The target business and the acquirer are in a transition period in which delays to closing and negative press may harm both the market position of the company and the success of the project. It should also be mentioned that many SPAs contain "*walk away clauses*", so that the deal drops dead if regulatory approval is not obtained within a certain time-period.

[434] See Christiansen, *Der More Economic Approach in der EU Fusionskontrolle*, supra, p. 477.
[435] See Christiansen, *Der More Economic Approach in der EU Fusionskontrolle*, supra, p. 477.
[436] See Christiansen, *Der More Economic Approach in der EU Fusionskontrolle*, supra, p. 477.
[437] See Christiansen, *Der More Economic Approach in der EU Fusionskontrolle*, supra, p. 477.
[438] General Court, ***Statistics concerning the judicial activity of the General Court,*** supra, p. 11. See also Walter Frenz, Handbuch Europarecht: Band 5: Wirkungen und Rechtsschutz, Ch. 2, § 2, footnote 18.

As a result, the EC will often get its way regardless of whether it can base its concerns on a sound theory of harm. This can be seen clearly from the fact that almost all of the cases that will be discussed in the following section have never made it to court.

1.2. Evidence considered by the EC

In its Phase II investigations, the EC analyses extensive customer and competitor testimonies and reviews internal documents of the merging parties.

What is striking is that the EC decisions – including the very detailed decision in *ABF* – do not contain any description of economic models that might have been used to assess the likelihood of post-merger coordination. In fact, the EC seems to rely almost exclusively on customer and competitor testimonies and prefers a "*common sense approach*" to coordinated effects analysis.[439] What goes on behind the scenes, namely whether the CCE has conducted intensive modelling which guided the decision of the case team, is not visible in the text of the decisions. Even the merging parties do not have access to the CCE's analysis. It is therefore very difficult to know what role the economic modelling played in the competitive analysis of DG Comp. In my view, this is a major flaw of the EC's analysis, as the economics that were at the basis of the decision need to be accessible. Parties should have a chance to see whether the EC's modelling was flawed, whether it conducted the necessary economic analysis and modelling, and whether the final decision deviated from the suggestions of the CCE and his team.

The EC does have a highly trained team of economic advisors. It issues detailed final decisions and statements of objections. There is an obvious commitment to conduct a sophisticated case-by-case assessment based on economic considerations, not least as part of the "*more economic approach"*. For the EC, adopting a more economic approach means testing whether the factors that the Guidelines have identified as increasing the likelihood of successful coordination are present. Therefore, the EC is still "*ticking the boxes*". Its decisions often do not explain what is going to happen in the market post-merger - they lack a "*story*" of how coordination is going to work.

However, this can only be the first part of the analysis. It needs to be followed by a concise example of successful future coordination based on economic modelling. At the moment, the parties will provide their economic insights in an attempt to refute the concerns expressed in the statement of objections. For the major cases, they will use the help of expert economists,

---

[439] See also Andrea Amelio/Pablo Asbo/Miguel de la Mano/Ruben Maximiano/Viktor Porubsky, *ABF/GBI Business: coordinated effects baked again, Competition Policy Newsletter*, No. 1, 2009, p. 96.

such as Frontier Economics Ltd.[440] or NERA.[441] It would be preferable, though, if the statement of objections and the final decision would already lay out clearly the economic basis of the EC's argument rather than just listing the factors which, in the view of the EC, make the market more prone to coordination. That would ensure that the EC and the parties can, from the start, discuss the case in detail. It would also likely shorten the review period for numerous cases, as the EC's concerns would prove to be unfounded during economic modelling.

1.3. Overview of the following section

The following section lists the most important EU cases in which coordinated effects have played a role. The number of key players in the market post-merger remains the major factor of the assessment. Therefore, the cases have been grouped so that mergers that reduced the number of key competitors from five to four are analysed in sequence, followed by four-to-three and three-to-two transactions.

The only two exceptions are the Court of Justice's *Impala* decision (2008) and the three-to-two merger case *ABF* (later on in 2008), which will be discussed first because of their special implications. *Impala* had a major effect on the EC's analysis in *ABF. ABF* is special because it is the only EC decision since *Airtours* which was solely based on coordinated effects. The analysis in *ABF* is, therefore, much more detailed than the coordinated effects analysis in any other EC decision discussed in this section. The higher level of detail allows for greater insight into the EC's approach towards coordinated effects.

1.4. Impact of Impala

Impala[442] has already been discussed in some detail in Chapter 1. This section will not therefore repeat the details of the decision and will instead simply comment on the impact that it had upon the EC's decision-making practice. The decision of the General Court in *Impala* (even though it was ultimately reversed by the Court of Justice) appears to have affected the EC's decision-making practice in two ways. First, the EC was reluctant to base merger decisions on collective dominance/coordinated effects. Since *Impala*, the EC has hardly ever intervened on the basis of coordinated effects (e.g., in *ABF*[443] and *Antalis*[444] where the EC imposed commitments). Second, in *ABF*, the EC took care to reason each

[440] See http://www.frontier-economics.com, last viewed: 22 April 2013.
[441] National Economic Research Associates, Inc. (***NERA***), see http://www.nera.com, last viewed: 22 April 2013.
[442] *Sony/BMG*, p. 30.
[443] Case No. COMP/M.4980, 23 September 2008, *ABF/GBI Business*, OJ 2009 C 145, pp. 12-15.
[444] Case No. COMP/M.4753, 24 October 2007, *Antalis/MAP*, OJ C 289, p. 3.

factor which it believed indicated an increase in the likelihood of post-merger coordination. The EC was especially careful to render a decision that could not be attacked in court.

In *Impala*, the Court of Justice held that the EC has to conduct a "*prospective analysis of the reference market*".[445] On the basis of that analysis, the EC has to determine whether competition on the reference market will be significantly impeded as a result of the transaction because the parties and one or more competitors are able to adopt a common policy because of "*correlative factors that exist between them*".[446]

The Court held that correlative factors included, in particular, the interdependence between the parties to a tight oligopoly which enabled them, in a market with the appropriate characteristics (market concentration, transparency and product homogeneity), to anticipate each other's behaviour and to align their conduct.[447]

The correlative factors are the same as those listed in the Horizontal Merger Guidelines of the EC.[448] The Court of Justice emphasised that the EC has to take into account both the current situation in the affected market and any alterations of its characteristics brought about by the transaction.[449]

The Court of Justice has cautioned against a mechanical approach.[450] The correlative factors should not be analysed in isolation.[451] Instead, the EC should take account of the "*overall economic mechanisms of a hypothetical tacit coordination*".[452] It is not enough for the EC to "*tick off the boxes*" and to arrive at the conclusion that there is a likelihood of post-merger coordination because a certain number of correlative factors have been established. The EC must explain how coordination is supposed to work. This requires modelling the post-merger behaviour of the main market participants.

1.5. ABF

ABF (2008) was the first EC-intervention since *Airtours* that was based solely on coordinated effects.[453] It was decided only a few months after the Court of Justice's *Impala* judgment, which strongly influenced the decision.[454] It is apparent from the detailed reasoning in the

[445] Court of Justice, Case C-413/06 P, *Impala,* para. 120.
[446] Court of Justice, Case C-413/06 P, *Impala,* para. 120.
[447] Court of Justice, Case C-413/06 P, *Impala,* para. 121.
[448] The non-horizontal merger guidelines had not yet been published in 2008.
[449] Court of Justice, Case C-413/06 P, *Impala,* para. 122.
[450] Court of Justice, Case C-413/06 P, *Impala,* para. 125.
[451] Court of Justice, Case C-413/06 P, *Impala,* para. 125.
[452] Court of Justice, Case C-413/06 P, *Impala,* para. 125.
[453] See also Amelio et al., supra, p. 91.
[454] Amelio et al., supra, p. 91.

decision that the EC really tried to provide an explanation why the merger threatened to produce coordinated effects that would stand up in court.

To understand the market characteristics, the EC conducted extensive interviews with competitors and a number of distributors, gathered information at an industry trade show and reviewed the internal documents of the parties. What is striking in *ABF*, like in EC merger control decisions, is that there is no reference to economic modelling undertaken by the CCE and his team.[455] From the text of the decision, it seems to have been based purely upon interviews with customers and competitors rather than on a quantitative analysis. I do not believe that it was, but it shows that it would be extremely helpful if the EC elaborated on the economic analysis in its merger decisions. As it is, there is no way to tell what economic analysis the CCE and his case team undertook, what the results were and to what degree they found their way into the final decision.

1.5.1. Details of the EC's analysis

Associated British Foods (***ABF***) planned to acquire the yeast business of GBI Holding BV (***GBI***) in continental Europe.[456] GBI is one of the main European yeast producers and owned by the Dutch private equity firm Gilde.[457] ABF is an international food, ingredient and retail group with activities in Europe, North America, Australia and New Zealand. [458] ABF is one of the two worldwide leaders in the production of yeast. [459]

The transaction consisted of the acquisition of several subsidiaries owned by GBI that were active in the yeast business as well as a group of assets owned by GBI Ingredients, the Netherlands BV (***GBI Ingredients***) and DSM Bakery Ingredients BV (***DSM Bakery***).[460] The remaining parts of GBI were sold to Lesaffre Group, another leading yeast producer.[461]

The market for compressed yeast in Spain and Portugal was highly concentrated pre-merger.[462] Post-merger, ABF and GBI's combined post-merger market share reached 70-

[455] See also Amelio et al., *ABF/GBI Business*, supra, p. 9. However, they only state that "*extensive econometric evidence*" was "*not necessary*" in *ABF*.
[456] Amelio et al., *ABF/GBI Business*, supra, p. 91.
[457] Amelio et al., *ABF/GBI Business*, supra, p. 91. For more information on *Gilde*, see http://www.gilde.nl, last viewed: 22 April 2013.
[458] *ABF*, paras. 5-6.
[459] Amelio et al., *ABF/GBI Business*, supra, p. 91.
[460] *ABF*, para. 1.
[461] Amelio et al., *ABF/GBI Business*, supra, p. 91, with reference to Case No. COMP/M.5020, 11 July 2008, *Lesaffre/GBI UK,* OJ C 308, 03/12/2008, p. 7. The merger was cleared in Phase I subject to commitments. For more information about *Lesaffre*, see http://www.lesaffre.com, last viewed: 22 April 2013.
[462] *ABF*, paras. 360-369, Table 7. There was no indication that the merger would lead to coordinated effects in the market for liquid yeast due to a lack of overlap. For the dry yeast market, coordination was unlikely due to low barriers to entry. There were also sophisticated producers from Turkey (Pakmaya) and China (Angel) that were able to supply the European market with dry yeast in the event of a post-merger price increase.

80% in Portugal and 40-50% in Spain.[463] Only two other players existed in the market: Lesaffre and Lallemand. Lesaffre had a market share of 20-30% in the Portuguese market and 40-50% in the Spanish market. Lallemand only had 0-5% market share in both markets.[464] The transaction reduced the number of players in the market from three to two.

The EC stated that a merger that reduces the number of major rivals in a relevant market from three to two "*carries with it a presumption both from economic theory and empirical studies that coordination can be significantly facilitated […] in a highly concentrated market*". Such mergers make it "*incrementally easier*" for the remaining players in the market to tacitly coordinate their behaviour.[465]

With a lower number of rivals, companies face a lower base of rival customers from which they can attract new sales. As a result, the short-term gains of aggressive competition decrease.[466] Two players will also find it easier to agree on the terms of coordination than three. A reduction of the number of competitors also increases the level of market transparency and facilitates monitoring.[467] Punishments become more credible as the opportunity costs of turning a blind eye to aggressive competition grow as rivals get larger.[468] Larger market transparency also increases the effectiveness of the punishment.[469]

At the time of the transaction, the markets for bakers' yeast in Portugal and Spain were relatively stable or in slight decline.[470] The decline was caused by the switching of customers from artisanal to industrial bakers, which tend to use more liquid yeast.[471] However, the EC found that artisan bakers still accounted for about 70-80% of the compressed yeast turnover in Spain and 90-100% in Portugal.[472] The maturity of the market for bakers' yeast was also evidenced by the trend towards consolidation.[473] Few new plants had been built during the past decade and smaller traditional family plants had been acquired by some of the most important global players.[474] Little change was therefore expected that would disturb coordination.

---

[463] Compared to 30-40% in France.
[464] *ABF*, para. 119.
[465] *ABF*, para. 284 on the Spanish market for compressed yeast.
[466] *ABF*, para. 285.
[467] *ABF*, paras. 286-287.
[468] *ABF*, para. 288.
[469] *ABF*, para. 288.
[470] *ABF*, para. 114.
[471] *ABF*, para. 116.
[472] *ABF*, para. 116.
[473] *ABF*, para. 118.
[474] *ABF*, para. 118.

Furthermore, the relationships between yeast producers and distributors in Portugal and Spain were characterised by stable, long-term relationships (lack of switching).[475] In the Portuguese market, all of the distribution agreements were exclusive.[476]

Interaction between the market participants was frequent.[477] Yeast is a perishable product and needs to be supplied at regular, short-term intervals (weekly or bi-weekly).[478] Frequent interaction between competitors is usually necessary for successful coordination because firms learn, though repeated interactions with each other, to anticipate their rivals' actions. Accordingly, the EC stated that tacit coordination was unlikely to emerge in the absence of "*frequent and repeated*" interaction among market players.[479]

Demand elasticity in the market for compressed yeast in Spain and Portugal was low due to the fact that yeast is an indispensable ingredient in many bakery products.[480] Producers were unable to switch to substitutes if the prices for compressed yeast went up.[481]

Barriers to entry into the Spanish and Portuguese market were substantial. The reputation of established brands played an essential role. For instance, artisan bakers wanted to buy high-quality yeast and thus selected certain tried-and-true brands.

In addition, new entrants needed to build up a sales force and distribution network.[482] Greenfield entry was unlikely to take place in the foreseeable future, and competitors from neighbouring geographic markets were unlikely to expand their capacity to Spain or Portugal.[483]

Regarding the effect of barriers to entry on the likelihood of coordination, the EC stated:

> *"Tacit coordination is difficult to sustain if there are low barriers to entry. First, in the absence of entry barriers, any attempt to maintain supra-competitive prices would trigger entry [...], which would erode the profitability of collusion. Second, the prospect of future entry tends to reduce the scope for retaliation, which in turn limits the sustainability of collusion. The basic idea is that firms have less to lose from future retaliation if entry occurs anyway. More precisely, the prospect of future entry does not*

[475] *ABF*, para. 126.
[476] *ABF*, para. 128.
[477] *ABF*, para. 155.
[478] *ABF*, para. 155.
[479] *ABF*, para. 155.
[480] *ABF*, para. 157.
[481] *ABF*, para. 156.
[482] *ABF*, para. 161.
[483] *ABF*, paras. 167-172, 173-187.

affect the short-run benefit that a firm can obtain from a deviation, but it reduces the potential cost of deviation in terms of foregone future profits."[484]

The EC also found that the market was characterised by a high degree of product homogeneity. Compressed yeast products produced by different manufacturers were likely to react in a similar way to exogenous shocks of demand and supply.[485] The likelihood of similar reactions to exogenous factors increased the likelihood that the remaining players in the market would foresee each other's actions and would be able to monitor whether their rivals were adhering to the terms of coordination.[486]

Some market players had even described compressed yeast as a commodity.[487] However, brands also played a strong role in the markets for compressed yeast in Portugal and Spain.[488] The EC did not believe that this contradicted the homogeneity of yeast products.[489] The brand enabled the producers of compressed yeast to profit from their reputation in terms of service and reliability.[490] However, the EC did not consider whether reputation and reliability are differentiating factors that reduce the degree of product homogeneity.[491]

The markets for compressed yeast in Spain and Portugal were relatively transparent.[492] The EC conducted several interviews with market participants, some of which indicated that they were well informed about the prices of their competitors:

"The information of a competitors' price increase spreads quite rapidly in the industry. Customers start shop[ping] around and asking for new offers. The price increase due to [an] increase in the input prices can be verified in the press. The bakery industry is covered by a large number of journals."[493]

It was also easy to discern the capacities of the main competitors.[494] The parties themselves had collected capacity data for all of the production sites and all of the competitors in the EEA and Turkey.[495] The data was highly accurate, indicating a high level of market transparency.[496]

---

[484] *ABF*, para. 160. See also paras. 246-265.
[485] *ABF*, para. 188.
[486] *ABF*, para. 188.
[487] *ABF*, para. 189.
[488] *ABF*, para. 190.
[489] *ABF*, para. 190.
[490] *ABF*, para. 190.
[491] *ABF*, para. 190.
[492] *ABF*, paras. 192, 305, 322. For the Spanish compressed yeast market, see 208-211.
[493] *ABF*, para. 193.
[494] *ABF*, para. 194.
[495] *ABF*, para. 194.
[496] *ABF*, para. 194.

Lallemand stated during the EC's investigation that "*the yeast business is a small industry and it is very porous. People know each other through the main suppliers [...] as well as through customers [...]. Former employees are sometimes fluctuating to competing firms and some people from the smaller 'independent' companies have also met in various research projects which they cooperated and shared in the cost. Sometimes competitors are even invited to see the plant of another competitor upon the initiative of some equipment suppliers who want to demonstrate a particular piece of equipment*".[497]

It took producers of compressed yeast in the Spanish and Portuguese markets less than two months to find out to whom a customer had been lost through their sales force.[498] The reporting obligations of the distributors also ensured that the producers of compressed yeast learned about the pricing changes of their competitors within a short timeframe.[499] Some bakers even showed the sales force invoices during price negotiations.[500]

There had been past cases of collusion in the compressed yeast markets in France and in Turkey, in which Lesaffre and Gist-Brocades (former GBI) had been involved.[501] The EC also found evidence of tacit coordination in the Spanish compressed yeast market.[502] ABF, GBI and Lesaffre were able to influence prices and supplies through their exclusive relations with distributors.[503] During a recent bout of price increases, Lesaffre, ABF and GBI had aligned their price increases.[504] Market shares had remained stable and there was virtually no new entry into the Spanish compressed yeast market, even though Lesaffre, ABF and GBI were earning higher profits.[505]

GBI stated in an internal memo: "*Our objective is to increase the yeast prices in such a way that we will be able to keep the EBIT at the present level or, if possible, higher. Due to the fact that for the bakers the costs for yeast amount to less than 3% of the cost price of bread and the fact that the mentioned cost increases are valid for the whole yeast industry, we assume – at least at this moment – that we will succeed in these price increases.*"[506]

[497] *ABF*, para. 196.
[498] *ABF*, para. 197.
[499] *ABF*, para. 197.
[500] *ABF*, para. 197.
[501] *ABF*, para. 137, with reference to French Competition Authority, Conseil de la Concurrence, decision dated 22 March 1989 and numbered 89-D-08; Turkish Competition Authority's Board Decision dated 23 September 2005 and numbered 05-60/896-241.
[502] *ABF*, para. 207.
[503] *ABF*, para. 207.
[504] *ABF*, para. 223.
[505] *ABF*, para. 223.
[506] *ABF*, para. 225, with further reference.

There were also extensive multi-market contacts, as ABF, GBI and Lesaffre were present in a significant number of geographic markets for the production and distribution of compressed yeast on a worldwide basis, in the production of liquid yeast and other bakery ingredients:[507]

> *"Generally, it is possible that market conditions or incentives facilitating coordinated conduct may be less strong within some of these individual geographic markets. For example, demand could grow rapidly on one particular geographic market and grow slowly on a neighbouring one. It is also possible that on one market, firms can observe or respond more quickly to cheating and thus punishment starts sooner. In these cases, there is a range of parameters, for which multi-market contact and tacit coordination is facilitated and induced on both markets, whereas in the absence of such contacts, tacit coordination would be comparatively more difficult to sustain on one market individually. In a similar way, tacit coordination in one market can make more effective or sustainable tacit coordination in an adjacent market served by the same players."*[508]

The EC believed that coordination in the Spanish market also facilitated coordination in the adjacent Portuguese market and vice versa.[509] If Lesaffre tried to extend its presence in Portugal, a way for the merged entity to retaliate might have been to compete more aggressively in the Spanish market for compressed yeast.[510] ABF was also a conglomerate merger because the parties were active in different geographic markets. The coordinated effects issues which arose from the parties' multi-market contacts will be discussed in more detail in Chapter 3.

Geographic exclusivity played a major role in the Spanish compressed yeast market. The general manager of GBI confirmed that "*geographic exclusivity, mainly based on provinces is the norm, although depending on the size of the province the allotted territory of the distributors may be based on parts of provinces*".[511] The territorial exclusivity is usually based on the historic presence of the distributors.[512] The distributors did not in fact compete against each other, as every one of them covered only a small territory. [513]

The EC discussed the extent to which the transaction increased the likelihood of coordinated anti-competitive effects. It discussed how the market not only exhibited characteristics that

[507] *ABF*, para. 203.
[508] *ABF*, para. 204.
[509] *ABF*, para. 205.
[510] *ABF*, para. 205.
[511] *ABF*, para. 214, 318.
[512] *ABF*, para. 214.
[513] *ABF*, para. 214.

favour coordination before the transaction took place, but how the situation *actually got worse* because of the transaction.

The break up and sale of GBI's assets into ABF increased the level of market transparency by reducing the number of players in the market.[514] The transaction further increased the similarities between Lesaffre and the merged entity. Prior to the transaction, GBI had been the only major competitor whose plant was located outside the Iberian Peninsula, and it was not present in the industrial clients segment. [515] ABF planned to move GBI's production to the Iberian peninsula (to Cordoba and Setúbei).[516]

The transaction also increased the symmetry of capacities. The EC noted that capacity constraints can have an ambiguous effect on the likelihood of coordination.[517] They will make it difficult for companies to raise output in response to a rival's deviation from the terms of coordination.[518] In this respect, capacity constraints reduce the likelihood of successful post-merger coordination.[519] However, not using excess capacity carries opportunity costs.[520] Producers forego profits if they do not run their machinery at full capacity. In markets with excess capacity, producers will therefore have an incentive to deviate from the terms of coordination and to engage in output competition.

Asymmetric capacity distribution tends to hinder successful coordination, as the incentive structures of the competitors vary.[521] Reaching and agreeing on the terms of coordination and avoiding deviation from them becomes more difficult as a result.

Finally, the merger rested on an IP sharing agreement between Lesaffre and ABF, the details of which are, unfortunately, not disclosed in the non-confidential version of the EC's Art. 8(2) decision.[522] GBI had, in the recent past, made some advances in the development of Tetrapak liquid yeast cartons for the use of artisan bakers.[523]

On the basis of the aforementioned factors, the EC decided that the proposed transaction would significantly impede effective competition in the Spanish and Portuguese markets for

[514] *ABF*, para. 277.
[515] *ABF*, para. 278.
[516] *ABF*, para. 295.
[517] *ABF*, para. 296.
[518] *ABF*, para. 296.
[519] *ABF*, para. 296.
[520] *ABF*, para. 296.
[521] ABF, para. 297. GBI was also the only firm in the Spanish compressed yeast market that did not also serve the Spanish liquid yeast market. The transaction was going to eliminate this asymmetry, too.
[522] *ABF*, para. 299.
[523] *ABF*, para. 299.

compressed yeast through the creation or strengthening of the likelihood of anti-competitive coordinated effects.[524]

In order to render the concentration compatible with the common market, ABF proposed either to sell the current GBI distribution business in Spain and Portugal to a suitable purchaser or to sell the distribution business in Spain and Portugal together with GBI's production facility in Setúbal.[525] The divestiture removed the overlap brought about by the transaction.[526] It ensured that three major producers of compressed yeast were left in the Spanish and Portuguese compressed yeast market post-merger.[527]

The purchaser of the divested business would have been a newcomer with a different incentive structure to the established market players.[528] This reduced the likelihood that the newcomer would find it profitable to align its behaviour to that of the existing competitors. The purchaser would have a market share of 40-50% and would be strong enough to successfully compete with the existing firms.[529] At the same time, the divestiture also prevented the existing competitors from becoming more similar in terms of capacity and plant location, and thereby prevented a greater likelihood of successful coordination between the existing competitors.[530]

The EC conducted an in-depth market investigation to find out whether the proposed commitments removed the competitive concerns.[531] This included the evaluation of statements of approx. thirty customers and competitors.[532] The result of the market investigation was positive overall, and the EC cleared the transaction conditional upon the described divestiture on the basis of Article 8(2) of the Merger Regulation.

Even though we do not have the advantage of being able to access the economics behind the decision (except for general statements about the various market shares and market characteristics), the decision is still informative because it shows what a detailed coordinated effects discussion looks like after *Airtours* and *Impala*. The EC entered into an extremely detailed analysis, with references to the guidelines and the relevance of concentration levels – to name just a few. The outcome was a highly detailed decision in which the EC took great care to assess all of the relevant market characteristics so as to provide a firm basis for its

[524] *ABF*, para. 304, 336.
[525] *ABF*, para. 376.
[526] *ABF*, para. 384.
[527] *ABF*, para. 386.
[528] *ABF*, para. 387.
[529] *ABF*, para. 389.
[530] *ABF*, para. 387.
[531] *ABF*, para. 383.
[532] *ABF*, para. 383.

argument. As has already been mentioned, the only drawback of the decision is its lack of reference to modelling and quantitative analysis.

1.5.2. Comments on ABF

The EC discussed the different factors which indicated that the compressed yeast markets in Spain and Portugal are prone to coordination in great detail. Many of these factors were present in *ABF*, which is why the market called for competition concerns.

However, as can be seen from the summary of the EC's reasoning laid out on the previous pages, the EC's analysis is actually only based on customer and competitor testimonies and internal documents from the merging parties. This may have been enough in a clear-cut case and ABF seems to have been quite a clear-cut three-to-two merger. It is not enough in more difficult merger control cases. *Amelio et al.* have stated that the EC used a "*common sense approach*".[533] It is doubtful whether common sense should replace sound economic testing in merger control decisions. It has already been mentioned that what is missing is an incorporation of the economic tests that have been conducted by the CCE and his team into the EC's decisions. As it is, the EC is still laying out its case on the basis of a description of the market characteristics as evidenced by different customer and competitor testimonies. This is not enough for a prediction of the likelihood of post-merger coordination. ABF was a relatively simple case because it was a merger to duopoly in a highly transparent market which exhibited other characteristics that are conducive to coordination.

The following section will deal with some other important merger decisions of the EC in recent years that have discussed coordinated effects. As will be seen, in all of them, the EC either decided that coordinated effects were unlikely to arise or else left the question as to whether the merger leads to a likelihood of coordinated effects undecided. The only decision since *Airtours* in which commitments were exacted based on coordinated effects was *ABF*. No other decision contains a detailed explanation of the economic tests behind the decision. The situation in the EU is, therefore, such that we can only get bits and pieces of information about the analysis undertaken by the EC because decisions are usually not based on coordinated effects, and even if they are based on them, the factors that contributed to the EC's final decision are not completely laid out in the decision.

The cases are grouped based upon the number of participants in the post-merger market. The reason for this is that this dissertation looks out for a pattern - i.e., a number of

[533] Amelio et al., *ABF/GBI Business,* supra, p. 96.

remaining competitors in the market beyond which the EC does not even attempt to argue coordinated effects, much less base its decision upon them.

1.6. Five-to-four mergers

1.6.1. Blackstone

In *Blackstone*, Celanese Corporation (***Celanese***) signed an agreement with Acetex Corporation (***Acetex***), through which Blackstone Crystal Holdings Capital Partners (***Blackstone***) and its affiliated funds - through Celanese - would indirectly acquire all of the issued and outstanding common shares of Acetex.[534]

Celanese produces chemical products, acetate products, technical polymers and food ingredients.[535] Acetex was active in the acetyls and plastic business.[536] Celanese and Acetex were both active in the production of acetic acids and vinyl acetate monomer (***VAM***). Acetic acids are clear colourless liquids used, *inter alia*, for textile printing, dyes, photographic chemicals, pesticides, pharmaceuticals, food preservatives, rubber and plastics.[537] VAM is a chemical building block used to manufacture a variety of polymers.[538] It is used in the production of plastics, films, lacquers, laminating adhesives, elastomers, inks, water-based emulsion paints and adhesives, to name just a few. Blackstone is a global investment and advisory firm. Blackstone controlled Celanese.[539]

The EC defined a separate product market for acetic acid. In this market, the transaction reduced the number of major competitors from five to four. The four main competitors were to control 55-65% of the market.[540] Celanese and Acetex were going to have a post-merger

---

[534] Case No COMP/M.3625, 13 July 2005, *Blackstone/Acetex*, OJ L 312, 29.11.2005, pp. 60-62, para. 8. Coordinated effects were also discussed in Case No COMP/M.4525, 19 September 2007, *Kronospan/Constantia*, OJ C 220, 12.9.2009, p. 18. *Kronospan* was a six-to-five merger. The EC briefly noted that there was a relatively high degree of product homogeneity and market transparency as well as some indications of ongoing coordination. However, it only go into any more detail on the likelihood of coordinated effects as merging parties had already at that point in time amended the transaction to alleviate the competition concerns of the EC. The EC noted that it did not have any concerns about coordinated effects under the present transaction. Paras 82-86.

[535] *Blackstone*, para. 6. For more information on Celanese, see www.celanese.com, last viewed: 22 April 2013.

[536] *Blackstone*, para. 7.

[537] Health Protection Agency, *Acetic Acid – General information*, available at: http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1287147437792, last viewed: 22 April 2013, p. 2.

[538] Vinyl Acetate Council, *What is Vinyl Acetate?* available at: http://www.vinylacetate.org, last viewed: 22 April 2013.

[539] See Blackstone, *The Firm*, available at: http://www.blackstone.com/the-firm/overview, last viewed: 22 April 2013; *Blackstone*, para. 5.

[540] In the public version of the EC's decisions, confidential information such as market shares are removed and replaced by ranges.

market share of 20-30%, similar to BP plc (***BP***), which held 20-30%. Daicel Corporation (***Daicel***) had 0-10%.[541]

The EC discussed both unilateral and coordinated post-merger effects. The focus here will be on the EC's coordinated effects analysis. It conducted a market investigation to find out about the potential for post-merger anti-competitive coordinated effects between the parties and BP. As in *ABF*, the market investigation, from what can be gleaned from the public version of the decision, seems to have been based on information received from customers and competitors.

The EC concentrated on coordination between the two major players in the market: the merging parties and BP. Daicel and Millennium had much smaller market shares and, as a result, different incentives. They were, therefore, unlikely to align their behaviour to that of the major market players.[542]

The EC went through the different factors laid out in the Guidelines. It found out that the level of integration of the merging parties and BP differed. BP had a 20-30% market share regarding acetic acid capacity and a much higher market share of the merchant market (25-35%).[543] The market share of the parties on capacity exceeded their share of the merchant market.[544] BP was also integrated upstream into the petrochemical business (raw materials used for acetic acids).[545] Celanese, on the other hand, was more heavily integrated downstream compared to BP and was active in the production of a wide range of products there, including emulsions, emulsion powders and cellulose acetates.[546]

BP and the other parties used different technologies and their plant sizes varied.[547] The EC believed that this indicated that the incentives of BP and the parties differed and that they would not be able to agree on the terms of coordination.[548]

The production capacity was also expected to grow.[549] BP, the parties and the other competitors, had planned to commission substantial new capacity in the near future.[550] Any new plants were likely to be large in comparison to the size of the market due to economies of scale, and had to be kept operating at as near to full capacity as possible so as to avoid

[541] For information on the main competitors of the parties, see http://www.bp.com and http://www.daicel.com/en, both webpages have last been viewed on 22 April 2013.
[542] *Blackstone*, para. 97.
[543] *Blackstone*, para. 98.
[544] *Blackstone*, para. 98.
[545] *Blackstone*, para. 98.
[546] *Blackstone*, para. 98.
[547] *Blackstone*, para. 99.
[548] *Blackstone*, para. 99.
[549] *Blackstone*, para. 99.
[550] *Blackstone*, para. 99.

idle costs.[551] Acetex was also a party in a project in Saudi Arabia that would realise a capacity equivalent to over 1-10% of the worldwide production and 10-20% of global merchant sales.[552]

The asymmetric firm structure of the competitors and the resulting divergence of costs and incentives, a lack of market stability due to substantial future capacity growth, the existence of overcapacities and the resulting likelihood of substantial output competition all, in the view of the EC, strongly indicated that the parties were not going to be able to agree on or stick to the terms of coordination.

The EC also found that market transparency in the market for acetic acids was relatively low due to the fact that contracts were generally determined through intensive negotiations between producers and customers.[553] The lack of market transparency indicated that the companies in that market would have a hard time monitoring whether their competitors were adhering to the terms of coordination, a task that is generally more difficult to accomplish if the companies in the market are likely to engage in output as well as in price competition.[554]

Swift and effective retaliation against deviations was unlikely as companies had to run their production plants at a constant rate.[555] It was, therefore, going to be difficult for them to increase their production capacity swiftly in response to output competition.

Finally, demand was relatively elastic. Customers indicated to the EC during its investigation that they tended to multi-source their supplies and were ready to switch should their suppliers decide to raise their prices.[556]

Based on these findings, the EC decided that there was no need to take measures to avoid post-merger anti-competitive coordinated effects in the market for acetic acid.[557] It reached the same conclusion regarding the market for acetic anhydride, in which the parties' activities also overlapped. Acetic anhydride is, as the name indicates, the anhydride of acetic acid.[558] Anhydrides are oxides that combine with water to form an acid (i.e., the waterless *alter ego* of the acid).[559]

---

[551] *Blackstone*, para. 99.
[552] *Blackstone*, para. 99.
[553] *Blackstone*, para. 100.
[554] *Blackstone*, para. 100.
[555] *Blackstone*, para. 101.
[556] *Blackstone*, para. 102.
[557] *Blackstone*, para. 103.
[558] Klaus Weissermehl/Hans-Jürgen Arpe, Industrial Organic Chemistry, 2008, p. 180.
[559] William McPherson, *An Elementary Study of Chemistry: Introductory College Course*, 1924, Ch. 12. The market shares of the major competitors were asymmetric in that market, too, the degree of vertical integration varied as did the production technologies and plant sizes resulting in different cost structures. There was low market transparency due to intense and confidential negotiations and timely and effective retaliation was unlikely (at least through output competition) as plants had to be run at a constant rate. Like in the market for acetic acid,

The EC cleared the merger without conditions on the basis of Article 8(1) of the Merger Regulation. *Blackstone* is one of the few decisions in which the question of whether coordinated effects were likely to arise post-merger was not left open. The EC was sufficiently convinced that the merger would not result in a risk of post-merger coordinated effects. As it did not expect anti-competitive unilateral effects either, the EC cleared the transaction.

What is interesting is that even though the EC discussed the likelihood of coordinated effects in the horizontally affected markets, it did not mention coordination once in its analysis of the vertically affected markets. The EC feels more comfortable applying foreclosure theories rather than coordinated effects theories in its assessment of vertically affected markets (see also Chapter 3).

1.6.2. Arjowiggins

In *Arjowiggins*, Arjowiggins SAS (***Arjowiggins***) was to acquire control of all of the assets of Reflex Premiumpapier GmbH in Düren, Germany (***Reflex***), and a 25% shareholding in the joint venture Zheijiang Minfeng Zanders Paper Company Ltd. in China (***ZMZ***) from M-real Zanders GmbH (***M-real***).[560]

Arjowiggins is one of the world's leading manufacturers of creative and technical paper, with operations in Europe, North and Latin America and Asia.[561] Reflex had a paper production plant in Düren, Germany.[562] Reflex's assets included several trademarks and intellectual property rights, including the exclusive licence to use the M-real Zander's "*Gohrsmühle*" trademark.[563]

The EC defined product markets for the production and distribution of reels (*rolls*) and sheets of carbonless paper. Carbonless paper is used to make duplicate copies without a carbon layer for invoicing forms, internal forms, transport documents, purchase orders and contracts.[564] The product market definition was ultimately left open, as the EC believed that

---

most customers tended to multi-source their supply of acetic anhydride and were prepared to switch suppliers in case of a 10% price increase. Market share asymmetry, different levels of integration, different technologies, lack of market transparency, tendency of customers to multi-source and increases in output capacity also made coordination on the market for VAM unlikely. On the basis of the information gathered during the market investigation, the EC reached the conclusion that there was no risk of post-merger coordination between BP and the parties. *Blackstone*, paras. 130-133, 118-119.

[560] Case No COMP/M.4513, 4 June 2008, *Arjowiggins/M-real Zanders Reflex*, OJ C 96, 25.4.2009, pp. 10-14, para. 1.

[561] See http://www.arjowiggins.com, last viewed. 22 April 2013; *Arjowiggins,* para. 10.

[562] *Arjowiggins,* para. 11.

[563] *Arjowiggins,* para. 11.

[564] *Arjowiggins,* para. 17.

the merger was not going to significantly impede effective competition under either product market definition.[565]

The geographic markets for reels and sheets of carbonless paper were held to be national rather than EEA-wide, as the parties had argued.[566] However, the EC left the geographic market definition open, too, and decided that the merger did not raise competition concerns under either market definition.[567]

The transaction reduced the number of major competitors in the market for carbon less paper from five to four. In a hypothetical market for carbonless reels in the EEA, the combined company Arjowiggins/Reflex would have had a market share of 40-50%, followed by Koehler Paper Group (***Koehler***) and Mitsubishi Paper Mills Ltd. (***Mitsubishi***), with 15-20% each, and Torraspapel, SA (***Torraspapel***) with 10-15%.[568] The HHI was predicted to increase by more than 600, to approx. 2,500-3,600.[569] There were a large number of smaller producers with negligible market shares of between 0-5%.[570]

In a hypothetical EEA-wide market for carbonless sheets, the combined entity would have had a 50-60% market share, followed by Koehler with only a 5-10% market share,[571] Mitsubishi with 20-30% and Torraspapel with a 10-15% market share.[572] As in the market for reels, there were a large number of small competitors with 0-5% market share.[573] The HHI in the market for sheets was to rise by 400 to more than 3,000.[574] The EC also analysed the market shares in different member states.[575]

In its market investigation, the EC collected statements from over one hundred customers on the proposed merger's competitive impact.[576] The EC also analysed Arjowiggin's internal documents, such as its business plan for the Reflex paper mill and several independent market reports provided by Arjowiggins and third parties.[577] Customers from Germany, the UK, France and Italy, which accounted for more than 55% of the total sales in the EEA, expressed concerns that the combined company was going to raise its prices.[578] Unfortunately, as in *ABF* and *Blackstone,* the EC's decision does not provide any details of the economic analysis that was subsequently undertaken by the CCE and his case team.

---

[565] *Arjowiggins,* para. 62.
[566] *Arjowiggins,* para. 95.
[567] *Arjowiggins,* para. 95.
[568] *Arjowiggins,* para. 227.
[569] *Arjowiggins,* para. 228.
[570] *Arjowiggins,* para. 227.
[571] *Arjowiggins,* para. 229.
[572] *Arjowiggins,* para. 229.
[573] *Arjowiggins,* para. 229.
[574] *Arjowiggins,* para. 230.
[575] *Arjowiggins,* paras 231-342.
[576] *Arjowiggins,* para. 365.
[577] *Arjowiggins,* para. 365.
[578] *Arjowiggins,* para. 366-367, 369.

The EC stressed that, whereas market shares might give little information about market power in dynamic markets or bidding markets, they did provide a strong indication of post-merger anti-competitive effects in less dynamic markets.[579] Supply relationships between paper manufacturers and merchants were very stable and switching was not frequent, even though large printers sometimes switched suppliers.[580]

The market was not marked by overcapacity. Demand had been steadily declining in past years at a rate of approx. 4.7% per year, and installed capacity had been declining with it.[581] The market data indicated that the competitors had coordinated the capacity reduction:

> *"The close alignment of capacity and demand is particularly remarkable given the prisoner's dilemma faced by competitors when deciding on capacity: While the closure costs [...] are borne by the individual firm, any benefits of the reduced capacity in terms of higher prices are enjoyed by all suppliers in proportion to their respective market share. Hence, the capacity reduction constitutes a public good [...]. Firms are thus tempted to delay any closure plans in the hope that a competitor moves first. The evolution of capacity and demand in the carbonless paper market shows no signs of such free riding attempts. The capacity reduction has taken place in a remarkably orderly fashion, tracking closely the demand trend."*[582]

There was also a history of proven cartelisation in the carbonless paper market between Arjowiggins Appleton Ltd., Bolloré SA, Carrs Paper Ltd., Distribuidora Vizcaína de Papeles SL, Mitsubishi HiTec Paper Bielefeld GmbH, Papelera Guipuzcoana de Zicuñaga SA, Papeteries Mougeot SA, Papierfabrik August Koehler AG, Sappi, Torraspapel SA, and M-Real Zanders GmbH.[583]

The market was relatively transparent. Suppliers were well aware of the prices obtained by one another other due to the use of price lists.[584]

The EC did not conclude as to whether coordinated effects were likely to arise post-merger, as Arjowiggins committed to divest Reflex's carbonless paper business and digital paper

---

[579] *Arjowiggins,* para. 381.
[580] *Arjowiggins,* paras. 381-384.
[581] *Arjowiggins,* paras. 389-391.
[582] *Arjowiggins,* paras. 392, 432.
[583] *Arjowiggins,* para. 23, footnote 11, with reference to Commission Decision 2004/337/EC of 20 December 2001, relating to a proceeding pursuant to Article 81 of the EC Treaty and Article 53 of the EEA Agreement, Case COMP/E-1/36.212 – *Carbonless Paper*, OJ L 115, 21 April 2004; General Court, Joined Cases T-109/02, T-118/02, T-122/02, T-125/02, T-126/02, T-128/02, T-129/02, T-132/02 and T-136/02, 26 April 2007, *Bolloré and Others v Commission of the European Communities*, ECR 2007, II-947.
[584] *Arjowiggins,* para. 433.

business in order to obtain clearance within a shorter timeframe.[585] The EC cleared the merger subject to these commitments.[586]

1.6.3. tele.ring

T-Mobile Austria GmbH (***T-Mobile***) planned to acquire all the shares in EHG Einkaufs- und Handels GmbH, the sole owner of the tele.ring Unternehmensgruppe (***tele.ring***), comprising Telekom Service GmbH, TRA 3 G Mobilfunk GmbH and EKOM 3G Mobilfunk GmbH.[587] T-Mobile and tele.ring both provided mobile and fixed telephone services in Austria.[588] The EC identified separate national markets for: (1) the provision of mobile telecommunications services to end customers, (2) call termination, and (3) international roaming.[589] The transaction reduced the number of competitors in these markets from five to four. After the consummation of the transaction, only Mobilkom, a subsidiary of Telekom Austria, T-Mobile, ONE (which later became Orange Austria Telecommunications GmbH, ***Orange***) and H3G were left in the market.[590]

The HHI was expected to increase from 2,500-3,000 to 3,000-3,500 based on data for 2004 and the first half of 2005. Post-merger market concentration levels were substantial and the HHI increased by 500-600 points.[591]

The EC analysed the likelihood of unilateral and coordinated anti-competitive effects. It concluded that there was a risk that the transaction would significantly impede effective competition in a substantial part of the common market.[592]

The unilateral effects analysis is roughly twenty pages long. The coordinated effects analysis only comprises three paragraphs.[593] The EC clearly did not want to enter a detailed coordinated effects discussion and chose to rely upon unilateral effects, even though the merged entity was only going to be the second largest firm in the market and clearly not dominant. *tele.ring* was the first so-called "*gap*" case under the new merger test.[594] The EC was able to challenge the transaction on the basis of the 2004 Merger Regulation which provides a legal basis to challenge mergers that do not result in the creation or strengthening

---

[585] *Arjowiggins,* paras. 434, 544, XI B., p. 170.
[586] *Arjowiggins,* para. 555.
[587] Case No COMP/M.3916, 26 April 2006, *T-Mobile Austria/Tele.ring*, OJ C 199, 25/08/2007, p. 3, para. 6. For more information on T-Mobile, see http://www.t-mobile.at, last viewed: 22 April 2013.
[588] *T-Mobile Austria*, para. 4.
[589] *T-Mobile Austria*, paras. 10-28.
[590] *T-Mobile Austria*, para. 29.
[591] *T-Mobile Austria*, para. 11.
[592] *T-Mobile Austria*, para. 125.
[593] *T-Mobile Austria*, paras. 127-129.
[594] Kühnert, *Widening the gap*, supra, p. 9.

of a dominant position based on unilateral anticompetitive effects, but would have had difficulties in doing so under the 1989 Merger Regulation.

After the transaction, Mobilkom had a 35-45% market share, T-Mobile 30-40%, ONE 15-25% and H3G less than 5%.[595] The transaction therefore involved the number two and number four in the market. It would have been a perfect setting for a more detailed coordinated effects discussion due to the limited number of competitors in the market and the relative homogeneity of the market shares of at least the two major market players. However, as later in *Hutchison*[596], the EC felt more comfortable in basing its analysis on unilateral effects.

The EC believed that tele.ring had acted as a maverick before the transaction.[597] The elimination of tele.ring therefore reduced the incentive of T-Mobile and Mobilkom to keep their prices competitive.[598] The EC's decision provides little detail on what the unilateral actions the merged firm would take. Explanations were limited to the lack of restraint on T-Mobile and Mobilkom's pricing behaviour following the elimination of tele.ring as a maverick.

In its discussion of coordinated effects, the EC focused on the fact that the transaction created two network operators of "*roughly equal size, Mobilkom and T-Mobile*" that together accounted for market shares of 60-80% of the Austrian mobile communications market.[599] The focus was therefore on coordination between Mobilkom and T-Mobile. The EC also again pointed out tele.ring's apparent role as a price-aggressive maverick in the market and that no other service provider was able to take up the maverick position.[600] However, the explanations end there. The EC did not reach a conclusion on the likelihood of post-merger anti-competitive coordinated effects due to the fact that it had already been shown that the concentration was likely to result in anti-competitive unilateral effects.[601]

T-Mobile had also argued that the merger was going to produce substantial efficiencies (e.g., cost reductions, improvements of infrastructure and service).[602] The EC considered these efficiencies in the context of its unilateral effects analysis. It is unclear whether they were also included in the EC's coordinated effects analysis. However, they did not alleviate the competition concerns.

[595] *T-Mobile Austria*, para. 32.
[596] Case No. COMP/M.6497, 12 December 2012, *Hutchison 3G Austria/Orange Austria*. The non-confidential version of the decision has not yet been published. In its Article 6(1)(c) decision to open an in-depth investigation , the EC expressed concerns also about post-merger coordinated effects. Coordinated effects, however, did not play a role in the EC's later statement of objections.
[597] See *T-Mobile Austria*, para. 72 and the preceding paragraphs.
[598] See *T-Mobile Austria*, para. 72 and the preceding paragraphs.
[599] See *T-Mobile Austria*, para. 128.
[600] See *T-Mobile Austria*, para. 128.
[601] See *T-Mobile Austria*, para. 129.
[602] *T-Mobile Austria*, para. 47.

T-Mobile agreed to divest tele.ring's two packages of UMTS-frequencies, one to H3G and another to a competitor with a smaller market share.[603] T-Mobile also committed to divesting a large number of mobile telephony sites located with tele.ring.[604] Conditional upon these commitments, the EC agreed to clear the transaction.

Kühnert has commented that the EC's "*reliance on non-coordinated effects sits oddly with its characterisation of tele.ring as a no-frills provider of cheap voice telephony, in contrast to T-Mobile's less aggressive pricing strategy*".[605] He also remarked that the EC's findings appeared to be more in line with a coordinated effects scenario which the EC relied on in its administrative procedure but which then ceased to be in the focus of the investigation.[606] Relying on unilateral effects enabled the EC to bypass the analysis whether the market in question presented all the characteristics required for a finding of coordinated effects.[607] The concern that the EC might use the new and broader unilateral effects analysis to bypass coordinated effects seems to be justified if the EC uses unilateral effects theories in cases which would be better suited for a coordinated effects analysis without laying out a really convincing story regarding the alleged unilateral effects. Whether this will be the case remains to be seen. It is still to early to tell whether coordinated effects will be replaced by unilateral effects analysis. However, there seems to be a tendency to replace coordinated effects analysis with unilateral effects analysis in oligopolistic markets in which the transaction only leaves a small number of competitors.

1.7. Four-to-three merger: Scheider Electric

Schneider Electric SA (***Schneider***) planned to acquire the control of the distribution business of Areva T&D SA (**Areva**) through a special purpose vehicle (***SPV***) by way of purchase of shares.[608] Schneider was active in the production and sale of products in energy management.[609] Areva was active in the provision of products, systems and services related to the transmission and distribution of electrical power.[610]

[603] Johannes Luebking, *T-Mobile Austria/tele.ring: Remedying the loss of a maverick*, Competition Policy Newsletter, No. 2, Summer 2006, pp. 46, 49, available at: http://ec.europa.eu/competition/publications/cpn/2006_2_46.pdf, last viewed: 22 April 2013.
[604] Luebking, *T-Mobile Austria/tele.ring*, supra, at 49.
[605] Kühnert, *Widening the gap*, supra, p. 10.
[606] Kühnert, *Widening the gap*, supra, p. 10.
[607] Kühnert, *Widening the gap*, supra, p. 10. Kühnert also lays out that undue reliance on unilateral effects to bypass a more-burdensome coordinated effects analysis risks annulment by the General Court as it could be argued that the EC did not take into account all the available information to assess the situation. The concern is based on the criteria laid out by the Court of Justice's *Tetra Laval* judgment, Case C-12/03 P, Commission of the *European Communities v Tetra Laval BV*, ECR 2005, I-987.
[608] Case No COMP/M.5755, 26 March 2010, *Schneider Electric/Areva T&D*, OJ C 158, 18.6.2010, p. 4, para. 1.
[609] *Schneider,* para. 2. For more information on Schneider, see http://www.schneider-electric.com, last viewed: 22 April 2013.
[610] *Schneider,* para. 3. For more information on Areva, see http://www.areva.com, last viewed: 22 April 2013.

The EC defined separate EEA-wide markets for medium voltage (***MV***) products and energy automation and information systems.[611] The transaction reduced the number of major players in the market from four to three.[612] On the market for MV products, the combined company was going to hold 20-30%, ABB Group 10-20%, Siemens AG 10-20% and Grupo Ormazabal 5-10% and other market players 40-50%.[613]

The EC discussed unilateral effects in approx. 40 paragraphs (eight pages). Coordinated effects were discussed in only six paragraphs (one page). The focus of the analysis was, again on unilateral effects while coordinated effects were only mentioned on the sidelines.

The EC concluded that coordinated effects were unlikely to arise.[614] The main reason why the EC was not worried about coordinated effects was that the transaction reduced the symmetry of the market shares of the three remaining competitors.[615] Furthermore, the markets in question were bidding markets with infrequent, large projects.[616] The level of market transparency was low, as winning bids remained confidential after the bidding process.[617]

Furthermore, there were several small competitive players that competed with the major players and accounted for 40-50% of the MV products.[618] Manufacturers from China, Korea and India were on the fringe and could expand into the EEA-market.[619] Customers exerted considerable buyer power.[620]

Market information was gathered and tested through interviews with competitors and customers who did not express concerns.[621] In the end, the EC was convinced that the transaction did not create competition concerns and cleared it unconditionally on the basis of Article 6(1)(b) of the Merger Regulation.[622]

---

[611] *Schneider,* paras. 10-32. Whether the markets could be further subdivided was left undecided.
[612] *Schneider,* para. 73.
[613] *Schneider,* para. 33.
[614] *Schneider,* para. 77.
[615] *Schneider,* para. 73.
[616] *Schneider,* para. 73.
[617] *Schneider,* para. 73.
[618] *Schneider,* para. 74.
[619] *Schneider,* para. 74.
[620] *Schneider,* para. 74.
[621] *Schneider,* para. 75.
[622] *Schneider,* para. 78.

1.8. Three-to-two mergers

1.8.1. Syniverse

Syniverse Technologies, Inc. (***Syniverse***) planned to acquire control of the wireless business of Billing Services Group, Ltd. (***BSG***) through a share purchase agreement.[623] Syniverse, a 100% subsidiary of Syniverse Holdings, Inc. is a global provider of technological services to wireless telecommunication companies.[624] BSG is a global provider of payment processing, data clearing, financial settlement and risk management solutions for fixed-line (wire-line), wireless and Wi-Fi communication service providers.[625]

The EC analysed the likelihood of unilateral and coordinated effects in the at least EEA-wide market for the provision of data clearing services for Global System for Mobile Communications (***GSM***) roaming and decided to initiate an in-depth investigation.[626] GSM is the worldwide standard for mobile communication, as defined by the GSM Association.[627] Roaming allows users of mobile devices to connect to wireless networks other than those of which they are subscribers using their mobile device.[628]

In the market for data and financial clearing services for GSM roaming, the transaction reduced the number of major competitors from three to two on an EEA- wide market, leaving only the market leader Mach S.à.r.l. and the merged party together with Emirates Data Clearing House (***EDCH***) and VeriSign, Inc (***VeriSign***). which were, however, too insignificant based on their market shares to count as major competitors.[629]

In the post-transaction market, Mach was going to have value-based worldwide market shares of 50-60%, Syniverse/BSG was going to have a market share of 30-40%, while EDCH and VeriSign were only going to account for 0-10% of the worldwide market.[630]

Under an EEA-wide market definition, the market share of Mach was going to be 55-65% and that of the merging parties 40-50%.[631] The market shares were relatively symmetrical. For this reason as well as the fact that the transaction only left two main competitors in the

---

[623] Case COMP/M. 4662, 4 December 2007, *Syniverse/BSG*, OJ C 101, 23.4.2008, pp. 25-29, para. 1.
[624] *Syniverse*, para. 3. For more information on Syniverse, see http://www.syniverse.com/home, last viewed: 22 April 2013.
[625] *Syniverse*, para. 4. For more information on BSG, see http://www.bsgclearing.com/, last viewed: 22 April 2013.
[626] *Syniverse*, paras. 2, 35, 45. The transaction did not have a Community dimension as the global turnover of the parties did not exceed € 2 500 million. However, the transaction was reviewable under the laws of five member states and the parties asked for referral of the review to the EC. None of the Member States disagreed to the referral and the case was therefore automatically referred to the EC. Para 7.
[627] *Syniverse*, footnote 6.
[628] *Syniverse*, footnote 7.
[629] See *Syniverse*, para. 45, 48.
[630] *Syniverse*, para. 46. The non-confidential version of the notification only provides ranges for the market shares.
[631] *Syniverse*, para. 104.

market, the EC investigated whether the transaction increased the likelihood of coordinated anti-competitive effects.[632]

For this, it first tested whether a collective dominant position existed in the market pre-merger.[633] This would have required coordination between the collectively dominant firms of which the EC did not find any evidence.[634] By contrast, there was evidence of frequent switching between different suppliers of data clearing services.[635] The EC also found that prices had been falling steadily even before Syniverse had entered the EEA-wide market. Therefore, Syniverse was unlikely to be the reason for the price decrease.[636] There was ongoing technological change and the market was therefore highly dynamic and not stable enough for sustained coordination.[637] Technological developments also increased the likelihood of potential entry from billing software providers.[638] The EC stated that tacit collusion was "*generally considered incompatible with the dynamic and unstable nature of the relevant market in question*".[639]

Contracts were allocated infrequently and in lumps by way of bidding processes. The EC believed that the remaining two main competitors would find it difficult to agree on the terms of coordination in such a bidding market with infrequent and lumpy contracts.[640] The bidding process was also not transparent enough to allow for the successful monitoring of whether a rival adhered to the terms of coordination. The EC came to the conclusion that bidders would not be able to detect deviation during the tender, as bidders' offers were kept secret.[641] For that reason, it was unlikely that the other main competitor would be able to successfully retaliate against the deviation.[642] The only possible retaliation would have been to bid aggressively for the next contract. [643] In a market with infrequent contracts, retaliation in the next round did not constitute a credible punishment that would deter the remaining rival from deviating. [644]

---

[632] *Syniverse*, para. 104. The EC, of course, also analysed the likelihood of unilateral anti-competitive effects and found that there was no reason to be concerned about unilateral effects.
[633] *Syniverse*, para. 105.
[634] *Syniverse*, para. 105.
[635] *Syniverse*, para. 105.
[636] *Syniverse*, para. 105.
[637] *Syniverse*, para. 105.
[638] *Syniverse*, para. 105.
[639] *Syniverse*, para. 105.
[640] *Syniverse*, para. 106.
[641] *Syniverse*, para. 107.
[642] *Syniverse*, para. 108.
[643] *Syniverse*, para. 108.
[644] *Syniverse*, para. 108.

Supernormal profits through collusion would also have attracted outside entry.[645] The EC found that several competitors, such as Comfone AG, EDCH and VeriSign. were able to enter the EEA-wide market within a short timeframe.[646]

Based on these factors, the EC decided that the transaction was unlikely to result in anti-competitive coordinated effects. Unilateral anti-competitive effects were also unlikely. Therefore, the EC unconditionally approved the transaction on the basis of Article 8(1) of the Merger Regulation.[647]

1.8.2.KLM

In *KLM,* KLM Royal Dutch Airlines NV (***KLM***), a company controlled by Air France-KLM Holding (***Air France-KLM***), planned to acquire control of the whole of Martinair Holland NV (***Martinair***) on the basis of a share purchase agreement.[648]

KLM is a full-service network carrier, with its hub at Amsterdam Schiphol.[649] KLM is primarily active in the transport of passengers and cargo.[650] Martinair is a point-to-point carrier whose base is also located at Amsterdam Schiphol.[651]

Coordination was again only mentioned on the sidelines. The major theory of harm was unilateral effects. The EC analysed the competitive impact of the transaction on different routes. Coordinated effects were mentioned in the context of whether the proposed transaction would enable KLM to increase prices for flights on the Amsterdam-Curacao (***AMS-CUR***) and Amsterdam-Aruba (***AMS-AUA***) routes.[652]

There were no direct flights from either Brussels or Dusseldorf, so that these two airports which the EC had otherwise considered to be within the radius within which leisure travellers were prepared to switch depending upon the ticket and transport price were not taken into account.[653]

The merging parties' combined market share on these routes was predicted to be between 80-90%. The transaction reduced the number of competitors on the routes AMS-CUR and

---

[645] *Syniverse*, para. 109.
[646] *Syniverse*, paras. 41-43.
[647] *Syniverse*, para. 113.
[648] Case COMP/M.5141, 17 December 2008, *KLM/Martinair*, OJ C 51, 04/03/2009, para. 1.
[649] *KLM*, para. 3. For more information about the company, see http://www.klm.com, last viewed: 22 April 2013.
[650] *KLM*, para. 3.
[651] *KLM*, para. 4. For more information about the company, see http://www.martinair.com, last viewed: 22 April 2013.
[652] *KLM*, para. 345.
[653] *KLM*, footnote 102.

AMS-AUA from three to two.[654] The only remaining competitor ArkeFly had a market share of 10-20%.[655] ArkeFly used most of its capacity captively for package holidays offered by TUI AG or other tour operators belonging to the same corporate group as ArkeFly.[656]

The EC decided that the transaction was unlikely to result in coordinated effects, primarily because the market shares of the remaining market participants were highly asymmetric (80-90% to 10-20%).[657] As a result, the incentives of the parties were likely to differ substantially. For ArkeFly, it would have made sense to compete aggressively in order to capture a larger part of the market.[658]

During the EC's market investigation, ArkeFly commented that it would be able and willing to accommodate extra demand within a short time period of a few months if the combined entity decided to raise prices.[659] This meant that any agreement on the terms of coordination would have been highly unstable. [660]

Demand for transportation on the routes AMS-CUR and AMS-AUA was unstable, as most of the customers were leisure travellers.[661] Therefore, monitoring whether competitors adhered to the terms of coordination would have been hindered by a lack of market transparency.[662] ArkeFly and the combined entity would have found it difficult to identify whether price changes were due to deviation or driven by demand.[663]

The transaction did not remove a major competitive force from the market. Martinair had been in a difficult financial situation and was due to renew its fleet in order to stay competitive.[664] The business models of KLM and Martinair were also very different. Martinair was primarily a tour operator airline whereas KLM only sold a small proportion of its total capacity to tour operators.[665]

Prior to the transaction, two of the three players on the AMS-CUR and AMS-AUA routes had already been related by way of a 50% shareholding.[666] With a view to the pre-merger shareholdings, the chances of successful coordination were only marginally increased by the

---

[654] *KLM*, para. 307.
[655] *KLM*, para. 307. For more information about ArkeFly, see http://www.arkefly.nl, last viewed: 22 April 2013.
[656] *KLM*, paras. 308, 312.
[657] *KLM*, para. 346.
[658] *KLM*, para. 346.
[659] *KLM*, para. 346.
[660] *KLM*, para. 346.
[661] *KLM*, para. 348.
[662] *KLM*, para. 348.
[663] *KLM*, para. 348.
[664] *KLM*, para. 349.
[665] *KLM*, para. 349.
[666] *KLM*, para. 347.

transaction.[667] The EC therefore decided that the transaction was unlikely to result in anticompetitive coordinated effects on the AMS-CUR and AMS-AUA routes.[668]

1.8.3. Antalis

The influence of price transparency on post-merger coordination played a role in *Antalis*.[669] Antalis International SAS (***Antalis***) was a wholly owned subsidiary of Sequana Capital (***Sequana***), active in the sale of communication support materials (e.g., packaging paper for printer and offices).[670] Sequana also owned Arjowiggins SAS, a company active in the upstream market for paper manufacturing.[671] MAP Merchant Group BV (***MAP***), a subsidiary of the Finnish M-real Corporation (***M-real***), was a Dutch company active in paper distribution, consumer packaging, publishing and commercial printing.[672] Antalis planned to acquire the hole of MAP through a share purchase agreement.[673]

The EC analysed the effects of the merger on different national markets for the production and distribution of fine paper. In the UK, only two major firms were to be left following the transaction: the merged company with a 30-40% market share and PPX with a 30-40% market share. Other competitors together were only going to account for 20% of the merchant market.[674] The market shares of the main competitors were, therefore, roughly comparable.

Some respondents to the EC's market analysis referred to the risk of the creation of a duopoly within the UK market. The EC conducted a coordinated effects analysis in which it focused on price transparency and the strength of the competitive fringe.[675] The notifying parties argued that pricing was not transparent in the UK due to the absence of price lists, that prices were negotiated on a one-to-one and even day-to-day basis, the existence of high rebates and a wide range of types of paper products.[676] In particular, the last point was

[667] *KLM*, para. 347.
[668] *KLM*, para. 350.
[669] Case No COMP/M.4753, 24 October 2007, *Antalis/MAP*, OJ C 289, 01/12/2007, p. 3. For the discussion, see also Svend Albæk/Peter Møllgaard/Per Baltzer Overgaard, *Transparency and Coordinated Effects in European Merger Control*, Journal of Competition Law & Economics, Vol. 6, No. 4, 2010, pp. 839-851. *Albæk et al.* also refer to the recent decision *Lemvigh-Müller/Brdr. A & O Johansen* of the Danish competition in which the effect of a large number of products on coordination was also discussed. The decision is available at Konkurrencestyrelsen, Lemvigh-Müllers Overtagelse af Brdr. A & O Johansen, 14 May 2008, http://www.kfst.dk/fileadmin/webmasterfiles/konkurrence/afgoerelser/2008/14.05.08/Raadsafgoerelse_14__maj_2008.pdf, last viewed: 31 January 2013.
[670] *Antalis,* para. 3.
[671] *Antalis,* para. 3.
[672] *Antalis,* para. 4.
[673] *Antalis,* para. 1.
[674] *Antalis,* para. 24.
[675] *Antalis,* para. 65.
[676] *Antalis,* para. 66.

interesting as it gave the EC a chance to state what effect a large product range and the ensuing complexity of coordination had on the likelihood of coordination.[677]

The EC's market investigation confirmed that prices were negotiated individually and on a regular basis. However, the EC was concerned that the remaining two major market players would nevertheless find a way to pass on pricing information. One way that this could happen was if prices offered by one competitor were disclosed by customers in negotiations with the other competitor, either directly or implicitly by rejecting an offer. UK merchants also had a habit of giving important customers a printed individualised price list which theoretically could have been passed on by the customer to the other competitor.[678]

The EC admitted that a wide variety of products and packaging could decrease the degree of market transparency, especially if the prices of these products varied independently from one another. However, the EC found the prices across products to be similar if one took the different quality of finish and weight into account.[679]

Nor did the EC find sufficient evidence of a strong competitive fringe that would have destabilised coordination. The merging parties had claimed that Original Equipment Manufacturers (***OEMs***),[680] Office Supply Dealers (***OSDs***)[681] and paper mills competed with fine paper merchants. However, an important proportion of the respondents insisted that they did not have a chance to provide the same level of service or the same range of products.[682] OSDs and OEMs also only accounted for 5-10% of the paper distribution market, which was not sufficient to exert significant competitive constraints on the major two fine paper producers and distributors in the UK.[683]

The EC was, therefore, concerned that the transaction was incompatible with the common market regarding the UK market for the distribution of fine paper.[684] Antalis entered into commitments to obtain Phase-I approval. The commitment consisted in the divestiture of Premier Paper Group Ltd. (***Premier***) and a commitment to enter into a logistic service contract with the purchaser through MAP UK's logistics arm, gm2.[685]

---

[677] See Albæk et al., *Transparency and Coordinated Effects in European Merger Control*, supra, p. 12.
[678] *Antalis,* para. 67.
[679] *Antalis,* para. 68.
[680] Such as Xerox or Canon which buy paper from mills and supply it under their own brand name alongside their branded printing equipment. See *Antalis,* footnote 5.
[681] The EC defined OSDs as companies which supply offices, schools or universities with a range of office products (e.g. paper, envelopes, furniture, computer supplies). Examples include Lyreco and Office Depot. See *Antalis,* footnote 6.
[682] *Antalis,* para. 72.
[683] *Antalis,* para. 73.
[684] *Antalis,* para. 77.
[685] *Antalis,* para. 85.

The EC's market test concluded that the divestiture of Premier was going to create a viable entity that would be able to exert competitive pressure on the two remaining competitors.[686] Therefore, the EC cleared the merger and rendered a non-opposition decision on the basis of Article 6(2) of the Merger Regulation.

The text of the EC's non-opposition decision suggests that the EC did not rely primarily on economic modelling to test the commitments. As in most of the other analysed EC merger, there is no way to tell whether economic modelling was used because the details of the economic analysis are not disclosed. However, it seems that the EC relied on a survey among market participants. Market participants often provide uninformed or biased answers in surveys. Yet, these surveys play a significant role in merger control, as in the test of the commitments in *Antalis*. We do not know what tests the EC conducted to verify whether the results of the surveys were reliable. This is unsatisfactory because it makes it difficult to check whether the data used by the EC was reliable. EC decisions often fall short of the amount of information that would be required to test the EC's analysis. They also often do not provide enough information to fully understand why the EC rendered a specific decision.

1.9. Coordinated effects – Where does the EU stand today?

EU-level coordinated effects analysis is sophisticated. The past two decades have brought the first recognition of the concept of "*collective dominance*" in *Nestlé* in 1992, the creation of a framework to test for "*collective dominance/coordinated effects*" in *Airtours* in 2002, along with the incorporation of the concept in the Merger Guidelines.

What is unfortunate is that the EC follows an approach to coordinated effects analysis which is - I will label it - "*static*". It tests whether the different factors that the EU Merger Guidelines predict will increase the likelihood of coordination are present. If a sufficient number of factors are present, the case will very likely enter Phase II (i.e., it will undergo an in-depth assessment). If the in-depth assessment confirms the preliminary finding that the market characteristics favour coordination, the EC will usually exact structural commitments that remove the overlap between the parties' activities.

This approach may work in clear-cut cases. The Guidelines enumerate factors that indicate that the market at hand is prone to coordination. "Ticking off" these factors will often get it right. However, this is by no means an in-depth economic analysis. Working through the factors mentioned in the Guidelines can only serve as the starting point of the analysis. The EC should engage in economic modelling to prove the likelihood of coordination.

[686] *Antalis,* paras. 91-92.

The method and result of the economic tests conducted by the EC should be fully included in the final decision. Of course, the figures would have to be erased in the public version. This would provide greater transparency for the companies and the antitrust community who, at the moment, only have limited insight into the dealings between the EC's case team and its economic staff.

This is all the more important because of the "*margin of discretion*" that the EC enjoys in its economic assessment. It is almost impossible for the notifying party to have the economic analysis of the EC questioned by the General Court. This has recently been confirmed by the General Court in *Ryanair*:

> "*In addition, the Court of Justice has held that the basic provisions of the regulation, in particular Article 2,* ***confer on the Commission a certain discretion, especially with respect to assessments of an economic nature****, and that, consequently, review by the Courts of the European Union of the exercise of that discretion, which is essential for defining the rules on concentrations,* ***must take account of the margin of discretion implicit in the provisions of an economic nature which form part of the rules on concentrations*** *[…].*"[687] (emphasis added by the author).

The Court added that the EC nevertheless had to show before the Court that the evidence it relied upon was:

> *"factually accurate, reliable and consistent but also whether that evidence contains all the information which must be taken into account in order to assess a complex situation and whether it is capable of substantiating the conclusions drawn from it […]."*[688]

European courts assess those parts of the EC's economic analysis that are open to assessment by non-economists (e.g., the accuracy of the facts on which the analysis was based and the consistency of the analysis). The notifying parties stand little chance, however, to challenge the details of the EC's economic assessment.

---

[687] General Court in T-342/07, *Ryanair*, para. 29.

[688] General Court in T-342/07, *Ryanair*, para. 30. See also the judgement of the Court of Justice in Cases C-12/03 P and C-13/03 P, *Commission of the European Communities v Tetra Laval BV*, 15 February 2005, OJ 2004 L 43, p. 13. The Court stated in its press release "*The fact that the Commission enjoys discretion in economic matters does not mean that the Community Courts must refrain from reviewing the Commission's interpretation of information of an economic nature, especially in the context of a prospective analysis*". Court of Justice, The Appeal Against the Judgment of the Court of First Instance Annulling the Decision of the European Commission Prohibiting the Merger of Tetra Laval and Sidel is Dismissed, Press Release No 11/05, 15 February 2005, available at: http://curia.europa.eu/jcms/upload/docs/application/pdf/2009-02/cp050011en.pdf, last viewed: 9 January 2013, p. 2; also cited in Röller, *Economic Analysis and Competition Policy Enforcement in Europe*, supra, p. 12.

As will be seen Chapter 3, US merger litigation makes extensive use of modelling. The courts comment on the methods used and economic experts provide further insights by publishing extensive articles on their participation in high-profile cases. As a result, the data on the assessment of coordinated effects by US courts is much more comprehensive than that on the EU analysis.

Before we turn to the horizontal coordinated effects analysis conducted by the US antitrust authorities and courts, I will lay out some of the findings that were gained from the comparison of the EC merger control decisions in the context of coordinated effects.

The number of major players definitely has an impact on the EC's coordinated effects analysis. The only two cases in which the EC raised concerns on the basis of coordinated effects (*ABF* and *Antalis*) were three-to-two mergers. Apart from these extreme situations, the EC tries to avoid intervention on the basis of coordinated effects.

On the other hand, the EC may also find that a three-to-two merger is unlikely to result in coordinated effects. An example is *Syniverse*. The only two remaining players in the market, Mach and Syniverse, had market shares of 50-60% and 30-40%, respectively. Frequent switching between suppliers, a highly dynamic market, a likelihood of potential entry, infrequent and lumpy contracts and a lack of market transparency all convinced the EC that coordinated effects were unlikely to arise post-merger. The EC was not concerned about unilateral effects either, and cleared the transaction on the basis of Article 8(1) of the Merger Regulation.

Market shares play an important role in the EC's coordinated effects analysis. In-depth reviews are usually limited to mergers in concentrated markets. Coordinated effects concerns typically arise where the strongest two or three competitors have high combined market shares of 55% or more[689] and the market conditions (e.g., market transparency, product and firm structure homogeneity) favour coordination. However, even if concentration levels are high, the EC will not necessary conclude that coordinated effects are likely.

The symmetry of the market shares also plays an important role. One of the main reasons why coordinated effects were not expected to arise in the three-to-two merger *KLM* was the asymmetry of the market shares of the competitors. What is not quite clear is why one would test for coordinated effects in a situation where the merging parties have an 80-90% market share and the remaining competitor ArkeFly has a 10-20% in the first place. The market shares were so far apart that coordinated effects were highly unlikely.

---

[689] The two major competitors Mobilkom and T-Mobile had market shares of 60-80% in tele.ring. In Syniverse, the two major competitors had 70-90% under a worldwide and 90-100% under an EEA-wide market definition. In ABF, the combined market share of the merged entity was 70-80% in Portugal.

Other asymmetries (e.g., regarding the level of integration, capacity and technologies) are also taken into account by the EC and are considered to reduce the likelihood of successful coordination (see the five-to-four merger *Blackstone*, which was cleared without conditions).

The elimination of a maverick or of a company that imposed competitive constraints on the market, the concept is not always well-delineated in EC decisions, is also an important factor in EC coordinated effects analysis.

Pre-merger tacit coordination and instances of cartelisation play a major role in the EC's analysis. The EC found evidence of pre-merger tacit capacity coordination and a history of proven cartelisation in the five-to-four merger *Arjowiggins* and the three-to-two merger *ABF*. Both transactions were only cleared after the parties committed to divestitures that removed the overlap between their activities.

Some degree of market transparency is a prerequisite for successful monitoring and, therefore, naturally plays a major role in the EC's analysis. A lack of market transparency was diagnosed as one of the factors hindering successful post-merger coordination in the three-to-two mergers *KLM* and *Blackstone.*

Bidding markets are generally less prone to successful coordination because auctions tend to be infrequent and – at least in markets in which the outcome of the bidding process is not disclosed – market transparency tends to be low. An example is the market for data clearing services in the three-to-two merger *Syniverse. Syniverse* was cleared without commitments.

The EC considers a whole range of factors in its tests whether post-merger coordinated effects are likely. It is committed to conducting a thorough analysis of the market in question and to assessing whether and how coordination will work in the affected market. Unfortunately, the analysis still seems to be overly static in that the EC goes through a broad list of topics in order to explain why the merger has the alleged effects. Thorough economic modelling may occur in the background, as the CCE and his team advise the EC's case team, but it is invisible from the outside.

2. US

This section discusses the major horizontal merger decisions in recent years in which coordinated effects have played a role. It should be mentioned that a problem in US merger

analysis is the lack of Supreme Court precedents.[690] The case law on merger control is mostly limited to decisions of the courts of appeal. This leaves some uncertainty regarding how the Supreme Court would decide coordinated effects cases today (e.g., the level of proof required for an injunction, etc.).

The FTC and the DoJ cannot enjoin mergers themselves. This is a major difference between the European merger control system and that of the US. The EC itself can intervene if it finds that a merger results in anti-competitive coordinated effects. The DoJ and the FTC have to ask for an injunction in court and have to argue their case there.

The depth of the analysis in US merger litigation is striking. The large-scale litigations include thousands of pages of briefs, the participation of a large number of witnesses, including at least one expert witness for each side. Expert witnesses tend to be well-known economists and some of them have worked at the antitrust division of the DoJ or at the FTC.

The role of expert witnesses seems to be equally large in coordinated and non-coordinated effects cases. A question that is frequently a subject of in-depth discussion among expert witnesses is that of market definition, which can affect the outcome of both the unilateral and coordinated effects analysis. Another topic that expert witnesses tend to provide testimony on is the ease of new entry into the market, which also has implications for both unilateral and coordinated effects. In addition, in the cases discussed in this section, expert witnesses have also testified on numerous coordinated effects issues, such as the likelihood that the remaining firms in the market can agree on the terms of coordination, the effects of product or firm homogeneity, as well as other market characteristics and their effects on the likelihood of successful post-merger coordination.

What also became apparent during the analysis was that the Merger Guidelines of the DoJ and the FTC are taken into account by US courts and administrative law judges. In every single decision that will be discussed in this section, the court made references to the principles laid down in the Guidelines. The DoJ and the FTC also used the Guidelines in merger litigation to argue their case. This indicates that the parties will have a hard time pursuing an argument that is not in line with the Guidelines.

Due to the role that scientific and other expert evidence plays in US litigations, there is a detailed literature on the principles that should guide the analysis of such evidence in court. A notable example is "*The Reference Manual for Scientific Evidence*", which was formulated to provide a tool to judges in managing cases involving complex scientific and technical

[690] On the lack of Supreme Court precedents, see also Herbert Hovenkamp, *The Antitrust Enterprise*, 2008, p. 208. Hovenkamp comments that the last merger control decision on the merits was rendered 30 years ago in US *v. General Dynamics Corp.*, 415 US 486 (1974).

evidence.[691] The Supreme Court instructed US trial judges to serve as "*gatekeepers*" in determining whether the opinion of a proffered expert is based on scientific reasoning and methodology.[692]

Expert testimony tends to be less decisive in litigation before the European General Court or the Court of Justice. The main reason for this is the fact that the EC has been accorded a margin of discretion for its economic analysis and that the possibilities to appeal a decision on the basis that the EC's economic analysis was flawed are therefore limited. This, in turn, results from the fact that the courts are only involved in EU merger control at the appeal stage, whereas in the US the injunction itself is the result of litigation. Expert testimonies during the EC's Phase II investigation, however, are not a satisfactory replacement, as the parties do not have access to the economic analysis of the EC. They can only ask for a meeting with the case-team and the EC's economic staff. Whether the EC's economic staff meets with the parties is up to the EC. The decision-making process at the EC does not, therefore, provide for a compulsory exchange of ideas between the economic experts of the notifying party, on the one hand, and the EC's economic experts on the other. The EC is also not forced to reveal its hand completely or to explain the details of its economic assessment. Instead, it can count on the pressure resulting from a statement of objections and the indication that it might issue a prohibition decision, which will often be sufficient to draw out commitments from the parties.

The following part of the dissertation goes through the most important of the recent merger control cases in the US in which coordinated effects have played a role. The cases have been grouped based on the number of competitors that were left after the merger. In both the US and the EU, the number of competitors left in the market after the closing of the transaction plays a fundamental role in the merger assessment.

Whereas the DoJ's and the FTC's injunctions against three-to-two mergers have generally been successful (in fact, the DoJ and the FTC have won every such merger challenge between 2007 and 2012), all challenges of six-to-five and five-to-four mergers have been

---

[691] See Committee on the Development of the Third Edition of the Reference Manual on Scientific Evidence; Federal Judicial Center; National Research Council, *The Reference Manual on Scientific Evidence*, 3rd ed., 2011, available at: http://www.nap.edu/catalog.php?record_id=13163#toc, last viewed: 23 February 2013, pp. ix, xv; Kaushal B. Majmudar, *Daubert v. Merrell Dow, A Flexible Approach to the Admissibility of Novel Scientific Evidence*, Vol. 7, No. 1, 1993, pp. 187-205.

[692] See Committee, *The Reference Manual on Scientific Evidence*, supra, pp. ix, 12. The trial judge's role as a "*gatekeeper*" was recognised by the Supreme Court in *Daubert v. Merrell Dow Pharmaceuticals*, 509 US 589 (1993) which serves as a landmark case on the admission of expert testimony. See also Federal Rules of Evidence 104(a) and 702. In *General Electric v. Joiner*, the Supreme Court stated that the trial judge may reject evidence if it concludes that there is too great an analytical gap between the data and the opinion proffered. See 522 US 136 (1997) and Committee, *The Reference Manual on Scientific Evidence*, supra, p. 15. An important decision was Kumho Tire Co. v. Carmichael in which the Supreme Court held that the Daubert gate keeping obligation extended to all expert testimony (and therefore also to economic testimony), see 526 US 137 (1999); Committee, *The Reference Manual on Scientific Evidence*, supra, p. 17.

unsuccessful. This indicates that the turning point at which injunctions against merger projects are likely to be successful in the US are four-to-three and three-to-two mergers.

At the same time, the number of remaining competitors and concentration levels are only one part of the story. The courts, the FTC and the DoJ take numerous other factors into account, such as entry barriers, past attempts at coordination, product and firm structure heterogeneity, market transparency and future market developments, to name just a few. Even so, the main factor that determines the likelihood of success in merger challenges based on coordinated effects theories is still clearly the number of major competitors in the post-merger market.

2.1. Six-to-five and five-to-four mergers

There have been three main challenges of six-to-five and five-to-four mergers during the analysed time period in which coordinated effects played a role: *Kraft, Arch Coal* and *Foster*. The DoJ and the FTC lost all three challenges. The courts relied on detailed expert testimony, and the fact-finding was extremely thorough, even though uncertainties regarding the effects of the transaction remained.

The following section describes the main aspects of the analysis of the DoJ, the FTC and the courts in *Kraft, Arch Coal* and *Foster.* It helps to understand why the DoJ's and the FTC's merger challenge was unsuccessful.

2.1.1. Kraft General Foods

Kraft General Foods, Inc. was a six-to-five merger. Kraft General Foods, Inc. (***Kraft***) had acquired RJR Nabisco Holdings Corp.'s (***Nabisco***) ready-to-eat (***RTE***) cereal assets.[693] Prior to the acquisition, the six major companies in the market had market shares of 37.03% (Kellogg Co.), 25.58% (General Mills, Inc.), 11.7% (Kraft), 6.8% (Quaker Oats Company), 4.6% (Ralston Foods) and 2.8% (Nabisco), respectively. 10.90% of the market was held by other, smaller companies.[694]

[693] *State of N.Y. v Kraft General Foods, Inc.*, 862 F. Supp. 1030 (S.D.N.Y. 1993), at 1030.
[694] *Kraft*, at 1032.

Kraft was the third largest market player, with only a third of the market share held by the market leader Kellogg Co. It planned to buy the number six in the market which had only 2.8% market share.[695]

The RTE cereal market is extremely important for American consumers, as cereals are a key component of American diets.[696] Professor Cotterill acted as the plaintiff's economic expert. He explained:

> *"Fifty-seven percent of children under the age of 12 eat it for breakfast. Children under the age of 18 consume 14 pounds of cereal per year and those over the age of 40 consume 9 pounds, accounting for the bulk of RTE cereal consumption. Families with children and older Americans face serious income constraints more often than other demographic groups. Consequently the price of breakfast cereal is a significant concern for social welfare and has attracted public interest in many ways over the past 25 years."*[697]

There had been concerns about past coordination in the US cereal market. Specifically, the FTC had been investigating whether the leading RTE cereal manufacturers had been exercising collective dominance for almost ten years. That claim was dismissed in 1981.[698]

When General Mills proposed to buy Nabisco's RTE cereal assets, the FTC indicated that the merger would raise antitrust concerns and the deal was abandoned. However, shortly afterwards, Kraft offered to buy Nabisco's RTE cereal assets. The FTC did not take any action against the acquisition. Instead, the State of New York moved to enjoin the acquisition.

The merger was attacked on the grounds that it increased the likelihood of anti-competitive coordinated and unilateral effects.

The District Court for the Southern District of New York Dr Alfred Kahn, Robert Julius Thorne Professor of Political Economy, Cornell University, as economic expert.[699] The expert for the

---

[695] Nabisco had originally planned to sell its cereal assets to General Mills (the second largest player in the market) but the plan was abandoned due to antitrust concerns raised by the FTC. *Kraft*, at 1032. However, the FTC was also concerned about the acquisition of the assets by Kraft. It requested additional information to which the parties to the concentration responded after the expiration of the waiting period. The parties then consummated the merger. The FTC thereafter moved for a preliminary injunction. *Kraft*, at 1032-1033.

[696] Ronald W. Cotterill, *Jawboning Cereal: The Campaign to Lower Cereal Prices, Food Marketing Policy Center, University of Connecticut,* No. 17, Oct. 1998, p. 5.

[697] Cotterill, *Jawboning Cereal*, supra, p. 5.

[698] Cotterill, *Jawboning Cereal,* supra, p. 6, with reference to Kellogg et. al., 99 FTC 8 (1982).

[699] Daniel L. Rubinfeld, *Market Definition with Differentiated Products: The Post/Nabisco Cereal Merger,* Antitrust L.J., Vol. 68, 2000, p. 165. Alfred Kahn is best known for his contribution to the deregulation of the American airline industry in the 1970s during his time at the helm of the Civil Aeronautics Board. He was also the author of "*The Economics of Regulation*". See The Economist, Alfred Kahn, 20 January 2011, available at: http://www.economist.com/node/17956457; last viewed: 23 April 2013. The adoption of a separate economic expert for the court was an unusual step and happened with the approval of the defendant and objection of the

State of New York was *Ronald W. Cotterill*, Professor for Agricultural and Resource Economics at the University of Connecticut.[700] The expert for Kraft was *Daniel L. Rubinfeld*, Bridges Professor of Law and Professor of Economics at the University of California, Berkeley, and later Assistant Attorney General for Antitrust Economics at the DoJ.[701]

The main concern was, of course, the reduction of the major competitors in the market from six to five and the corresponding increase of concentration levels.[702] The court quotes from a statement of Dr Kahn:

> *"As a general proposition, I, along, I believe, with a great majority of economists, subscribe to the proposition that the more highly concentrated a market, the greater the likelihood sellers will avoid direct and open everyday low price competition, whether through overt collusion or conscious parallelism or mere recognition of oligopolistic interdependence […]."*[703]

What should be stressed with a view to the discussed shortcomings of the EC's merger decisions, is the importance the econometric analysis played in *Kraft*. Professor Rubinfeld later called it a prime example of a fully litigated merger in which econometric methods played a substantial role. He then argued in favour of using econometrics in merger litigation.[704]

> *"The court was presented with both direct and indirect evidence of the responses of buyers to changing prices, and econometrics made much of it possible. […]"*

It makes sense in this context to provide a little more detail on the comments of Professor Rubinfeld regarding the econometric analysis and the use of modelling in merger analysis. He emphasised that the importance of empirical methodology in merger analysis had substantially increased in recent times:

---

plaintiff, Ilene Knable Gotts/Daniel E. Hemli, *Just the Facts: The Role of Customer and Economic Evidence in M&A Analysis,* Geo. Mason L. Rev., Vol. 13:6, 2006, p. 1234.

[700] *Cotterill* published numerous papers on the food industry and its economics, see for example Cotterill, Ronald/Haller, Lawrence E., *An Econometric Analysis of the Demand for RTE Cereal: Product Market Definition and Unilateral Market Power Effects*, Food Marketing Policy Center, Research Report No. 35, Sept. 1997; Cotterill, *Jawboning Cereal,* supra. See also Benaissa Chidmi/Rigoberto Lopez/ Ronald Cotterill, *Vertical Relationships in the Ready-to-Eat Breakfast Cereal Market: A Brand-Supermarket Level Analysis,* Selected paper presented at the American Agricultural Economics Association Annual Meetings Denver, 1-4 August 2004; Benaissa Chidmi/Rigoberto Lopez/ Ronald Cotterill, *A Supermarket-Level Analysis of Demand for Breakfast Cereals: A Random Coefficients Approach*, Selected Paper prepared for presentation at the American Agricultural Economics Association Meetings, Providence, Rhode Island, 24-27 July 2005; Benaissa Chidmi/Rigoberto Lopez/ Ronald Cotterill, *The Retail Services, The Market Power, and the Vertical Relationships in the Breakfast Cereals Industry,* Contributed Paper prepared for presentation at the International Association of Agricultural Economists Conference, Beijing, China, 16-22 August 2009; Robert Cotterill, *Antitrust Economic Analysis in Food Marketing Channels,* Presented at the 27th International Association of Agricultural Economists Conference, Beijing, China, 18 August 2009.

[701] Cotterill, *Jawboning Cereal,* supra, p. 8.

[702] *Kraft*, 962 at 364.

[703] *Kraft*, 962 at 364.

[704] Rubinfeld, *Market Definition with Differentiated Products*, supra, p. 165.

"[T]he rapid improvement in computing technology has made empirical methodologies feasible and economical. Accordingly, the enforcement agencies and economic and marketing experts in the private sector now make frequent use of supermarket scanner data available commercially from two firms, Nielsen and Information Resources, Inc. (IRI). Coincident with the improved technology has been the development of a number of empirical methods that have been utilized with some success by industrial organization economists.

On the demand side, judicial interest in using statistical methods also has been growing rapidly. Courts are finding, to a greater and greater degree that reliable statistical evidence can be invaluable in deciding questions of impact, harm, and damages in a range of cases, including antitrust. Accordingly, the Federal Judicial Center's Reference Manual on Scientific Evidence contains a chapter on statistics and a chapter on multiple regressions."[705]

However, *Rubinfeld* also gave some insight in the difficulties that were associated with using an econometric analysis:

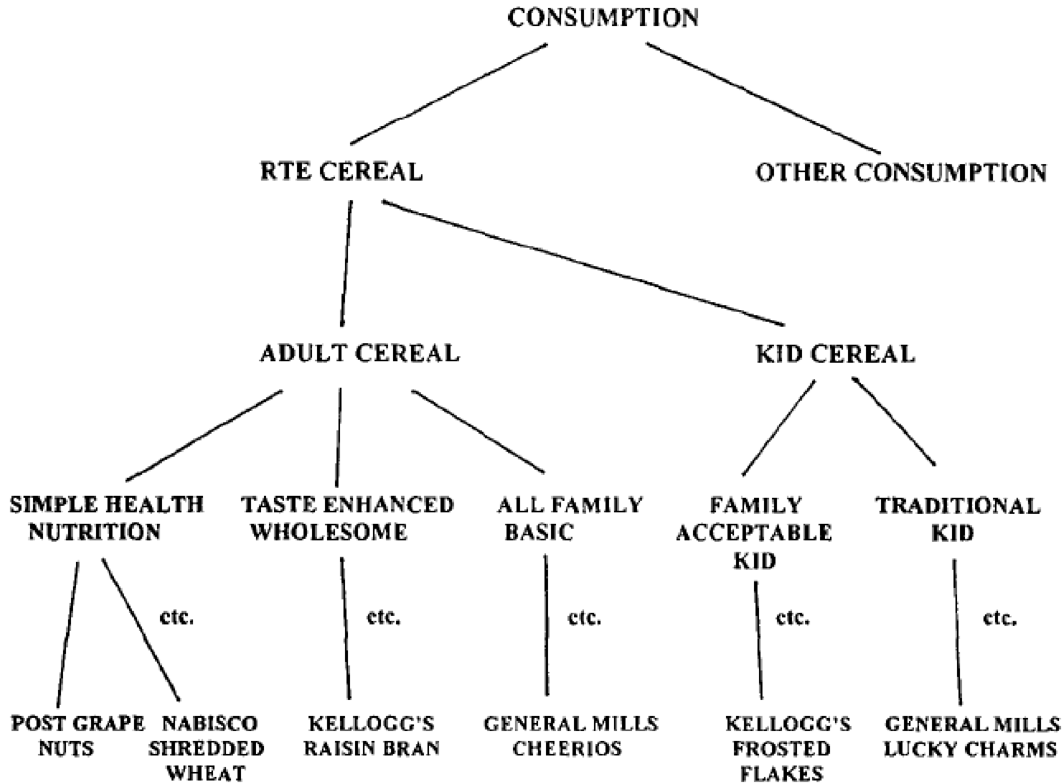
"For example, in the RTE cereal industry, with approximately 200 products, it would be necessary to estimate 40,000 (200x200) own- and cross-price elasticities in a constant elasticity demand-model. Without some strong assumptions, estimation would be impossible."[706]

To arrive at an analysis that was somehow managable in view of the limited time and resources available, the defendants' used a multi-stage decision-making model.[707] The roughly 200 RTE cereal brands were divided into the three segments "*adult*", "*all family*" and "*kid*" and the brands within each segment were aggregated until there were only eight products left per category.[708]

For these eight product categories, the demand elasticities were calculated. This led to a total of 64 demand elasticity calculations in each of the three segments and, therefore, a total of 192 within-segment calculations. In addition, cross-segment elasticities had to be calculated. On the basis of the three segments, a total of nine demand elasticity calculations had to be conducted, leading to a total number of demand elasticity calculations of 201.[709]

---

[705] Rubinfeld, *Market Definition with Differentiated Products*, supra, p. 163-164, with further reference.
[706] Rubinfeld, *Market Definition with Differentiated Products*, supra, p. 173.
[707] Rubinfeld, *Market Definition with Differentiated Products*, supra, p. 174.
[708] Rubinfeld, *Market Definition with Differentiated Products*, supra, p. 174.
[709] Rubinfeld, *Market Definition with Differentiated Products*, supra, p. 174.



The graphic has been taken from Daniel L. Rubinfeld, *Market Definition with Differentiated Products: The Post/Nabisco Cereal Merger*, 68 Antitrust L.J. 175, there Figure 1. A Four-Level “Tree Structure”.

The analysis of demand elasticity was primarily linked to the assessment of possible unilateral effects. However, it is a good and well-documented example of the workload associated with the use of economic modelling in merger litigation, which is why it has been included here. The problems associated with data overload apply just as well to empirical coordinated effects analysis.

The crux of the simplified model, like any simplified model, was that it increased the risk of error:

> *“It became clear during the course of Kraft that the decision to include a product or group of products in one segment rather than another can substantially affect the conclusion that one reaches concerning the definition of the relevant antitrust market.*
>
> *The intuition can be most easily seen with an example. A nesting that adopts Nabisco’s division of cereals into Kid, All Family, and Adult segments increases the likelihood that Kellogg’s Sugar Frosted Flakes and General Mills’ Cap’n Crunch (both Kid cereals) will be found to be relatively close substitutes for each other, but decreases the likelihood that Kellogg’s Sugar Frosted Flakes will be found to be highly substitutable with Kellogg’s Corn Flakes (an All Family cereal) or Post’s*

Shredded Wheat (an Adult cereal). Intuitively, this grouping of cereals is likely to make any two Kid cereals appear to be closer substitutes than they in fact are, because a restricted number of products within the Kid segment are competing to be close substitutes. Moreover, this grouping is likely to make a Kid cereal and a cereal in, say, the Adult segment appear to be less close substitutes than they in fact are because they are not competing directly."[710]

Arriving at the right market definition also posed problems. The plaintiff's economic expert used a three-stage decision-making model: (1) choice of cereal versus other consumer items; (2) choice of adult versus kids cereals; and (3) choice among individual adult cereal products based a low estimated price elasticity of demand for adult cereals.[711]

Competition as to non-price factors played a major role as it was clear that the market was highly concentrated and that there was no fierce price competition.[712] The court considered that there were more than 200 RTE cereals in the market which were largely heterogeneous. It found that product heterogeneity coupled with the multiple forms of competition within the market made it highly unlikely that the acquisition would result in anti-competitive coordinated effects:

> *"Collusive behavior is more likely to occur in industries with homogeneous products. […] Where products are heterogeneous, the products compete with one another with respect to their product characteristics, as well as on the basis of price and other forms of competition noted above. The combination of RTE cereals' heterogeneity and the multiple forms competition takes, renders anti-competitive coordinated effects difficult and unlikely."*[713]

The court also considered whether there had been prior price coordination in the market for RTE cereals.[714] It also discussed the effects of consumer promotion, advertising, new product introductions, frequent quality improvements, changes in the firms' marketing strategies, competition from private label cereals, the shelving decisions of retailers, the ability of RTE cereal manufacturers to deal punishments for deviation, industry profitability on the likelihood of coordination – it was an extremely intensive, in-depth analysis. [715]

It did not find any evidence of prior price coordination between RTE cereal manufacturers. Pricing actions were communicated by manufacturers through public announcements, and

---

[710] Rubinfeld, *Market Definition with Differentiated Products*, supra, p. 175.
[711] Rubinfeld, *Market Definition with Differentiated Products*, supra, p. 176.
[712] *Kraft*, 962 at 342. On this, see also Cotterill, *Jawboning cereals,* supra, p. 9-10.
[713] *Kraft*, 962 at 342.
[714] *Kraft*, 962 at 342.
[715] *Kraft*, 962 at 342.

retailers would tell the sales personnel in sales discussions about prices offered by the competition.[716] Kellogg and General Mills would generally move first to announce a price increase and the other manufacturers would often follow, but they did not do so "*all the time, or across the board*".[717] The court concluded that the parallel behaviour that it had found was normal profit-maximising behaviour.[718] Moreover, General Mills, the number two in the market with roughly 25% market share, had recently adopted a new pricing strategy that differed from that of its competitors:

> *"Although Kellogg and Post announced, in early 1994, price increases on more than half of their cereals, in April 1994 General Mills announced a 10-15% wholesale price rollback on about 40% of its volume sales."*[719]

The transaction was not going to eliminate a maverick firm. Nabisco had been far too small to act as a maverick.[720]

Frequent new product introductions, changes in firms' marketing strategies and competition from private label cereals would also have destabilised any coordination agreement in the industry.[721]

Monitoring was difficult due to frequent promotion activities (give-backs and couponing), as it was difficult to track the amounts expended on these activities.[722] Advertising generally played a major role, making RTE cereals "*one of the most intensely advertised products in the [US] economy*".[723] This hindered monitoring and also made it difficult for firms to agree on the terms of coordination. The defendant's economic expert stated:

---

[716] *Kraft*, 962 at 342.
[717] *Kraft*, 962 at 342, with further reference.
[718] *Kraft*, 962 at 342.
[719] *Kraft,* 962 at 343. This was attacked by Plaintiff's economic expert who argued that there was evidence of tacit coordination (between Post and Nabisco) which had led to increased cereal prices: *"Grape Nuts pricing tends to follow Nabisco Big Biscuit pricing up in a dramatic fashion and thereafter tends to follow variations in Big Biscuit prices. Prices for these two brands do seem to behave in a parallel fashion consistent with tacit collusion."* Following the acquisition the coordinated behaviour was going to be *"completely internalized and even more effectively harmonized"* leading to the *"permanent disappearance of competition"* between Post and Kraft. Professor Cotterill had prepared a 100 page report on non-competitive pricing strategies in the RTE cereal industry which investigated harvesting and tacitly collusive pricing which was supposed to be published but in fact never was because Phillip Morris threatened to sue. However, a similar report was submitted during the trial. The court decided that there was no evidence of coordination in the market. Ronals Cotterill/Andrew Franklin/Lawrence Haller, *Harvesting and Tacit Collusion in the Breakfast Cereal Industry: A Case Study of Nabisco Shredded Wheat and Post Grape Nuts,* Food Marketing Policy Issue Paper, No. 6, May 1996, pp. 2, 16, 26. See also Cotterill, *Jawboning Cereal,* supra, p. 11.
[720] *Kraft*, 962 at 342-343.
[721] *Kraft*, 962 at 346-348. However, it had also been argued that product proliferation in the RTE cereal industry produced barriers to entry and resulted in oligopolistic pricing, see Cotterill, *Jawboning Cereal,* supra, p. 6, with further reference. On product proliferation as a barrier to entry, see Giacomo Bonanno, *Location Choice, Product Proliferation and Entry Deterrence,* Review of Economic Studies, LIV, 1987, pp. 37-45.
[722] *Kraft*, 962 at 344-345.
[723] Cotterill, *Jawboning Cereal,* supra, p. 5.

> *"Based on my study of the RTE cereal market, it is clear that this is not a market in which collusion would be likely to be successful. In addition to price, colluding firms would have to agree on: (a) product improvements, (b) product introductions, (c) trade allowances, (d) advertising, and (e) couponing. In the light of the many dimensions of competition in the RTE cereal market, any cartel would be ineffective if it merely controlled published wholesale prices. In fact, any coordinated effort to elevate wholesale prices would be likely to stimulate competition on all other dimensions: differences in product attributes, product improvement, product introduction, trade allowances, advertising and couponing."*[724]

Forward and bulk buying also made monitoring more difficult. Traders bought large amounts of RTE at infrequent intervals and under varying conditions. Every retail division decided independently when they would pass on trade deal savings to customers and only then would the terms of the deal between the RTE cereal manufacturer and the retailer become apparent to other RTE cereal manufacturers.[725] All of this reduced the level of market transparency:

> *"RTE cereal manufacturers face serious impediments in attempting to monitor the behavior of their competitors. Both their ability to learn what other manufacturers are doing with respect to, e.g., coupon values or trade promotions, and their ability to respond, are impeded by considerable time lags. RTE cereal manufacturers are not aware of one another's' merchandizing plans until after they are announced or until information is obtained from a retailer. The time lag involved in any monitoring of competitive activity makes it impossible to use monitoring as a vehicle for collusion even if the parties so desired."*[726]

Nor did the court find evidence of successful punishment. A "*targeted response*" would have required "*a long lead time*" and would have been difficult to aim at the cheater as *"[p]rice cutting and couponing […] generally would affect* "*cheaters*" and "*non-cheaters*" alike".[727] Meeting out punishments for deviations from coordination was, therefore, unlikely to be timely or feasible.

On the basis of all of these factors, Judge Kimba Wood reached the conclusion that the defendants had managed to rebut the *prima facie* case which had been based on concentration levels. Despite high concentration levels and only five competitors in the

---

[724] Daniel L. Rubinfeld, ***Avidavit filed in State of New York v. Kraft General Foods et al.***, 93 Civ. 0811 (S.D.N.Y.). The excerpt has been taken from Cotterill et al., *Harvesting and Tacit Collusion,* supra, p. 7.
[725] *Kraft*, 962 at 344-345.
[726] *Kraft*, 962 at 349.
[727] *Kraft*, 962 at 349.

market post-merger, the court believed that successful post-merger coordination was unlikely.[728]

Kraft shows that defendants can overcome the structural presumption in six-to-five merger cases if they can argue that the market's post-merger situation will not be conducive to coordination. Economic experts have a wide playing field here because, essentially, all market characteristics can be discussed.

Kraft also shows the role econometrics can play to overcome the structural presumption (and the workload this entails when it is to be undertaken correctly to reduce the rate of error to the minimum possible).[729]

This decision had political repercussions. The key points from the plaintiff's expert report were included in a memo and sent to Congressman Samuel Gejdenson, who used it – together with Senator Charles E. Schumer, a ranking Democrat on the House Judiciary Committee with oversight authority over antitrust enforcement – for a jawboning strategy, blaming RTE cereal manufacturers for charging excessive prices at the expense of the American public.[730] As a result of the jawboning, consumption of brand label cereals went down by 145 million boxes per year and cereal manufacturers started to reduce their prices.[731] The plaintiffs therefore achieved what they had not been able to get in the courtroom through politics instead.

2.1.2. Arch Coal

In *Arch Coal*[732] - and as in *Kraft* - five firms were expected to compete in the post-merger market. In May 2003, Arch Coal, Inc. (***Arch Coal***) and New Vulcan Coal Holdings (***New Vulcan***) had entered into a merger and purchase agreement based on which Arch Coal was going to acquire New Vulcan's subsidiary Triton Coal Company LLC (***Triton***) and its two Southern Powder River Basin (***SPRB***)[733] mines, North Rochelle and Buckskin.[734] Arch Coal itself operated two SPRB mines, Black Thunder and Coal Creek, and also had mining operations throughout the US.[735]

---

[728] The State of New York did not appeal the verdict. Rubinfeld, supra, at 163.
[729] Rubinfeld, *Market Definition with Differentiated Products*, supra, p. 182.
[730] Cotterill, *Jawboning Cereal,* supra, p. 11-12.
[731] Cotterill, *Jawboning Cereal,* supra, p. 13.
[732] *FTC v Arch Coal, Inc.*, 329 F.Supp.2d 109 (D.D.C. 2004).
[733] The Powder River Basin is a large coal-bearing geological formation in Montana and Wyoming. *Arch Coal*, at 117.
[734] *Arch Coal*, at 110.
[735] *Arch Coal*, at 110.

In August 2003, the FTC asked the notifying parties to provide additional information on the transaction.[736] To alleviate competition concerns, Arch Coal informed the FTC that it intended to divest the Buckskin mine to the competitor Peter Kiewit Sons, Inc. (***Kiewit***), a large company active beyond SPRB. Arch Coal and Kiewit entered into an asset purchase agreement in January 2004.[737]

Nevertheless, the FTC voted, after a nine-month review, to enjoin the transaction because it violated Section 7 of the Clayton Act, and sought a preliminary injunction at the District Court for the Disctrict of Columbia until completion of the administrative proceedings.[738]

The trial lasted for two weeks, during which the court "*heard from more than twenty witnesses and received hundreds of exhibits, many of them lengthy including deposition and affidavit testimony of several additional witnesses. The parties have submitted well over 700 pages and post-hearing proposed findings of fact and briefs. The Court has reviewed that substantial body of evidence and argument […].*"[739]

The defendant's economic experts were Margaret E. Guerin-Calvert, who at that time had been Principal at Economists Incorporated and Assistant Chief of the Economic Regulatory Section at the Antitrust Division of the DoJ (to name just a few positions)[740], Paul Lang (Arch Coal's General Operations Manager) and Dennis Kostic (President and CEO of Weir International Mining Consultants).[741]

Five large mining companies were active in the SPRB: Arch Coal, Triton, Kennecott Energy Co. (***Kennecott***) with the Antelope, Jacobs Ranch and Cordero-Rojo mines, Peabody Holding Co. (***Peabody***) with the north Antelope/Rochelle, Caballo and Rawhide mines, and RAG American (***RAG***), which only operated the Tier 2 and 3 mines Belle Ayr and Eagle Butte but was nevertheless a significant producer.[742] There were two small mining entities, Western Fuels and Wyodak which, however, did not generally compete with the big five for business in the area and were not considered to be feasible alternatives to the other five producers.[743]

---

[736] *Arch Coal*, at 110.
[737] *Arch Coal*, at 110.
[738] *Arch Coal*, at 110. The States Missouri, Arkansas, Kansas, Illinois, Iowa, and Texas also filed a parallel suit seeking preliminary and permanent injunctive relief. The actions were consolidated with the FTC's action into one case.
[739] *Arch Coal*, at 110.
[740] 'See the biography of Margaret E. Guerin-Calvert on Compass Lexecon where Mrs. Guerin-Calvert is now a Senior Consultant, available at: http://www.compasslexecon.com/professionals/pages/bio.aspx?BioID=116, last viewed: 23 April 2013.
[741] Respondents' Joint Expert Witness List in the Matter of Arch Coal, Inc., available at: http://www.ftc.gov/os/adjpro/d9316/040614respjointexpertwitlist.pdf; last viewed: 23 April 2013.
[742] *Arch Coal*, at 118.
[743] *Arch Coal*, at 118.

The transaction would have reduced the main players in the mining of coal in the SPRB from five to four if it had not been for Arch Coal's commitment to sell the Buckskin mine to Kiewit. On the basis of that commitment, the merger did not reduce the number of major competitors in the market, which remained at five. Arch Coal and Kiewit had, at that point in time, already entered into the asset and purchase agreement. The transaction therefore merely changed the firms' market shares.[744] The market for coal mining in SPRB was highly concentrated, but the HHI was only going to increase slightly, by 49 points, to a total of 224 points.[745] Post-merger, Arch Coal remained the number three among the five mining companies in the SPRB.[746] Based on these considerations, there was only a weak structural presumption and the *prima facie* case for the FTC was weak.[747]

The court considered whether there was a likelihood of post-merger coordinated effects based on output coordination.[748] In this, Arch Coal differed from previous litigations in which coordinated effects had been alleged on the basis of price coordination.[749]

There was no evidence of past coordination in the market. Coal had a wide range of heat levels (8,800 to 8,400 Btu) and was, therefore, not completely homogeneous, the quality differed, depending on the sulphur and ash content, as did the price, the pricing was not transparent and monitoring and punishing deviations was difficult.[750]

The FTC tried to show that the merger nevertheless "*increase[d] the gains from coordination; place[d] most of the excess capacity in the hands of firms most likely to restrict production; eliminate[d] a significant independent competitor (Triton); substantially weaken[ed] the post-merger competitive fringe (RAG and Kiewit); and generally enhance[d] Arch's ability to lead the industry toward an anti-competitive outcome*".[751]

The mining companies in the SPRB had indeed shown interest in price or production discipline, as was evidenced by some comments of the CEOs of the major mining companies. Irl Engelhardt, Chairman and CEO of Peabody, had remarked during a speech before the Western Coal Transportation Association attended by SPRB coal producers and customers that *"[i]f coal producers would use growth in returns as their performance metric, we believe more discipline would be applied to investments that would otherwise lead to*

---

[744] *Arch Coal*, at 124.
[745] *Arch Coal*, at 124-125. As *Andrew Dick* noted, a 49 point increase on the HHI-scale was well below the level at which mergers were usually challenged. theantitrustsource, *Coordinated Effects Analysis*, supra, p. 4.
[746] *Arch Coal*, at 124.
[747] theantitrustsource, *Coordinated Effects Analysis*, supra, at 4.
[748] *Arch Coal*, at 131.
[749] *Arch Coal*, at 131.
[750] *Arch Coal*, at 132.
[751] *Arch Coal*, at 132.

oversupply situations". [752] He provided an account of the measures Peabody planned to adopt to address the oversupply situation:

> "*Peabody is focusing on profitability and high return investments in the Powder River Basin. Here are some recent steps that they have taken:*
>
> - *In early 1999, Peabody suspended the 10-million-ton-per-year Rawhide Mine, one of the most productive mines in the United States;*
> - *Also in 1999, the company delayed a 30-million-ton-per-year capacity expansion at North Antelope/Rochelle until margins generate the proper returns; and*
> - *In April 2000, it idled a truck/shovel fleet at Caballo, producing 8 million tons per year, until market conditions improve.*"[753]

A similar statement had been made only a month later by Steven Leer, Chairman and CEO of Arch Coal, when he addressed the Western Coal Council's 2000 Spring Coal Forum in front of SPRB coal producers and customers:

> *"If you produce it, they will buy it.*
> *Outcome: Prices have suffered.*
> *Solution: Produce less coal."*[754]

However, the court stated that the *willingness to collude* was not sufficient to show that the transaction was likely to result in coordinated anti-competitive effects. According to the court, the FTC had failed to show *how* output coordination could be achieved and had merely provided evidence that SPRB coal miners *wanted* to coordinate their output.[755]

There were actually several factors that pointed towards a likelihood of post-merger coordination. Demand for SPRB-coal was relatively inelastic, making modest price increases profitable, there were substantial entry barriers, transactions were small and frequent (the typical transaction size was less than 1%) and market transparency was not so low after all because information on competitors was available from numerous sources, trade reports and conferences, industry analysts, consultants reports, Form 423 monthly reports to the Federal Energy Regulatory Commission (***FERC***), public announcements, bidding processes and merger negotiations.[756]

---

[752] *Arch Coal*, at 137.
[753] *Arch Coal*, at 137.
[754] *Arch Coal*, at 137. Arch Coal also publicly announced production cuts in 2002. However, there was no evidence that the other competitors had followed suit. *Arch Coal*, at 140.
[755] Jola Sterbentz in theantitrustsource, *Coordinated Effects Analysis*, supra, p. 1.
[756] *Arch Coal*, at 138.

However, the information that was available in the marketplace was "*limited, largely unreliable and untimely*".[757] Demand for SPRB-coal was largely unpredictable, as the two largest demand drivers, the weather and the economy, were themselves unpredictable and also because of the existence of long-term variable contracts.[758] There was a lack of reliable information regarding the supply side and bidding processes, which remained confidential even after there had been a successful bidder.[759]

The plaintiff's economic expert apparently also failed to explain how deviation from the terms of coordination would be punished in the SPRB coal market. The court found that the confidential bidding and contracting process gave producers incentives to submit aggressive bids which would only be detected with a time-lag.[760]

The court gave little weight to the customer evidence presented by the FTC. Customers had expressed concerns that the transaction would lead to increased coordination. The court stated that customers were lay people and, therefore, not well-placed to offer opinions regarding the competitive effects of the transaction on competition:[761]

> *"[W]hile the Court does not doubt the sincerity of the anxiety expressed by SPRB customers, the substance of the concern articulated by the customers is little more than a truism of economics: A decrease in the number of suppliers may lead to a decrease in the level of competition in the market. Customers do not, of course, have the expertise to state what will happen in the SPRB market, and none have attempted to do so. The Court therefore concludes that the concern of some customers in the SPRB market that the transaction will lessen competition is not a persuasive indication that coordination among SPRB producers is more likely to occur."*[762]

This provides some insight into the role of customer evidence in US federal merger litigation. Its value for the FTC and the DoJ will be limited with regards to economic questions, such as whether the transaction increases the likelihood of post-merger anti-competitive coordinated effects.[763] This requires a degree of economic expertise and insight into future developments

[757] *Arch Coal*, at 141.
[758] *Arch Coal*, at 142-143.
[759] *Arch Coal*, at 143-144.
[760] *Arch Coal*, at 145.
[761] Michael Salinger in theantitrustsource, *Coordinated Effects Analysis*, supra, p. 10. Salinger criticised that the court had considered customer testimony that bids were "*competitive*" contending that such customer testimony should have been treated the same way as testimonies expressing concern that the transaction would lead to coordination as lay-people were ill-placed to make either statement.
[762] *Arch Coal*, at 145-146.
[763] Gots et al., *Just the facts*, supra, p. 1226, with a deeper analysis of the role of customer evidence in merger litigation.

in the affected industry that customers are not likely to have.[764] Therefore, their testimony will be of limited value.

There was also no evidence that the transaction eliminated a maverick. Triton had not acted as a maverick prior to the acquisition. Its North Rochelle mine was actually one of the mines in SPRB with the highest costs.[765] Triton had been debt-ridden and had to obtain sufficient returns to meet bank commitments as they came due. [766] It used a "*last mine standing*" strategy, not seeking to increase its market share but simply to cover its costs and make a profit.[767] The testimonies of utility customer witnesses showed that Triton often came "*dead last*" in terms of competitiveness in the bids in which it participated.[768] The defendants even claimed that the acquisition ought to profit from the failing-firm defence. The court rejected the failing-firm defence, but reasoned that Triton's weakness and Kiewit's comparable strength reduced the likelihood of coordination:[769]

> *"The evidence also suggests that Kiewit, as owner and operator of the Buckskin mine, will be a stronger competitive force in a post-merger market than Triton has been or will be if no merger occurs. Although defendants cannot avail themselves of a failing firm defense to defeat the FTC's antitrust challenge, Triton's weak competitive status remains relevant to an examination of whether substantial anticompetitive effects are likely from the transaction."*[770]

The court also found evidence of competitive pressure from the fringe producers Kiewit and RAG. Kiewit had agreed to buy the Buckskin mine and was confident that the investment would pay off.[771] It planned to upgrade Buckskin's output, plant and equipment. Kiewit believed that this was going to significantly improve Buckskin's profitability and facilitate future expansion.[772]

The competitor RAG also had viable plans to expand its output from 44 to 60 million tons per year in the near future, under the condition that a new mine plan was approved by the Wyoming Department of Environmental Quality, which RAG did not believe would cause a problem.[773]

---

[764] Gots et al., *Just the facts*, supra, p. 1226.
[765] *Arch Coal*, at 147.
[766] *Arch Coal*, at 147.
[767] *Arch Coal*, at 147.
[768] *Arch Coal*, at 147.
[769] *Arch Coal*, at 157.
[770] *Arch Coal*, at 157.
[771] *Arch Coal*, at 148.
[772] *Arch Coal*, at 148. Kiewit's models showed that the increasing the production of the buckskin mine was "*very, very attractive*" financially.
[773] *Arch Coal*, at 148-149.

There was evidence of (albeit limited) efficiencies through cost savings resulting from the combination of the adjacent Black Thunder and North Rochelle mines.[774] The parties claimed that the merger was going to produce $107.4 million in merger-specific savings, but the Court decided that the claims were overstated and only partly merger-specific.[775]

The bulk of the evidence therefore spoke against the likelihood of post-merger coordination. Accordingly, the Court reached the conclusion that the defendants had successfully rebutted the FTC's *prima facie* case and that the latter had not met its burden of showing the likelihood of success.[776] It therefore denied the FTC's request for the preliminary injunction.[777]

This does not stop the FTC from proceeding with an administrative trial.[778] In most cases, however, the FTC will either appeal the judgment or close the investigation, including the administrative litigation. In this case, the FTC voted 4-1 not to pursue the administrative litigation against Arch Coal.[779]

As in *Kraft,* there was much debate about whether the case had been correctly decided. *Andrew Dick*, Vice-president of Charles River Associates, Inc., suggested that Arch Coal had shown that it was no longer sufficient for an antitrust agency to rely on the "*Stigler-Posner*" checklist[780] as a basis for the merger challenge, as the checklist did not explain how to weigh conflicting evidence.[781]

Michael Salinger, Professor of Economics at Boston University and special consultant to NERA, also provided his opinion regarding the decision. He called the judgment a "*close call*".[782] In his view, the court would have been justified to decide that coordinated anti-competitive effects were likely post-merger. He believed that the court had, perhaps wrongly,

---

[774] *Arch Coal*, at 153. Even though the court found most of the claimed efficiencies had been overstated.
[775] *Arch Coal,* at 153.
[776] *Arch Coal*, at 159.
[777] *Arch Coal*, at 147.
[778] Katherine A. Ambrogi, *The Elephant in the Courtroom: Litigating the Premerger Fix in Arch Coal and Beyond,* 47 Wm. & Mary L. Rev. 1781, 1788 (2006), available at: http://scholarship.law.wm.edu/wmlr/vol47/iss5/6, last viewed: 23 April 2013 with a discussion of the implications of the assessment of the court of the proposed divestiture.
[779] Statement of the Commission *In the Matter of Arch Coal, Inc. et al.,* available at: http://www.ftc.gov/os/adjpro/d9316/050613commstatement.pdf, last viewed: 23 April 2013. See also the Dissenting Statement of Commissioner Pamela Jones Harbour, *id.*, available at: http://www.ftc.gov/os/adjpro/d9316/050613harbourstatement.pdf, last viewed: 23 April 2013. Commissioner Harbour criticised that the court had not adequately considered the past attempts of the industry to reduce output and testimonies of customers on which the latter expressed concern about the effects of the transaction.
[780] This refers to the factors Stigler and Posner had laid out that increased the likelihood of post-merger coordination, such as "*small number of competitors, barriers to entry, product homogeneity, inelastic demand, close geographic proximity, and substantial competitor information*". Andrew Dick in theantitrustsource, *Coordinated Effects Analysis*, supra, p. 4.
[781] Andrew Dick, theantitrustsource, *Coordinated Effects Analysis*, supra, p. 5.
[782] Michael Salinger, theantitrustsource, *Coordinated Effects Analysis*, supra, p. 8.

concluded that the elimination of Triton as a competitive force in the market did not increase the likelihood of coordination because Triton had been a bidder of last resort:[783]

> *"I question the Court's inference from its analysis of Triton's bidding behaviour. […] If the low cost suppliers could get the supplier of last resort to submit higher bids, the price would go up. That theory, it seems to me, would be a better way of articulating the concern that the suppliers expressed about having this merger go through.*
>
> *I do think there is some risk that this merger will turn out to be anti-competitive. Whether the court should have blocked the merger really turns on its relative tolerance for false acquittals and false convictions. It was, in my judgment, a close call."*[784]

The decision, therefore, also shows that even intensive fact finding and the use of expert witnesses and studies will not remove the doubt that remains at the end of the litigation as to whether the decision of the court was correct. Whereas both Kraft and Arch Coal indicate the sophistication of the merger analysis that has been undertaken in the US during the past five years, it also indicates that this has not reduced the element of doubt associated with large-scale merger decisions.

2.1.3. Foster

In *FTC v Paul L. Foster et al.* (***Foster***), Western Refining, Inc. (***Western***), a whole-owned subsidiary of Western and Giant Industries, Inc. (***Giant***), entered into an agreement and plan of merger by which Western agreed to acquire all of the voting securities of Giant.[785] Western was an independent oil refiner and marketer with headquarters in El Paso, Texas, mostly operating in the south-western and western US.[786] Giant was an independent refiner and marketer of petroleum products with refineries in Yorktown, Virginia, and in the Four Corners region of New Mexico.[787]

---

[783] Michael Salinger, theantitrustsource, *Coordinated Effects Analysis*, supra, at 8.
[784] Michael Salinger, theantitrustsource, *Coordinated Effects Analysis*, supra, at 8.
[785] Memorandum Opinion and Order, *Federal Trade Commission v. Paul L. Foster et al.*, Case 1:07-cv-00352-JB-ACT (D.N.M. 2007), p. 2.
[786] See the website of Western, www.wnr.com/About.aspx, last viewed: 23 April 2013.
[787] Foster, Memorandum Opinion and Order, p. 2.

The acquisition reduced the number of main bulk supply firms in the light petroleum products market from five to four in the market for bulk supplies of light petroleum products in northern New Mexico, and from six to five in the market for bulk supplies of gasoline.[788]

The FTC was concerned that the acquisition would result in unilateral and coordinated anti-competitive effects and filed complaints both before a federal district court and an FTC administrative law judge.[789] The district court granted a temporary restraining order, while emphasising that it had not been given the time required to weigh the evidence and that there were conflicting indications regarding the effects of the transaction on competition.[790]

The FTC believed that Giant had been acting as a maverick in the market for the bulk supply of light petroleum products.[791] Giant had substantial excess capacities, while the market for the bulk supply of light petroleum products was marked by capacity constraints:

> *"[I]n a market where capacity constraints are significant for many competitors a firm is more likely to be a maverick, the greater its excess or divertible capacity in relation to its sales or its total capacity, and the lower are its direct and opportunity costs of expanding sales in the relevant market."*[792]

What is striking about the case is the failure of the FTC to provide an explanation, apart from the elimination of the maverick, as to why the transaction would result in a likelihood of coordinated effects. It merely argued that timely and sufficient entry was unlikely.[793] The FTC did not attempt to show that there had been prior collusion and provided little other detail.

The court thus decided that the FTC had not shown why the acquisition was likely to result in coordinated effects. The elimination of a firm with excess capacity and the presence of entry barriers by itself was not sufficient proof of the likelihood of future coordination or of irreparable harm should the transaction be allowed to go through.[794]

---

[788] Foster, Plaintiff's Memorandum of Points and Authorities in Support of Motions for Temporary Restraining Order and Preliminary Injunction, available at: http://www.ftc.gov/os/caselist/0610259/070417ccmemoptsandauth.pdf; last viewed: 23 April 2013, pp. 13, 20.

[789] FTC Press Release, *FTC Ends Administrative Litigation in Western Refining Case,* 3 October 2007, available at: http://www.ftc.gov/opa/2007/10/western.shtm, last viewed: 23 April 2013.

[790] Foster, Memorandum Opinion and Order, pp. 5, 8.

[791] Foster, Plaintiff's Memorandum, p. 18.

[792] Foster, Plaintiff's Memorandum, p. 18, with further reference.

[793] Foster, Plaintiff's Memorandum, pp. 19-21.

[794] FTC Press Release, supra.

The FTC filed a motion for an injunction pending appeal in the US Court of Appeals for the 10th Circuit, which was also denied.[795] The FTC's Commissioners then decided to discontinue the administrative litigation and abandoned the administrative complaint.[796]

2.1.4. Conclusion on six-to-five and five-to-four mergers

In order to prevail in six-to-five and five-to-four merger litigations, the DoJ and the FTC have to provide strong economic arguments beyond the structural presumption. The number of competitors in the post-merger market and concentration levels as measured by market shares and the HHI are sufficient to establish a *prima facie* case. However, defendants will be successful in rebutting the *prima facie* case, as they have been in all three big merger litigations in which five or four competitors were still active in the post-merger market, if they can show that the market characteristics do not favour coordination.

These cases are, therefore, the perfect "*battleground*" for economists. Essentially, any economic argument that serves the cause can be brought forward in these merger cases. The elimination of a maverick carries special weight, as does evidence of past coordination. But many other factors, essentially the whole "checklist", is relevant for the assessment.

It is therefore no surprise that plaintiffs and defendants engage in in-depth economic analysis, econometric modelling and intensive economic discussions in six-to-five and five-to-four mergers. Generally, the weaker the structural presumption, the more room there is for economic arguments other than concentration levels. The FTC and the DoJ relied too much on concentration levels and therefore were unsuccessful in their merger challenges. The analysis of the US materials shows that, where five or four competitors are left in the market, the FTC and the DoJ need to explain in detail why they think that the remaining five or four competitors will be able to coordinate their behaviour.

2.2. Four-to-three mergers

All three mergers that will be discussed in this section have been decided under the Obama Administration. They are examples of the tougher antitrust enforcement of this new administration. Only one (*AT&T*) was a large-scale litigation merger. In *Dean Foods* and *Grifols*, the DoJ (*Dean Foods*) and the FTC (*Grifols*) exacted commitments before they cleared the merger.

---

[795] FTC Press Release, supra.
[796] FTC Press Release, supra.

2.2.1. AT&T

H&R Block reassured the DoJ that it was able to win merger challenges in court.[797] *AT&T* further proved that point. That the DoJ challenged the acquisition also indicated tougher merger enforcement under the Obama administration also in the area of coordinated effects.[798] The case was handled by Joseph Wayland, deputy head of the Antitrust Division of the DoJ.[799]

On 20 March 2011, AT&T, Inc. (***AT&T***) and Deutsche Telekom AG (***DT***) entered into a stock purchase agreement to acquire DT's subsidiary T-Mobile US, Inc (***T-Mobile***). AT&T has approx. 98.6 million connections to mobile wireless services.[800] T-Mobile has approx. 33.6 million connections.[801] Both serve customers throughout the US and have networks that reach the homes of 90% of the US population.[802] In total, there are only four competitors with nationwide coverage and the competitive attributes associated with nationwide scale and presence: AT&T, DT, Cellco Partnership d/b/a Verizon Wireless (***Verizon***) and Sprint Nextel Corp. (***Sprint***). These four have a combined market share of approx. 90%.[803] The other providers are significantly smaller than the main four, with none of their networks covering as much as one-third of the US population and the largest of them servicing only one-third of the connections of T-Mobile.[804] The acquisition therefore reduced the main players in the market from four to three.

The DoJ and the Federal Communications Commission (***FCC***), which assessed the merger in parallel, were concerned about coordinated and unilateral anti-competitive effects.[805] As

---

[797] US *and Plaintiff States v. AT&T, Inc. et al.*, available at: http://www.justice.gov/atr/cases/index.html#page-1&page=page-1, last viewed: 24 March 2013. Which it had not been able to do between 2004 and 2011. Toni Schoenberg/Sara Forden, *H&R Block Antitrust Loss is Win for US Ahead of AT&T Trial,* Bloomberg, 15 November 2011, available at: http://www.businessweek.com/news/2011-11-16/h-r-block-antitrust-loss-is-win-for-u-s-ahead-of-at-t-trial.html, last viewed: 23 April 2013. See also James A. Keyte, *United States v. H&R Block: The DoJ Invokes Brown Shoe to Shed the Oracle Albatross*, Antitrust, Vol. 26, No. 2, Spring 2012, available at: http://www.americanbar.org/content/dam/aba/publications/antitrust_magazine/spring_2012_keyte.authcheckdam.pdf, last viewed: 23 April 2013, p. 32.

[798] Daniel A. Crane, Has the Obama Justice Department Reinvigorated Antitrust Enforcement?, 65 Stan. L. Rev. Online 13, 18 July 2012, available at: http://www.stanfordlawreview.org/sites/default/files/online/articles/65_Stan._L._Rev._Online_13.pdf, last viewed: 14 January 2013, p. 13.

[799] Schoenberg et al., *H&R Block Antitrust Loss is Win for US Ahead of AT&T Trial*, supra.

[800] AT&T, Second Amended Complaint of the DoJ in the US District Court for the District of Columbia, US et al. v. AT&T et al., 1:11-cv-01560-ESH, available at: http://www.justice.gov/atr/cases/f275700/275756.pdf, last viewed: 23 April 2013, p. 3.

[801] AT&T, Second Amended Complaint,, supra, p. 3.

[802] AT&T, Second Amended Complaint,, supra, p. 3.

[803] AT&T, Second Amended Complaint,, supra, pp. 3-4.

[804] AT&T, Second Amended Complaint,, supra, p. 4: "*The smaller competitors also lacked nationwide data network, nationally recognised brands, significant nationwide spectrum holdings and timely access to popular handsets*."

[805] For the FCC's statement see FCC, *Staff analysis and findings*, available at: http://publicknowledge.org/fcc-staff-analysis-and-findings-re-attt-mobile, last viewed: 23 April 2013. The analysis of the FCC is not congruent with the analysis of the DoJ as the FCC has to take a larger number of factors into account and has to assess whether the "*public interest, convenience and necessity will be served*" by the transaction. However, a transaction

the remaining three competitors charged similar prices, coordination was likely to arise in the form of price coordination.[806]

The DoJ defined the relevant market as the provision of mobile wireless telecommunication services to enterprises and government customers in the US. It argued that the substantial increase in the level of concentration and the reduction of the number of nationwide providers from four to three would enhance the risk of anti-competitive coordination.[807] The transaction would have raised the HHI by nearly 700 points, to more than 3,100 points for mobile wireless telecommunication services, and by at least 300 points to at least 3,400 points for mobile wireless telecommunications services provided to enterprises and government customers.[808]

Apart from the rise in concentration levels and the reduction of the main competitors, the DoJ was primarily concerned about the elimination of T-Mobile as a competitive force. T-Mobile had decided to grow its market share via a "*challenger strategy*" and had adopted new, aggressive and innovative pricing plans, and provided low-priced smartphones and superior customer services, all of which would have required competitive responses from its competitors.[809] Documents produced by AT&T and T-Mobile established that a significant portion of customers switched to T-Mobile and vice versa, indicating that there was head-to-head competition between AT&T and T-Mobile which the transaction would eliminate.[810]

T-Mobile had also played a considerable innovative role in the market, having been the first to offer an Android phone, Blackberry e-mail and the Sidekick.[811] The DoJ also successfully argued that T-Mobile's presence in the market had driven investments in technology that led to better service quality.[812]

The DoJ also showed that prices were very transparent due to the use of national prices and service plan offerings by most providers, and the small size of individual retail transactions as well as the common use of contracts by post-paid customers.[813] This facilitated reaching an agreement on the terms of coordination and also monitoring whether the other competitors adhered to the terms of coordination.[814]

---

that violates competition law will also be deemed not to be serving the public interest. See FCC, *Staff analysis and findings*, supra, pp. 2-3.

[806] FCC, *Staff analysis and findings*, supra, p. 41.
[807] AT&T, Second Amended Complaint, supra, p. 17.
[808] AT&T, Second Amended Complaint,, supra, p. 13-14.
[809] AT&T, Second Amended Complaint,, supra, p. 18.
[810] AT&T, Second Amended Complaint,, supra, p. 18.
[811] AT&T, Second Amended Complaint,, supra, p. 19.
[812] AT&T, Second Amended Complaint,, supra, p. 19.
[813] AT&T, Second Amended Complaint,, supra, p. 19.
[814] AT&T, Second Amended Complaint, supra, p. 19.

Based on these factors, the DoJ was able to make a very convincing argument in court. It did not only rely on the structural presumption but went far beyond that to show that the particular market characteristics were in favour of post-merger coordination.

However, *AT&T* has to be treated with care. The case may have been affected by the fact that the law firm working for AT&T accidentally posted a partially-redacted document on the FCC's website that was taken to indicate that the main reason for the transaction was to eliminate T-Mobile as a competitor, as well as widespread public pressure that the deal should be stopped.[815]

AT&T therefore shows that the DoJ stands a better chance with a merger challenge in court if the merger only leaves three competitors, but that defendants also stand a good chance of winning. It certainly indicates that the DoJ stands a better chance of winning in court if it engages in a detailed argumentation as to why the specific market characteristics are in favour of post-merger anti-competitive coordination. What will not be sufficient in these cases is for the DoJ (or the FTC) to rely on the structural presumption.[816]

2.2.2. Dean Foods

On 1 April 2009, Dean Foods Company (***Dean***) acquired the De Pere and Waukesha plants, along with related assets, from Foremost Farms USA (***Foremost***).[817] The monetary value of the transaction fell well below the Hart-Scott/Rodino Act threshold.[818] The merger did not, therefore, have to be notified. The DoJ nevertheless chose to intervene.[819]

Dean is one of the largest food and beverage producers in the US. Foremost is a dairy cooperative (a member-owned business association).[820]

The DoJ defined a separate market for the production and distribution of fluid milk in Wisconsin, North-eastern Illinois and the Upper Peninsula of Michigan.[821] The market was

[815] Karl Bode, *Leaked AT&T Letter Demolishes Case for T-Mobile Merger,* Broadband DSL Reports, available at: http://www.dslreports.com/shownews/Leaked-ATT-Letter-Demolishes-Case-For-TMobile-Merger-115652, last viewed: 23 April 2013.

[816] Another four-to-three merger that will not be discussed in greater detail because it does not add any new insights was *US v Alcan Inc.*, 1:03CV02012-GK (D.D.C. 2005). Following the acquisition, the merged party and one of the two remaining competitors would have had a combined market share of more than 80%. The DoJ was also concerned that the transaction would eliminate Alcan's incentive to act as a maverick. The court ordered the divestiture of Acan's or Pechiney's Brazing Sheet Business. For more information on the case, see the webpage of the DoJ under www.justice.gov/atr/cases/alcan0.htm, last viewed: 23 April 2013.

[817] US *v. Dean Foods Company*, Competitive Impact Statement, Civil Action No. 2:10-cv-00059 (JPS) (E.D. Wisc. 2011), available at: http://www.justice.gov/atr/cases/f269000/269057.htm, last viewed: 11 January 2013, I, II.A.

[818] David A. Balto, *Reinvigorating Antitrust Enforcement – The Obama Administration's Progressive Direction on Competition Law and Policy in Challenging Economic Times*, Center for American Progress, July 2011, available at: http://www.americanprogress.org/wp-content/uploads/issues/2011/07/pdf/antitrust_enforcement.pdf, last viewed: 15 January 2013, p. 11.

[819] Balto, *Reinvigorating Antitrust Enforcement*, supra, p. 11.

[820] Dean Foods, Competitive Impact Statement, supra, II.A.

highly concentrated. Dean itself had a more than 57% market share. There were only two other competitors with a more than 5% market share: Kemps LLC (a subsidiary of Hood LLC) with 17% and Prairie Farms Dairy, Inc. with approx. 15%.[822]

The demand elasticity of retailers, distributors and other customers was low due to low consumer demand elasticity.[823]

The DoJ, along with the Attorney Generals of Wisconsin, Illinois and Michigan, was concerned about unilateral effects (the loss of head-to-head competition between Foremost and Dean) and anti-competitive coordinated effects.[824] Foremost had been a significant disruptive and aggressive competitive force in the market with substantial excess capacity.[825] The acquisition reduced the number of major competitors from four to three and in some areas of the geographic market, only two competitors were left. The DoJ believed that Dean and its competitors were going to stop bidding aggressively, instead allocating customers based on existing supplier-customer relationships.[826]

Timely and sufficient entry (e.g., from neighbouring geographic markets) was unlikely to occur. The DoJ also did not expect competitors to expand their sales of fluid milk sufficiently to disrupt potential competition.[827]

To alleviate the competition concerns, the DoJ required that Dean divest the Waukesha plant within 90 days after the filing of the proposed Final Judgment, or five days after the entry of the Final Judgment by the District Court for the Eastern District of Wisconsin, whichever was later.[828] The Waukesha plant had the larger capacity of the two plants to produce and process milk, and was located closer to major population centres, such as Chicago, Green Bay and Milwaukee.[829] It also had significant excess capacity.[830]

---

[821] Dean Foods, Competitive Impact Statement, supra, II.B.1.
[822] Dean Foods, Competitive Impact Statement, supra, II.B.1c.
[823] Dean Foods, Competitive Impact Statement, supra, II.B.1a.
[824] See Rick Barretts/Erin Richards, *Despite dairy closing, Milwaukee-area milk deliveries continue*, Journal Sentinel online, 7 January 2013, available at: http://www.jsonline.com/news/wisconsin/despite-dairy-closing-milwaukeearea-milk-deliveries-continue-ua89cmi-185874921.html, last viewed: 11 January 2013. The DoJ was also concerned about anti-competitive unilateral effects in the markets for school milk in the school district in Wisconsin and the Upper Peninsula of Michigan. In these markets the acquisition constituted a merger to monopoly and, in some areas, to duopoly. The DoJ based its analysis on unilateral effects (for the mergers to duopoly on the removal of head-to-head competition between Dean and Foremost). Dean Foods, Competitive Impact Statement, supra, II.B.2.
[825] Dean Foods, Competitive Impact Statement, supra, II.B.1c.
[826] Dean Foods, Competitive Impact Statement, supra, II.B.1c.
[827] Dean Foods, Competitive Impact Statement, supra, II.B.1d.
[828] Dean Foods, Competitive Impact Statement, supra, III.A. See also Dean Foods, Final Judgment, Civil Action No. 2:10-cv-00059 (JPS) (E.D. Wisc. 2011), available at: http://www.justice.gov/atr/cases/f273400/273469.pdf, last viewed: 11 January 2013.
[829] Dean Foods, Competitive Impact Statement, supra, III.A.
[830] Dean Foods, Competitive Impact Statement, supra, III.A.

Dean was also required to provide advance notification of any future acquisitions of fluid milk processing plants to the Antitrust Division. This was because small-scale transactions like *Dean* were usually not notifiable and therefore not on the radar of the DoJ.[831]

However, the new owners OpenGate Capital (***OpenGate***), which had acquired the Golden Guernsey Waukesha plant in September 2011, shut it down in January 2013, putting more than 100 employees out of work.[832] OpenGate had originally announced that it wanted to accelerate the plant's expansion opportunities. The closing led to criticism of the DoJ's divestiture decision, the first of the DoJ under the Obama Administration and a rare occurrence in the agricultural sector. Lynn Hiemke, president of Mapleton Dairy Haulers in Oconomowoc, was quoted by the press as saying:

> "*The Department of Justice has no clue […]. They have wrecked our plant. It's the federal government going in there, and they wrecked our plant*."[833]

OpenGate said Golden Guernsey had been under pressure to lower prices and had faced non-negotiable operating expenses.[834] However, some Waukesha plant employees told the press that they believed, Golden Guernsey would have continued to operate had Dean been allowed to buy the plant, as Dean was familiar with the liquid milk business.[835]

Chris Olsen, chief executive officer of ECO, Inc. (***ECO***), an Elkhorn-based specialised transportation and distribution company with a dairy division, told the press that the DoJ approached Olsen for consultation at the time of the lawsuit. Olsen apparently told them:

> *"You may as well have an auction and let the place go along with the 150 jobs, numerous distributors, bulk haulers and support personnel. […] I cannot believe that this type of a train wreck is occurring under your auspices. […] You would have competent dairy people running a plant with adequate funding. Without a player operating the facility […] or Dean Foods, it will be slaughter of that plant."*[836]

Olson later told the press about the law suit:

---

[831] See also Dean Foods, Competitive Impact Statement, supra, III.B.

[832] Thomas Catan, *First Obama Antitrust Case Sours as Milk Plant is Shut*, The Wall Street Journal, Online edition, 10 January 2013, available at: http://online.wsj.com/article/SB10001424127887324442304578234071475199876.html#, last viewed: 11 January 2013; Rick Barrett, *Market forces spurred Golden Guernsey closure, attorney says, Journal Sentinel, 9 January 2013*, available at: http://www.jsonline.com/business/market-forces-spurred-golden-guernsey-closure-attorney-says-1p8ajb2-186250041.html, last viewed: 11 January 2013.

[833] Thomas Content, *Waukesha dairy plant Golden Guernsey suddenly closes*, Journal Sentinel, 5 January 2013, available at: http://www.jsonline.com/business/golden-guernsey-in-waukesha-suddenly-closes-sources-say-i488vri-185759901.html, last viewed: 11 January 2013.

[834] Barrett, *Market forces spurred Golden Guernsey closure, attorney says,* supra.

[835] Barrett, *Market forces spurred Golden Guernsey closure, attorney says,* supra.

[836] Ryan Ekvall, *Get out of the whey: Federal regs kill Wisconsin dairy*, 113 jobs, Wisconsin Reporter, 10 January 2013, available at: http://watchdog.org/65835/get-out-of-the-whey-federal-regs-kill-wisconsin-dairy-113-jobs/, last viewed: 11 January 2013.

"This was entirely driven by the federal Department of Justice and Attorney Generals from Wisconsin, Illinois, and Michigan theorizing that there may be some price collusion in milk for schools." [837]

The fact that Dean was permitted to keep Golden Guernsey's ice-cream business under the settlement was also criticised, as it apparently removed Golden Guernsey's cash cow and left a business that was unable to survive on its own:

"*When [the] DOJ allowed Dean Foods to remove ice cream production from the facility, it put the plant in an uncompromising financial dilemma. […] Local management made it clear it would be difficult to keep the plant going without ice cream. I don't know what DOJ was thinking when they allowed it. You're not going to stand alone with school districts serving school milk*."[838]

Wisconsin Assistant State Attorney Steve Means who had been involved in the case did not believe that the outcome for the workers would have been better had Dean been allowed to keep the plant.[839] However, he also added:

"*There are so many variables out there. To suggest but for the anti-trust lawsuit everything would be great, everybody would have a job, is a stretch," he said. "If three years ago we could project the plant was going to close and people were going to lose jobs, obviously we might have thought of doing something differently. We rely on economists, people with advanced degrees who study these things.*"[840]

Chris Olsen, chief executive of ECO, stated:

"*The pathetic part is this had nothing to do with the plant. It had everything to do with government intervention. They were worried about collusion. Now you don't have a competitor. You have milk being hauled in from 150 miles away.*[841]

It is unclear whether the plant would have survived had Dean been allowed to keep it. Nevertheless, the shut-down of the plant less than two years after the ordered divestiture is the nightmare scenario for antitrust agencies and an example that merger enforcement at the end of the day is all about "*getting it right*".

The shut-down of the dairy plant came at a time at which the Obama administration had vowed to address competition problems in the agricultural markets, and in particular in the

[837] Ekvall, *Get out of the whey*, supra.
[838] Ekvall, *Get out of the whey*, supra.
[839] Barrett, *Market forces spurred Golden Guernsey closure, attorney says,* supra.
[840] Ekvall, *Get out of the whey*, supra.
[841] Ekvall, *Get out of the whey*, supra.

dairy, beef and poultry markets.[842] There had been little merger control in these markets under George W. Bush's Administration, even though there had been a trend towards consolidation. Most transactions, however, did not reach the monetary value threshold of the Hart-Scott-Rodino Act and, therefore, did not require notification.[843] However, this does not preclude the DoJ or the FTC from scrutinising a transaction. The Obama Administration initiated five workshops examining the state of competition in agriculture markets at which the Agricultural Secretary Tom Vilsack and the Attorney General of the DoJ Eric Holder participated, and at which numerous farmers and processors were heard.[844] Dean Foods was meant to be the first example of reinvigorated merger control in the agricultural sector.[845]

2.2.3. Grifols

Grifols was another merger that was decided under the new Obama Administration. On 6 June 2010, Grifols, SA (***Grifols***) agreed to acquire Talecris Biotherapeutics Holdings Corp. (***Talecris***). The acquisition combined two of the largest manufacturers of life-sustaining plasma-derived products.[846] Grifols, a Spanish healthcare company, was one of the leading healthcare providers in Europe.[847]

At the time of the notification, the plasma-derived products industry had already undergone a transformation from an industry marked by robust competition in the early 2000s to a tight oligopoly characterised by high levels of transparency and coordination and, as a result, supply shortages and significant price increases.[848] The transformation had been the result of vertical integration and the rationalisation of production and plasma collection as a reaction to previous supply increases. Only three major competitors were left in the industry at the time of the transaction, Baxter International, Inc. (***Baxter***), CSL Limited (***CSL***), and Talecris, and two smaller ones, Grifols and Octapharma AG (***Octapharma***).[849] The transaction did not, therefore, reduce the number of major competitors in the industry but instead resulted in an even tighter oligopoly with three major and only one minor market player.

---

[842] Balto, *Reinvigorating Antitrust Enforcement*, supra, pp. 11-12.
[843] Balto, *Reinvigorating Antitrust Enforcement*, supra, pp. 11-12.
[844] Balto, *Reinvigorating Antitrust Enforcement*, supra, pp. 11-12.
[845] Balto, *Reinvigorating Antitrust Enforcement*, supra, pp. 11-12.
[846] FTC, *Grifols, S.A. and Talecris biotherapeutics Holdings Corp.*, Complaint, Docket No. C-43222, 22 July 2011, available at: http://www.ftc.gov/os/caselist/1010153/110601grifolsacmpt.pdf, last viewed: 29 January 2013, para. 4. The value of the transaction in fact exceeded that of the buyer Grifols. See Tracy Rucinski, *Grifols to pay $3.4 billion for plasma group Talecris*, Reuters, 7 June 2010, available at: http://www.reuters.com/article/2010/06/07/us-talecris-grifols-idUSTRE6560SU20100607, last viewed: 30 January 2013.
[847] Rucinski, *Grifols to pay $3.4 billion for plasma group Talecris*, supra.
[848] Grifols, Complaint, supra, para. 26.
[849] Grifols, Complaint, supra, para. 26.

The FTC believed that coordination took place through signalling among competitors (the intentional sharing of competitive information). However, sensitive information was also available from reports, market analyses, discussions with downstream purchasers, suppliers and the industry's major trade group, the Plasma Protein Therapeutics Association (***PPTA***), which facilitated the exchange of competitive intelligence.[850] The FTC found that manufacturers used PPTA data to "*calibrate their own collections, output, and pricing decisions and avoid "irrational" behaviour" such as oversupplying the market or starting a price war*". Cheating without detection and corresponding punishment was difficult due to the transparency of the market and the long production cycle for plasma-derived products.[851]

The FTC was concerned that the transaction was going to further increase the ability of the remaining major firms in the market to coordinate the distribution of Ig, albumin and pdFVIII, resulting in higher prices and lower levels of innovation.[852] Ig is a drug that is commonly used to treat Primary Immunodeficiency Diseases and neurological conditions.[853] Albumin is used as a blood volume expander (e.g., for expanding heart valves during surgery).[854] PdFVIII is a protein responsible for blood coagulation (clotting), used in the treatment of individuals with Haemophilia A or Willebrand Disease.[855]

The combined firm would have commanded 31.2% of the Ig market. Baxter would have continued to be the market leader with 35% and CSL would have come third with 25%. The market shares of the three major competitors in the Ig market would, therefore, have been relatively homogeneous following the transaction, which was another indication that the transaction increased the likelihood of successful coordination between them.[856] Octapharma had just withdrawn its Ig product from the market due to concerns about serious adverse effects. Prior to the withdrawal, Octapharma had held an approx. 8% market share in the US.[857] The available materials do not provide much information on the other markets. However, they indicate that the situation was similar there, too.[858]

The FTC cleared the merger subject to commitments. Grifols agreed to divest the Melville fractionation facility (New York State) and the Grifols Plasma Centres in Mobile (Alabama)

[850] Grifols, Complaint, supra, para. 26.
[851] Grifols, Complaint, supra, para. 26.
[852] Grifols, Complaint, supra, para. 27. Smith et al., *New Merger Guidelines and Enforcement Trends*, supra, p. 307.
[853] Grifols, Complaint, supra, para. 7.
[854] Grifols, Complaint, supra, para. 10.
[855] Grifols, Complaint, supra, para. 13. Antitrust authorities had already caused the termination of a deal between Talecris and the large rival CSL due to concerns about further sector consolidation. See Rucinski, *Grifols to pay $3.4 billion for plasma group Talecris*, supra; Seeking Alpha, *Talecris Infusion Could Save or Sink Grifols*, 8 June 2010, available at: http://seekingalpha.com/article/208946-talecris-infusion-could-save-or-sink-grifols, last viewed: 30 January 2013.
[856] Grifols, Complaint, supra, para. 20. The HHI in the Ig market increased by more than 200 points and exceeded 2,500 points.
[857] Grifols, Complaint, supra, para. 20.
[858] Grifols, Complaint, supra, para. 20.

and Winston-Salem (North Carolina) to Kedrion SpA (***Kedrion***).[859] Kedrion is a producer of plasma-derived products active in Europe and other markets and a new entrant in the US plasma-derived products industry.[860] Grifols also agreed to enter into agreements and to extend the rights and obligations necessary for the production of the affected products to Kedrion.[861]

The fact that Grifols agreed to the divestiture and corresponding behavioural commitments indicates that it believed that the FTC had a fair chance of winning an injunction against the transaction in its originally proposed form. This was due to the lack of competition in the affected markets at the time of the transaction, the high degree of vertical integration of the market participants, high market transparency and evidence of past coordination. The importance of the affected products and of continued R&D regarding their production also set the agency on high alert. Grifols also had an interest to avoid press releases and general media coverage.

2.3. Three-to-two mergers

The plaintiffs have won every single one of the analysed large-scale three-to-two merger that has been brought on the basis of coordinated effects during the past five years. Mergers to duopoly based on other theories of harm have sometimes been won by the defendants.[862] It is clear from the reasoning of the courts in the analysed decisions that it is possible for defendants to also win a coordinated effects case if they can provide strong enough economic arguments as to why the merger will not result in anti-competitive unilateral or coordinated effects. It is, therefore, possible to rebut the structural presumption in three-to-two merger cases, even though the structural presumption is much stronger in three-to-two merger cases than in merger cases that leave three or more competitors. To defend a merger to duopoly, the arguments advanced to refute the competition concerns must be very convincing.

Even in merger to duopoly litigations, US courts analyse in detail whether the market characteristics favour coordination. The structural presumption itself is not sufficient, even for a preliminary injunction purposes, to justify government intervention. The government has to

[859] FTC, Press Release, *FTC Approves Final Order Settling Charges That Grifols, S.A.'s Acquisition of Talecris Biotherapeutics Holding Corp. Was Anti-competitive*, 22 July 2011, available at: http://www.ftc.gov/opa/2011/07/grifols.shtm, last viewed: 30 January 2013.

[860] FTC, Press Release, supra.

[861] Grifols, Decision and Order, 22 July 2011, available at: http://www.ftc.gov/os/caselist/1010153/110722grifolsdo.pdf, last viewed: 30 January 2013.

[862] See FTC v. Freeman Hospital, 69 F.3d 260, 262 (8th Cir. 1995); FTC v. Tenet Health Care Corp., 186 F.3d 1045, 1047 (8th Cir. 1999) and United States v. Long Island Jewish Medical Center, 983 F. Supp. 121 (E.D.N.Y. 1997), cited in *FTC v. OSF Healthcare System et al.*, Memorandum Opinion and Order, supra, at 17-18.

provide a convincing economic assessment of the market characteristics. This shows that the economics-driven case-by-case approach to merger injunctions is really being taken seriously by the US federal courts.

2.3.1.FTC v Heinz

FTC v. H.J. Heinz Co. and Milnot Holding Corp. (***Heinz***)[863] contributed to the European discussion that led to the introduction of the SIEC-test. In *Heinz*, the District of Columbia Court of Appeals decided that the transaction was likely to "*substantially lessen competition*", even though it did not create or strengthen a single or collective dominant position.[864] Competition lawyers and economists in the EU debated whether a finding of competitive harm would have also been possible in the EU in similar circumstances. This was what started the "*gap*" theory in European merger control and led to increased discussions about the introduction of a new and wider test.[865]

The market for jarred baby-food in the US was highly concentrated. The major three competitors were Gerber Products Company (***Gerber***),[866] Heinz Co. (***Heinz***) and Beech-Nut with market shares of 65%, 17.4% and 15.4% respectively.[867] Gerber was the undisputed market leader. Its products were found in 90% of all US supermarkets, whereas Heinz's products were only sold in approx. 40% of US supermarkets.[868]

Heinz planned to acquire all of Beech-Nut's voting securities.[869] The acquisition reduced the number of major players in the baby-food industry from three to two. At that time, no court had ever approved a merger that resulted in a duopoly, especially in the presence of significant entry barriers (as were present in the baby-food industry).

The District Court conducted a five-day hearing in which testimonies from eight industry witnesses, two economists and one accountant were heard, and then denied the FTC's motion for a preliminary injunction.[870] Defendant's expert economist was Jonathan Baker, the

---

[863] *FTC v H.J. Heinz Co. and Milnot Holding Corp.*, 345 US App. D.C. (2001).

[864] Under the old "*dominance test*" in Europe, single dominance could not have been established in this case as Gerber, the market leader, had far higher market shares. Had there not been a likelihood of coordinated effects, it is possible, that the EC would not have been in a position to prohibit the planned transaction, Ulrich Schwalbe/Daniel Zimmer, *Law and Economics in European Merger Control,* 2009, p. 183.

[865] Horner, *Unilateral Effects and the EC Merger Regulation,* supra, pp. 27 et seq.

[866] Gerber is a subsidiary of the Swiss conglomerate Novartis AG. See Jonathan B. Baker, ***Efficiencies and High Concentration: Heinz Proposes to Acquire Beech-Nut (2001),*** in: John E. Kwoka/Lawrence J. White (eds.), The Antitrust Revolution: Economics, Competition, and Policy, p. 150.

[867] *FTC v. H.J. Heinz Co. and Milnot Holding Corp.* 345 US App. D.C. 364 (2001).

[868] Heinz, p. 4.

[869] Heinz, p. 5.

[870] Kolasky, *Lessons from Baby Food: The Role of Efficiencies in Merger Review,* 16 Antitrust, 2001-2002, p. 82, with further reference.

former head of the FTC's Bureau of Economics, who submitted three econometric studies to the Court:[871]

> "*The first study showed that consumer substitution between the two brands was very small and that cross-elasticity of demand between them was not statistically significant. The second study found no discernible difference in the price of baby food whether there were two or three brands in the same metropolitan area. […] The Court found, based on a third econometric study by Professor Baker, that this past wholesale competition [between Heinz and Beech-Nut] had no effect on the retail price of baby food.*"[872]

Based on this, the District Court denied the preliminary injunction. The FTC appealed the decision to the Court of Appeals for the District of Columbia Circuit.

The Court of Appeals overturned the decision engaging - as *Kolasky* put it - in "*a remarkable degree of appellate fact-finding*" and stepping "*well outside the usual role of an appellate court*".[873] The record before the Court consisted of 1,267 exhibits, including 150 demonstrative exhibits, 32 depositions and 41 affidavits. Eleven eyewitnesses testified.[874]

The panel consisted of three judges, at least two of whom were well-versed in antitrust and economics: Judges Ginsburg (a former Assistant Attorney General for Antitrust appointed by President Regan in the mid-1980s),[875] Garland (who had taught antitrust at Harvard Law School) and Tatel.[876] The merits panel consisted of Judges Garland, Henderson and Randolph.[877]

In its coordinated effects analysis, the Court first considered the reduction of the main market players and the increase of the concentration levels.[878] The reduction of the number of major

---

[871] Kolasky, *Lessons from Baby Food,* supra, p. 83.
[872] Kolasky, *Lessons from Baby Food,* supra, p. 82. *Kolasky* also co-signed a brief filed by Robert Bork on behalf of Citizens for a Sound Economy urging for the affirmation of the district court's decision in *Heinz*. Supra, p. 82.
[873] Kolasky, *Lessons from Baby Food,* supra, p. 83. Others had heavily criticised the decision of the district court, see Timothy J. Muris, *Understanding Mergers: Strategy and Planning, Implementation, and Outcomes,* Opening Remarks, 9 December 2002, available at: http://www.ftc.gov/speeches/muris/mergers021209.shtm, last viewed: 23 April 2013: *"The parties lost, in part, because the district court judge ignored both antitrust economics and relevant precedent, and did not even allow the substantial customer testimony supporting the merger, let alone give that testimony proper weight."*
[874] Heinz, p. 6.
[875] Since 10 August 1993, Ruth Bader Ginsburg is Associate Justice at the US Supreme Court.
[876] Richard Dagen/Dan Richards, *Merger Theory and Evidence: The Baby-Food Case Reconsidered,* Working Paper, 2006, p. 1, footnote 6.
[877] Dagen et al., *Merger Theory and Evidence*, supra, pp. 1-2, footnote 6.
[878] Heinz, p. 11.

players in the market from three-to-two provided a strong *prima facie* case of anti-competitive harm that was difficult to rebut.[879]

However, what was special in *Heinz* was that the number two and three in the market were competing for the second shelf-position.[880] Harm to competition arose from the removal of this competition for the second shelf space. Heinz and Beech-Nut paid money to retailers for the "*second shelf*" position in the form of "*slotting fees*" and "*pay-to-stay*" arrangements.[881] Heinz's own documents acknowledged that there was substantial wholesale competition between Heinz and Beech-Nut and anticipated that the merger would end it:[882]

> *"Indeed, those documents disclose that Heinz considered three options to end the vigorous wholesale competition with Beech-Nut: two involved innovative measures while the third entailed the acquisition of Beech-Nut. Heinz chose the third, and least pro-competitive, of the options."*[883]

New timely and sufficient entry into the market was unlikely due to the existence of notable barriers to entry.[884] In fact, there had been no significant entries in the baby food market in decades, and such entry was "*difficult and improbable*".[885]

The appellees contended that Heinz and Beech-Nut were not really competing against each other at the retail level as consumers did not regard them as substitutes.[886] Retailers provided shelf space for only two brands, one of which was always Gerber's brand and the other of which would be either Heinz or Beech-Nut. Consumers' purchase decisions, so the argument went, were only made between the two products on display on the supermarket shelf. The appellees sought to prove the argument providing econometric evidence showing that the cross-elasticity of demand between Heinz and Beech-Nut was low.[887]

The Court rejected the argument. It held that there was vigorous competition between Heinz and Beech-Nut for the "*second shelf*" position with a "*winner-takes-it-all*" quality.[888]

---

[879] Heinz, p. 11, with further reference. FTC Chairman Pitofsky had proposed a bright-line rule rejecting any efficiency defence where market shares were excessively high. J. Joseph Curran, Jr./Ellen S. Cooper, *Brief of Thirty-Six Amici Curiae in Support of the Federal Trade Commission*, 6 December 2000, p. 5, with further reference.
[880] Heinz, p. 13.
[881] Heinz, p. 16, footnote 16.
[882] Heinz, p. 13.
[883] Heinz, p. 13.
[884] Heinz, p. 13.
[885] Heinz, p. 13.
[886] Heinz, p. 15.
[887] Dagen et al., *Merger Theory and Evidence,* supra, at 5 with further reference to the (not publicly available) testimony of Professor Baker. See also Baker, *Efficiencies and High Concentration,* supra.
[888] Heinz, at 16.

Heinz contended that the merger was going to strengthen the market position of the combined entity and enabled it to compete with Gerber due to the substantial efficiencies that the merger was likely to create. In the view of Heinz, the merger was pro-competitive because it increased the level of competition in an otherwise uncompetitive industry and led to the creation of a maverick firm with no incentive to coordinate with Gerber and which was instead likely to fight for a greater market share.[889]

In the pre-merger situation, Heinz and Beech-Nut were unable to compete with Gerber because of the latter's dominant position in the market. Heinz had a less attractive brand and excess manufacturing capacity. Beech-Nut had high production costs due to an inefficient two-storey production line.[890] Following the transaction, the Beech-Nut brand would have been produced at Heinz plants, filling up Heinz's excess capacities and replacing the inefficient production line at Beech-Nut's manufacturing facility.[891] As a result, the variable costs of manufacturing the Beech-Nut line were predicted to fall by 43% and the variable costs of all the production and distribution activities were predicted to fall by 15%.[892]

Heinz also argued that the merger was going to improve the taste and thereby the quality of its baby-food. Allegedly, Beech-Nut had a better recipe that Heinz planned to use for its own products, combining the superior taste of Beech-Nut baby food with the more efficient production line of Heinz's manufacturing facilities.

Therefore, there was a strong indication that the transaction was going to result in substantial efficiencies. *Heinz* was viewed by many as an example of a merger that deserved to be approved because it created substantial efficiencies despite the fact that it significantly raised concentration levels.

The notifying parties did not argue efficiencies as a defence. They argued that the transaction was unlikely to lead to coordinated anti-competitive effects in the first place because of the predicted efficiencies. These efficiencies were going to alter the incentive structure of the merged company in a way that made it more profitable to charge lower prices, thereby increasing its market share, than to coordinate its behaviour with Gerber.[893]

---

[889] Dagen et al., *Merger Theory and Evidence,* supra, at 5, with reference to the Testimony of Professor Baker (which unfortunately is not publicly available), Trial tr. 1013. Robert S. Schlossberg, Mergers and Acquisitions: Understanding the Antitrust Issues, Ch. 6, p.253; Jonathan B. Baker, *Efficiencies and High Concentration,* supra, at 164.
[890] Robert S. Schlossberg, *Mergers and Acquisitions: Understanding the Antitrust Issues*, Ch. 6, p.253.
[891] Schlossberg, *Mergers and Acquisitions*, supra, p. 253.
[892] See Baker, *Efficiencies and High Concentration,* supra, p. 162.
[893] Baker, *Efficiencies and High Concentration,* supra, p. 162.

The parties argued that they were going to pass on the cost savings to the consumers.[894] An economic analysis seemed to confirm a high pass-through rate of 50-100%.[895]

The defendant's economic expert had already testified before the District Court that anti-competitive coordinated effects were unlikely because of the efficiencies that would be realised from the merger:

> "*He testified that because of the efficiencies that would be realized from the merger, Heinz would have an increased incentive and ability, post-merger, to increase its market share and that this would make cartel behaviour more difficult because it would make it harder for the two remaining firms, Heinz and Gerber, to reach consensus on price and output. This led him to conclude that at least 50 percent (and perhaps all) of the cost savings resulting from the merger were likely to be passed on to consumers, resulting in as much as a 15 percent reduction in quality-adjusted retail prices.*"[896]

The Court of Appeals rejected the argument and held that the District Court had not analysed in sufficient detail whether or not the predicted efficiencies were more than mere speculation. Based on the high concentration levels and the reduction of the main players in the market from three to two, an especially thorough analysis should have been conducted.[897] It also doubted that the claimed efficiencies were merger-specific and could not have been achieved by other less anti-competitive means:

> *"Yet the District Court never explained why Heinz could not achieve the kind of efficiencies urged without the merger. As noted, the principal merger benefit asserted for Heinz is the acquisition of Beech-Nut's better recipes, which will allegedly make its product more attractive and permit expanded sales at prices lower than those charged by Beech-Nut, which produces at an inefficient plant. Yet, neither the District*

---

[894] Baker, *Efficiencies and High Concentration,* supra, p. 162. *Heinz* indicated that the acquisition would lower the price of Beech-Nut by approx. 15 % which would have been the amount of the variable cost-savings. Supra.

[895] Baker, *Efficiencies and High Concentration,* supra, pp. 163-164: *"Econometric estimates of the demand for both the Heinz brand and the Beech-Nut brand, based on functional forms that did not constrain the curvature of demand, also showed that each firm's demand grew much more elastic when the firm's price declined slightly – so much so as to make plausible Heinz's claim that a cost reduction would be fully passed-through to consumers. Rivals' anticipated reactions to price changes can also affect the incentives to pass through cost reductions but simulation studies suggested that the competitive interaction among firms was a minor determinant of the pass-through rate for Heinz and Beech-Nut relative to the curvature of demand. Accordingly, this economic analysis demonstrated that the pass-through rate for cost-savings from the merger of Beech-Nut and Heinz would likely be very high, at least 50 percent and quite possibly the 100 percent that the company claimed."*

[896] See Kolasky, *Lessons from Baby Food,* supra, p. 86.

[897] Heinz, p. 20. See also Kolasky, *Lessons from Baby Food,* supra, p. 86, who criticises that the appellate court characterised the transaction as a merger to duopoly which it was not according to Kolasky due to the fact that there had already been a duopoly at the retail level between the number one brand and only either the number two or the number three brand before the merger took place. Kolasky argues that, as a consequence, the transaction could only have eliminated the threat of future entry into one of the regional retail areas. However, there had been no indication that such entry was planned. See Kolasky, *Lessons from Baby Food,* supra, p. 86.

Court nor the appellees addressed the question whether Heinz could obtain the benefit of better recipes by investing more money in product development and promotion – say, by an amount less than the amount Heinz would spend to acquire Beech-Nut."[898]

The Court therefore sided with the FTC, overturned the judgment of the District Court and enjoined the transaction. It stated that the District Court had given too much credence to the claimed efficiencies and too little weight to the loss of competition between Heinz and Beech-Nut at the wholesale level.[899]

As with *Kraft*, there was much controversy as to whether the case had been correctly decided, even though the panel had included Judge Ginsburg and Judge Garland, both highly experienced in antitrust analysis.[900] *Kolasky* later criticised that the Court of Appeals did not consider whether the feared for coordination between the two smaller market players would have raised prices. He asserted that prices may well have fallen even if there had been coordination, as even a "*monopolist's profit-maximising price will be reduced as a result of lower costs; the same is equally true for oligopolistic prices*".[901] With this, he did of course not argue against the likelihood of coordinated effects. He asked the more fundamental question of whether coordinated effects necessarily harm consumers.

It is difficult to draw lessons from *Heinz* as the case is very special. It offered a lot of scope for economic argumentation (e.g., the discussion relating to competition for the second shelf position). What can be gleaned is that the government and defendant both need to provide convincing economic arguments for their story. Three-to-two mergers are not easy for the government to win. Defendants, on the other hand, also need to provide convincing arguments why coordinated effects would not be likely in the post-merger market situation.

2.3.2. H&R Block

US v. H&R Block, Inc., (***H&R Block***)[902] which was litigated under the new Obama Administration, was the first victory of the DoJ (*Heinz* had been litigated by the FTC) in a litigated merger case since 2004. It was an important victory that showed that the DoJ had

[898] Heinz, p. 22.
[899] See Kolasky, *Lessons from Baby Food,* supra, p. 82.
[900] For more detail on the different opinions, see Dagen et al., *Merger Theory and Evidence*, supra, p. 1. See also Baker, *Efficiencies and High Concentration,* supra, p. 162 and William J. Kolasky, *Effectively Advocating Efficiencies in Merger Reviews,* Antitrust Report, Spring 2003, p. 3, available at. .http://www.ftc.gov/bc/mergerenforce/presentations/040219kolasky02.Pdf, last viewed: 23 April 2013.
[901] See Kolasky, *Lessons from Baby Food,* supra, p. 87.
[902] *United States v. H&R Block, Inc.*, *2SS Holdings, Inc. and TAIX L.P.*, Memorandum Opinion, No. 1:11-CV-00948 (D.D.C. filed May 25, 2011), available at: http://www.justice.gov/atr/cases/f277200/277287.pdf, last viewed: 23 April 2013.

not become “*gun-shy about merger litigation*” since its Bush-era loss of the litigation challenging Oracle’s acquisition of PeopleSoft.[903] In *H&R Block*, H&R Block, Inc. (***H&R***) planned to acquire 2SS Holdings, Inc. (***TaxACT***).[904] Both companies offered digital do-it-yourself tax preparation products (***DDIY***).[905] The market for US compatible DDIY was highly concentrated. The three major firms, Intuit, H&R and TaxACT, had market shares of 62.2%, 15.6% and 12.8%, respectively, and accounted for approx. 90% of the DDIY-prepared federal returns filed for the 2010 tax season.[906] The next largest firm, Tax Hawk, only had a 3.2% market share, followed by TaxSlayer with a 2.7% market share.[907] The transaction reduced the number of major players in the market from three to two. The DoJ sought a permanent injunction blocking H&R from acquiring TaxACT.[908] The parties agreed to forgo the preliminary injunction phase and proceeded directly to a trial on the merits of the action.[909]

District Judge Beryl Howell conducted a nine-day bench trial, and eight fact witnesses and three expert witnesses testified at the hearing.[910] Testimonies from additional witnesses were presented by affidavit and deposition. As the Court describes, “*each side submitted over 800 exhibits, totalling many thousands of pages*”.[911] The economic experts for the plaintiff’s side were Frederic R. Warren-Boulton, Principal at MiCRA, Inc., and former chief economist of the Antitrust Division of the DoJ and Associate Professor of Economics at Washington University (St. Louis),[912] Ravi Dhar, George Rogers Clark, Professor of Managing and Marketing at Yale School of Management, who specialised in consumer behaviour and consumer psychology, branding, marketing management and marketing strategy,[913] and Mark E. Zmijewski, Leon Carroll Marshall Professor of Accounting and Deputy Dean at the University of Chicago Booth School of Business.[914]

---

[903] *United States and Plaintiff States v. Oracle Corporation*, No. 04-15531 (9th Cir. 2004), available at: http://www.justice.gov/atr/cases/oracle.htm, last viewed: 21 March 2013; Jonathan B. Baker/Carl Shapiro, *Response: Evaluating Merger Enforcement During the Obama Administration*, 65 Stan. L. Rev. Online 28, 21 August 2012, available at: http://www.stanfordlawreview.org/sites/default/files/online/articles/Baker-Shapiro-65-SLRO-28.pdf, last viewed: 15 January 2013, pp. 32-33.
[904] H&R Block, p. 3.
[905] H&R Block, p. 2.
[906] H&R Block, p. 5.
[907] H&R Block, p. 5.
[908] H&R Block, p. 6.
[909] H&R Block, p. 6.
[910] H&R Block, p. 6.
[911] H&R Block, p. 6.
[912] For more information, see http://www.micradc.com/economists/warren_boulton.html, last viewed: 23 April 2013. MiCRA is an abbreviation for Microeconomic Consulting & Research Associates, Inc.
[913] H&R Block, Declaration of Ravi Dhar Summarizing Expected Direct Testimony, available at: . http://www.appliedantitrust.com/08_mergerII/cases_doj/hr_block/hr_block_expert_dec_dhar12_9_2011us.pdf, last viewed: 23 April 2013, p. 1.
[914] H&R Block, Declaration of Mark E. Zmijewski, redacted version available at: . http://docs.justia.com/cases/federal/district-courts/district-of-columbia/dcdce/1:2011cv00948/148296/112/0.pdf?1323506695, last viewed: 23 April 2013.

The defendants' economic experts was Dr Christine Siegwarth Meyer, Vice President of NERA Economic Consulting.

The Court defined the relevant market as the market for US digital do-it-yourself tax preparation products (***DDIY***), excluding assisted tax or manual preparation.[915] The market definition was one of the key battlegrounds in the case with intensive economic analysis.[916] It turned into a discussion as to whether sufficient data existed and the evidentiary value was questioned.[917]

As it was a three-to-two merger, the DoJ did not have any difficulties establishing the *prima facie* case once the Court had sided with the DoJ's market definition, and it was clear that the merger at hand was a merger to duopoly with exceedingly high concentration levels (a HHI of 4,291 already, pre-merger).[918]

There was concern that the transaction facilitated coordination between the number one in the market (Intuit) and the only remaining major competitor (the merged company).[919] The Court was especially concerned that Intuit and the merged company were going to reduce the competitiveness of their free products.[920] The target TaxACT had relied on high-quality free product offerings as part of its business strategy.[921] The other firms in the DDIY market also offered free products, but with varying functionalities.[922]

The defendants argued that neither of the two remaining firms had an incentive to reduce the competitiveness of their free offers because this meant losing customers. They provided documents and testimony which indicated that Intuit had engaged in a series of "*war games*" to anticipate competitive threats that might result from the transaction.[923] The documents and testimony indicated that Intuit and the merged company were going to continue to compete post-merger.[924] However, some of these documents contained an Intuit employee's perception that "*part of HRB's [H&R's] post-merger strategy would be to "not escalate free war: Make free the starting point not the end point for customers*". This indicated that Intuit

---

[915] H&R Block, p. 16.
[916] Keyte, *United States v. H&R Block*, supra, p. 32.
[917] Keyte, *United States v. H&R Block*, supra, p. 32.
[918] H&R Block, p. 51, with reference to the Guidelines.
[919] H&R Block, p. 60, as the DoJ had established the *prima facie* case, the burden was on the defendant to defeat the presumption of collusion.
[920] H&R Block, p. 60.
[921] H&R Block, p. 8.
[922] H&R Block, p. 10. The International Revenue Service (***IRS***), the federal tax authority in the U.S., actively promotes e-filing. To promote access to free online tax filing, the IRS partnered with a consortium of companies in the DDIY industry. H&R Block, pp. 10-12.
[923] H&R Block, p. 61.
[924] H&R Block, p. 61.

was aware of the need to avoid a price war and wanted to limit the availability of free content.[925] Intuit had an incentive to coordinate with the remaining competitor.

As the government argued, the risk was not that free-offerings were going to disappear after the merger, but that the quality of such offerings would suffer and that the higher quality content would be reserved for paid products.[926] The theory of harm therefore rested on non-price coordination with regards to the quality of the products.

The government was able to provide an example of past coordination between H&R and Intuit that also showed that TaxACT had been a maverick competitor:

> *"After TaxACT launched its free-for-all offer in the FFA, Intuit proposed that the firms in the market limit their free offers, a move which TaxACT opposed and which Mr Dunn believed was an illegal restraint on trade. HRB, Intuit, and others then joined together and successfully lobbied the IRS for limitations on the scope of the free offers through the FFA - limitations that remain in place today."*[927]

TaxACT had an "*impressive history of innovation and competition in the DDIY market*".[928] Mr Dunn, who testified in Court, was "*a dedicated and talented entrepreneur and businessman, with deep knowledge and passion for providing high-quality, low-cost tax solutions*".[929] The Court held that TaxACT's "*history of expanding the scope of its high-quality free product offerings has pushed the industry toward lower pricing, even when the two major players were not yet ready to follow*".[930] TaxACT had been the only market player to offer "*high-quality, full-featured products for free with associated products at low prices*".[931]

The Court considered that the merged firms' pricing incentives were going to change due to the fact that the opportunity costs of offering free or low-priced products were going to increase compared to those of TaxACT making it more profitable to migrate customers into the higher-priced offering segment.[932]

Some commentators have argued that *H&R Blocks* removed the need to show that the eliminated competitor is a maverick and that instead any removal of an aggressive price

---

[925] H&R Block, p. 61.
[926] H&R Block, p. 61.
[927] H&R Block, p. 62.
[928] H&R Block, p. 63.
[929] H&R Block, p. 63.
[930] H&R Block, pp. 63-64.
[931] H&R Block, p. 65. Plaintiffs argued that TaxACT had been the first to offer free federal tax return preparation and e-filing for all taxpayers through the free file alliance and its website and continued to offer robust DDIY tax preparation products at low prices, *H&R Block,* Plaintiff's Memorandum of Points and Authorities in Support of its Motion for a Preliminary Injunction, redacted version available at: http://www.justice.gov/atr/cases/f273600/273683.pdf, last viewed: 23 April 2013, pp. 5-10.
[932] H&R Block, p. 66.

competitor or innovator from a highly concentrated market will do the trick.[933] However, this misconstrues the reasoning of the Court. The maverick nature of TaxACT was discussed in detail. The government provided a press article in which TaxACT referred to itself as a "*maverick*".[934] The Court commented that it did not want to play "*semantic gotcha*" and that it only wanted to know whether "*TaxACT [was] consistently play[ing] a role within the competitive structure of this market that constrains price*".[935]

As is often the case, internal information from the merging party strengthened the competitive concerns. H&R executives were apparently aware that the acquisition of TaxACT would reduce the intensity of quality-based competition between the remaining players in the market:

> *"As one HRB executive observed, Intuit and HRB would have significant incentives to raise prices and no longer increase the quality of their products in the absence of the industry maverick: "Intuit and HRB together would have 84% of the digital market and we both obviously have [a] great incentive to keep this channel profitable. Other potential TA purchasers could decide to cut their prices even further to see if they could make large market share gains & build short-term profitability by "winning the race to the bottom." Another HRB executive agreed: "One could also argue that there is value in taking control of this "segment" by not encouraging a race to free, which Intuit would have no interest in doing, and therefore has value to HRB by preventing it through the acquisition." HRB's Chief Information Officer summed up the advantages of the acquisition for his company:"[confidential] "In contrast to all the benefits HRB could expect from the deal, its internal documents reflect a swift assessment of the benefits consumers could expect: "None."*[936]

High price transparency due to the fact that the products were marketed online further facilitated coordination.[937] Firms could easily monitor each other's prices, even though there

---

[933] Keyte, *United States v. H&R Block,* supra, p. 37.
[934] H&R Block, p. 64.
[935] H&R Block, pp. 64-65.
[936] H&R Block, Plaintiff's Memorandum of Points and Authorities in Support of its Motion for a Preliminary Injunction, pp. 36-37. See also the declaration of Frederick R. Warren-Boulton, plaintiff's economic expert: "*The evidence shows that HRB and Intuit share similar incentives to structure their product line-ups and prices in a way that preserves the profitability of their high priced products. 2SS's incentives are different, as made clear from their disruptive conduct over the years, because they do not share HRB's and Intuit's concern about cannibalizing higher priced products. 2SS's different incentives make it the market "maverick" and have forced HRB and Intuit to restructure their digital DIY product line-ups in a way that makes it more difficult for them to sell their higher margin products. […] This merger would eliminate this stark contrast in incentives among 2SS, HRB, and intuit, thus increasing the likelihood that HRB and Intuit could reach a common understanding about the best way to structure their product line-ups to better "up-sell" customers. Customers would lose the competition-enhancing benefits that come from having such an effective maverick in this market.*" *H&R Block,* Declaration of Frederick R. Warren-Boulton Summarizing Expected Direct Testimony, redacted version available at: http://www.appliedantitrust.com/08_mergerII/cases_doj/hr_block/hr_block_expert_dec_warren_boulton12_9_2011us.pdf, last viewed: 23 April 2013, pp. 8-9.
[937] H&R Block, p. 62.

was some couponing via email.[938] Transactions were small, numerous and spread among a mass of individual consumers with low bargaining power. Switching was not easy.[939] In addition, product differentiation through brand and quality extras was not the kind of product differentiation that reduced the likelihood of post-merger coordination.[940]

Due to the existence of relatively high entry barriers, new entry was unlikely to counteract the predicted coordinated effects.[941]

The Court ruled that the proposed transaction violated the antitrust laws. H&R then decided to abandon the transaction and did not appeal the verdict.[942] It was the first time in seven years (since 2004) that the DoJ had gone to trial after its failed attempt to stop Oracle Corp.'s acquisition of PeopleSoft Inc.[943] It was commented that the judgment showed what kind of evidence a district judge finds most attractive: ordinary course business documents, party testimony and industry perception based on simple market definitions, and that the DoJ seemed to have realised that it had the best chance of winning its case in court based on a strong structural presumption (high market shares and concentration levels) and a simple market definition.[944]

However, the detailed discussion of the other market characteristics also shows that the structural presumption by itself would not have been sufficient to win the case. The notifying parties can win a merger-to-duopoly case before a US court despite the structural presumption if they can show that successful coordination is unlikely because of the market's specific characteristics, if the merger does not result in anti-competitive unilateral effects, either.

2.3.3. OSF

The recent litigation in OSF is another example of stronger merger enforcement under the new Obama Administration, this time in the healthcare sector. OSF HealthCare System (***OSF***) planned to acquire all of the operating assets of Rockford Health System's (***RHS's***) as part of an affiliation agreement.[945] OSF then planned to combine different hospital and

---

[938] H&R Block, p. 62.
[939] H&R Block, p. 63.
[940] H&R Block, Plaintiff's Reply Memorandum of Points and Authorities in further Support of its Motion for a Preliminary Injunction, available at: http://www.justice.gov/atr/cases/f274400/274430.pdf, last viewed: 23 April 2013, p. 17.
[941] H&R Block, pp. 53-60, 67.
[942] Schoenberg et al., *H&R Block Antitrust Loss is Win for US Ahead of AT&T Trial,* supra.
[943] Schoenberg et al., *H&R Block Antitrust Loss is Win for US Ahead of AT&T Trial,* supra.
[944] Keyte, *United States v. H&R Block,* supra, p. 32.
[945] *FTC v. OSF Healthcare System et al.*, Memorandum Opinion and Order, 3:11-cv-50344, available at: http://www.ftc.gov/os/caselist/1110102/120505rockfordmemo.pdf, last viewed: 23 April 2013, p. 2.

physician operations to create a new healthcare system with the name "*OSF Northern Region*".[946]

OSF was part of OSF Healthcare and consisted of eight hospitals and medical centres, one long-term care facility and two colleges of nursing. OSF HealthCare was owned and operated by The Sisters of the Third Order of St. Francis, Peoria, Illinois, US. A part of OSF HealthCare was OSF Medical Group, a primary care physician network consisting of more than 600 primary care specialist physicians and advanced practice providers.[947]

RHS, a non-for-profit company, was the largest health system serving northern Illinois and southern Wisconsin, including Rockford Memorial Hospital (a 396 bed tertiary care hospital), Rockford Health Physicians (outpatient clinics with locations throughout the region), Van Matre Health South Rehabilitation Hospital and the Visiting Nurses Association.[948]

OSF and RHS were two of only three providers of general acute-care inpatient hospital services in the Rockford region, the third one being SwedishAmerican Health System (***SwedishAmerican***).[949] The notified transaction was a merger to duopoly.[950]

Post-merger, the combined entity was going to control 59.4% of the general acute-care inpatient hospital services market based on patient admissions, and 64.2% of the market based on patient days.[951] The combined company and SwedishAmerican together controlled 99.5% of the general acute-care inpatient hospital services market.[952] The HHI changed by 1,767 points from an already very high 3,411 points pre-merger to 5,179 points post-merger.[953] The FTC, therefore, had no problems in establishing the *prima facie* case.[954]

The defendants argued that there had been mergers to duopoly in which the Court had denied the preliminary injunction.[955] However, the Court pointed out that these cases were special and not comparable to *OSF* (in all three cases, the courts had found that the markets had not been properly delineated and thus questioned the concentration levels).[956]

[946] OSF, Memorandum Opinion, p. 2.
[947] See http://www.osfhealthcare.org/ last viewed: 23 April 2013.
[948] See http://www.rhsnet.org/about.aspx, last viewed: 23 April 2013.
[949] OSF, Complaint, Docket No. 9349, available at: http://www.ftc.gov/os/adjpro/d9349/index.shtm, last viewed: 23 April 2013, p. 1.
[950] OSF, Complaint, p. 1. For the remaining competitor in the market, see http://www.swedishamerican.org/, last viewed: 23 April 2013.
[951] OSF, Memorandum Opinion, p. 13.
[952] OSF, Complaint, p. 2.
[953] OSF, Memorandum Opinion, p. 15.
[954] OSF, Memorandum Opinion, p. 13.
[955] See *FTC v. Freeman Hospital*, 69 F.3d 260, 262 (8th Cir. 1995); *FTC v. Tenet Health Care Corp.*, 186 F.3d 1045, 1047 (8th Cir. 1999) and *United States v. Long Island Jewish Medical Center*, 983 F. Supp. 121 (E.D.N.Y. 1997), cited in OSF, Memorandum Opinion, pp. 17-18.
[956] OSF, Memorandum Opinion, pp. 17-18.

The FTC based its theory of harm (higher prices and reduced quality) both on unilateral and coordinated anti-competitive effects.[957] For this, it considered evidence stemming from health plans, local employers and physicians, third party hospitals and the merging parties themselves.[958] Following the transaction, the combined entity would have been a "*must have*" for health plans seeking to offer insurance to Rockford employers and employees (the FTC considered this in the context of unilateral effects).[959]

Based on its analysis, the FTC decided to initiate administrative proceedings. The District Court for the Northern District of Illinois (Western Division) conducted an expedited discovery which was followed by an evidentiary hearing, during which each side was allowed to present four witnesses. The FTC presented two witnesses from managed care organisations and two expert witnesses (Patric Romano, a Professor of Medicine and Paediatrics at the University of California Davis School of Medicine and Cory Capps an economist with Bates White Economic Consulting).[960]

The defendants presented their own executives, David Schertz, President and CEO of OSF, and Gary Kaatz, President and CEO of RHS, a local employer and expert witness, and Susan Manning an economic consultant with Compass Lexecon.[961] The parties moved for the admission of more than 2,000 exhibits.[962]

In 1989, the District Court for the Northern District of Illinois had already blocked the merger of two Rockford hospitals because the transaction facilitated collusion among the two remaining hospital competitors. [963] The FTC argued that the market situation had not materially changed since then.[964] The remaining two competitors would be able to coordinate, either by communicating confidential information related to health plan negotiations, direct contact or other forms of signalling.[965]

There were indications of past coordination. The three Rockford hospitals had jointly refused to negotiate rates with the state's largest health plan, Blue Cross Shield of Illinois (***Blue Cross***).[966] The coordination seemed still to be ongoing at the time of the notification.[967] Rockford Memorial had contacted SwedishAmerican when it believed that the latter had

---

[957] OSF, Complaint, p. 2.
[958] OSF, Complaint, p. 2.
[959] OSF, Complaint, p. 3.
[960] OSF, Memorandum Opinion, pp. 2-3.
[961] OSF, Memorandum Opinion, p. 3.
[962] OSF, Memorandum Opinion, p. 3.
[963] OSF, Complaint, p. 13.
[964] OSF, Complaint, p. 13.
[965] OSF, Complaint, p. 14.
[966] OSF, Memorandum in Support of Plaintiff's Motions for Temporary Restraining Order and Preliminary Injunction (***Memorandum***), available at: http://www.ftc.gov/os/caselist/1110102/111118rockfordtro.pdf, last viewed: 23 April 2013, p. 10.
[967] OSF, Memorandum ,p. 10.

been bidding for the same BlueCross's business.[968] SwedishAmerican informed Rockford that it was not negotiating with BlueCross.[969] This allegedly reduced Rockford's incentive to offer lower rates.[970]

Entry barriers were high due to the fact that new hospitals could only be built after an extensive application process based on the provision of the Illinois' Certificate of Need (***CON***). Such an application risked being denied because the Illinois Health Facilities and Services Review Board responsible for reviewing CON applications did not believe that Rockford needed more hospitals.[971] Even if CON granted the application, entry would have taken at least five years from the planning stages to opening the door to patients.[972] Any entry would, therefore, have been untimely as well as unlikely.

The claimed efficiencies did not outweigh the alleged competitive harm. The merger created a duopoly. Therefore, "*extraordinary*" efficiencies were needed to justify the acquisition.[973] The claimed efficiencies were not "*extraodinary*". The FTC even claimed that they were "*unfounded and unreliable*".[974] The respondent OSF had claimed that the deal would create operational efficiencies and cost savings that would result in approx. $41-54 million in annual savings, and over $130 million in one-time capital cost avoidance, as well as $1-2 million in revenue enhancements.[975]

All in all, the defendants were unable to alleviate the coordination concerns (or those relating to post-merger unilateral effects). Judge Kapala therefore sided with the FTC and granted the preliminary injunction.[976] OSF then decided to abandon the acquisition.[977]

OSF shows that the notifying parties have to provide a convincing story to the court why coordinated effects are unlikely to refute the government's *prima facie* case in three-to-two merger cases. It is also an example of the Obama Administration's commitment to stepping up enforcement in the healthcare sector. During the presidential campaign, Barack Obama had particularly criticized the lack of merger enforcement in the healthcare industry. He stated that there had been "*over 400 healthcare mergers in the last 20 years*" and vowed to

---

[968] OSF, Memorandum, p. 11.
[969] OSF, Memorandum, p. 11.
[970] OSF, Memorandum, p. 11.
[971] OSF, Complaint, p. 14.
[972] OSF, Complaint, p. 14.
[973] OSF, Complaint, p. 15.
[974] OSF, Complaint, p. 15.
[975] OSF, Respondent OSF Healthcare System's Answer to Complaint, 12 December 2011, available at: http://www.ftc.gov/os/adjpro/d9349/111212osfhealthanswertocmplt.pdf, last viewed: 23 April 2013, p. 1.
[976] OSF, Memorandum Opinion and Order, 3:11-cv-50344, available at: http://www.ftc.gov/os/caselist/1110102/120505rockfordmemo.pdf, last viewed: 23 April 2013. Defendant's arguments regarding coordinated effects were weak and included the testimony of the executives of the three hospitals that they would not allow coordination to occur in the future. P. 30.
[977] FTC, *OSF Healthcare System Abandons Plan to Buy Rockford in Light of FTC Lawsuit; FTC Dismisses its Complaint Seeking to Block the Transaction*, Press Release, available at: http://www.ftc.gov/opa/2012/04/rockford2.shtm, last viewed: 23 April 2013.

reinvigorate antitrust enforcement in the healthcare sector.[978] This primarily applied to healthcare insurance, but it also included greater scrutiny of the healthcare sector in general.[979]

2.3.4. CCC

In *FTC v CCC Holdings Inc. et al.*, CCC Information Services, Inc. (***CCC***) and Aurora Equity Partners III, LLP (***Aurora***) entered into a restructuring agreement which stipulated a "*merger of equals*" between CCC and Mitchel International, Inc. (***Mitchel***), of which Aurora was the majority shareholder.

CCC and Mitchell were the two largest producers of partial loss estimating (*estimatics*) and total loss valuation (***TLV***) software.[980] The only other significant competitor was Audatex North America, Inc. (***Audatex***).[981] The merger therefore reduced the number of companies in the markets for total loss estimating and total loss valuation software (***TLV***) from three to two.

In 2007, CCC had had a market share in the market for estimatics of approx. 48%, Audatex of 30% and Mitchell of 21%.[982] The HHI in that market was to increase from approx. 3,650 to 5,685 which, as the Court noted, was more than in *Heinz.*[983]

In the market for TLV, CCC had held approx. 60.7%, followed by Audatex with approx. 34.8% and Mitchell with 4.5%.[984] The pre-merger HHI in this market was approx. 4,900 and was predicted to rise by 545 to approx. 5,460.[985]

The FTC's economic expert was Dr John Hayes, a former economist with the US DoJ who had submitted testimony in numerous proceedings, amongst others, to the FCC and the US

---

[978] Cited in David Balto, *Obama's Healthcare Trust Busting*, US News online ed., 19 October 2012, available at: http://www.usnews.com/opinion/blogs/economic-intelligence/2012/10/19/obamas-healthcare-trust-busting, last viewed: 23 February 2013.

[979] On this and the enforcement record of the Obama Administration in the healthcare sector, see Balto, *Obama's Healthcare Trust Busting*, supra. See also Matthew L. Cantor/Marlene Koury, A Watchful Antitrust Eye in Healthcare, Bloomberg Law, available at: http://about.bloomberglaw.com/practitioner-contributions/watchful-antitrust-eye-healthcare/, last viewed: 23 February 2013; FTC, Antitrust Under the Obama Administration – An FTC Perspective, 12 September 2012, available at: http://www.kslaw.com/library/publication/HH092412_AntitrustSlides.pdf, last viewed: 23 February 2013, p. 12; Brent Kendall, Regulators Seek to Cool Hospital-Deal Fever, WSJ online ed., 18 March 2012, available at: http://online.wsj.com/article/SB10001424052702303863404577286071837740832.html#, last viewed: 23 February 2013.

[980] *Federal Trade Commission v. CCC Holdings Inc.*, *et al,* Memorandum Opinion, Case 1:08-cv-02043-RMC (D.D.C. 2009), available at: http://www.ftc.gov/os/caselist/0810155/090309cccmitchellpublicopinion.pdf, last viewed: 23 April 2013, p. 1.

[981] CCC, Memorandum Opinion, p. 1.

[982] CCC, Memorandum Opinion, p. 28.

[983] CCC, Memorandum Opinion, p. 28. In *Heinz*, the transaction increased the HHI by 510 to approx. 5,285.

[984] CCC, Memorandum Opinion, p. 29.

[985] CCC, Memorandum Opinion, p. 29.

House of Representatives.[986] The defendant's economic expert was Prof. Dr Janusz Ordover, Professor of Economics, New York University (***NYU***) and former Deputy Assistant Attorney General for Economics at the Antitrust Division of the DoJ.[987]

The District Court for the District of Columbia stated that even though there was a *prima facie* case due to the high market levels, these alone "*cannot guarantee litigation victories*". To allow the government to rest its case after the mere presentation of concentration statistics "*would grossly inflate the role of statistics in actions brought under section 7*".[988] Even when high levels of market concentration are present, merger analysis must take into all factors that favour coordination.[989]

The FTC had to analyse the merger's effects on competition in-depth even in a case in which the number of competitors was reduced to two.

> *"The FTC relies heavily on Heinz for the proposition that a "merger to duopoly" is destined for a preliminary injunction because "no court has ever approved a merger to duopoly under similar circumstances. […] The FTC overlooks the significance of the phrase "under similar circumstances" in Heinz […] and thus overreads the case. Instead of making a generalized holding relevant to all 3-to-2 company mergers, the Court of Appeals focused on the nature of the baby food market at issue in Heinz, in which high barriers to entry and total transparency in pricing underscored the risk of coordination. While pricing is not completely secret in the instant markets, the characteristics of Estimatics and TLV are worlds apart from baby food. For starters, the software products are usually sold in complex bundles that may include both Estimatics and TLV or just one of these, as well as various other software products. What is clear from this preliminary record is that this situation is not Heinz. The question, therefore, is not simply whether this merger would constitute a "merger-to-duopoly," but rather, whether the presumption of anti-competitive effects holds up, for preliminary relief, given the way these markets operate in fact."*[990]

A showing of a real likelihood of timely and sufficient entry would have been capable of rebutting the *prima facie* case.[991] The defendants argued that there had been successful

---

[986] See Charles River Associates, *Meet the Expert – Competition,* 2010, available at: http://www.crai.com/uploadedFiles/Publications/Meet_the_Expert_Hayes_0110.pdf, last viewed: 23 April 2013, p. 1.

[987] See the curriculum vitae available at: http://www.econ.nyu.edu/dept/vitae/ordover.htm, last viewed: 23 April 2013.

[988] *United States v Baker Hughes Inc.,* 908 F.2d 981, 991-992.

[989] See also the 1992 Horizontal Merger Guidelines, § 2.1.

[990] CCC, Memorandum Opinion, p. 30.

[991] CCC, Memorandum Opinion, pp. 31-32.

entry into the Estimatics and the TLV market in the past, as at least four companies had entered the market and managed to acquire a customer base.

The District Court agreed that a history of entry into the relevant market was a central factor in the assessment of the likelihood of future entry.[992] However, only two of the four entrants were still in the market at the time of the analysis and they held, collectively, a less than 1% market share of the Estimatics market.[993] They also only competed in the "*low end*" market (which the Court defined as the independent repair facilities that had been "*traditionally underserved*") and offered their products at a substantially lower price there.[994] Mitchell's successful entry into the TLV market had been preceded by two failed attempts and had, altogether, required "*ten years of effort, and millions of dollars of investment*".[995] Moreover, Mitchell was in a "*privileged*" position when it entered the market because it could capitalize on its strong reputation with insurance companies.[996] The production of the software also required a huge data input (it essentially had to cover all the vehicles in the US) and needed between one and two years.[997]

CCC and its private equity owner Investcorp International, Inc. (***Investcorp***) had themselves mentioned in a press release following Investcorp's acquisition of CCC that the markets were marked by very high entry barriers.[998]

The District Court noted that despite the high concentration levels, the estimatics and TLV market were currently highly competitive.[999] There was no evidence that there had been prior coordination.

The District Court considered the degree of product differentiation and found that even though insurance companies demanded customised Estimatics and TLV products, the existence of customised bundles of products with varying prices, there were "*standard packages*" which included the basic estimating system, the imaging systems and aftermarket products tools and communications.[1000]

The defendants argued that pricing transparency was low as the bidding process for insurance companies was usually conducted on a confidential basis and accompanied by non-disclosure agreements and information, if it was obtained, was often misleading as the

[992] CCC, Memorandum Opinion, p. 33.
[993] CCC, Memorandum Opinion, p. 34.
[994] CCC, Memorandum Opinion, p. 34.
[995] CCC, Memorandum Opinion, p. 35.
[996] CCC, Memorandum Opinion, p. 35.
[997] CCC, Memorandum Opinion, p. 38.
[998] CCC, Memorandum Opinion, pp. 36-37.
[999] CCC, Memorandum Opinion, p. 56.
[1000] CCC, Memorandum Opinion, p. 58.

price metrics had to be understood.[1001] Long-term, high-value contracts further reduced the incentive to coordinate and insurance companies exercised considerable bargaining power.[1002] The Court stated that "*[c]ollectively, the heterogeneity of the base products and customized bundling, the largely confidential pricing, and the high-value insurance contracts tend to make tacit coordination less likely than the huge HHIs might predict*".[1003]

On the other hand, the markets were very stable and mature, there was information available to competitors apart from price (such as what products were offered, what accounts had been won, the identities of the final two bidders, which insurance companies were being served by which competitor, etc.).[1004] Switching costs for customers wanting to change the software were relatively high and product heterogeneity could also end up increasing the likelihood of coordination if it further segmented the market.[1005]

The defendants also argued that the high fixed costs in the market provided a strong economic incentive to produce close to full capacity.[1006] The Court agreed that high fixed costs "*work against the likelihood of any collusive price raising scheme which would require output restrictions*".[1007] However, capacity in the market would not have risen as there was limited customer demand.[1008]

The parties claimed that the merger would create substantial efficiencies. Mitchell and CCC Holdings' CEOs claimed that they would spend 50% more on new product research after the merger. The Court was not convinced:

> "*[T]here is no telling whether these aspirations of greatly enhanced investment in R&D will become a reality as the combined firm is saddled with the burden of paying off its committed debt. Furthermore, there is little evidence that these promises of increased R&D spending are merger-specific. Mr Balbirer testified, for instance, that CCC could already afford to increase R&D funding on its own if its 'shareholders were willing to trade off their return'*."[1009]

Regarding the productive efficiencies, the Court held such efficiencies were not expected to materialise sufficiently quickly. Based on the parties' submission, the consolidation of the firms to a single platform could have taken up to ten years. The Court decided that:

[1001] CCC, Memorandum Opinion, p. 59.
[1002] CCC, Memorandum Opinion, p. 62.
[1003] CCC, Memorandum Opinion, p. 63.
[1004] CCC, Memorandum Opinion, pp. 63-64.
[1005] CCC, Memorandum Opinion, pp. 64-65.
[1006] CCC, Memorandum Opinion, p. 65.
[1007] CCC, Memorandum Opinion, pp. 65-66.
[1008] CCC, Memorandum Opinion, p. 66.
[1009] CCC, Civ. Action No. 08 - 2043 (RMC), 2009 WL 723031 (D.D.C. 2009), para. 139, with further reference.

"[The Court] cannot place great weight on the predicted cost savings resulting from that consolidation because there is no telling when those savings might begin to accrue or whether they will actually materialize and not be absorbed by the consolidation effort."[1010]

The District Court therefore rejected the efficiency claims on the basis of insufficient verifiability and timeliness.

Overall, the Court sided with the FTC, which had shown that there were high entry barriers and a number of other factors that made post-merger coordination likely.[1011] The Court emphasised that it did not have to decide whether the assumptions of the FTC were correct in order to grant the preliminary injunction:

"*Critically, the District Court's task is not 'to determine whether the antitrust laws have been or are about to be violated. That adjudicatory function is vested in the FTC in the first instance*.'"[1012]

Two days later, the defendants informed the Complaint Counsel that they were abandoning the transaction.[1013]

What is interesting is that the FTC had a harder time convincing the Court of the evidence for unilateral effects. The plaintiff's economic expert, John Hayes, later stated that the evidence supporting coordinated effects had been more limited, "*perhaps owing to the difficulty of detecting or measuring the impact of coordination absent "hot documents"*".[1014]

CCC therefore raised the question as to whether it had become easier for the FTC to obtain a preliminary injunction in court based on coordinated effects theories than on unilateral effects theories. In *CCC*, most of the arguments had applied equally to unilateral and coordinated effects. John Hayes stated:

"The CCC/Mitchell decision suggests that, when the market is highly concentrated and a strong presumption of harm applies, the FTC may find it easier to prevail under a theory of coordinated effects than unilateral effects. However, economics provides no basis to apply the presumption differently. In my view, the law should follow an even-handed treatment."[1015]

[1010] CCC, Civ. Action No. 08 – 2043 (RMC), paras. 133-134.
[1011] CCC, Memorandum Opinion, pp. 67-68.
[1012] CCC, Memorandum Opinion, p. 68, with further reference.
[1013] CCC, Joint Motion to Dismiss Complaint, available at: http://www.ftc.gov/os/adjpro/d9334/090312jointmodismisscmplt.pdf, last viewed: 23 April 2013.
[1014] See Charles River Associates, *Meet the Expert*, supra, p. 1.
[1015] See Charles River Associates, *Meet the Expert,* supra, p. 2.

This is an interesting factor. Coordinated effects analysis used to lead a life in the shadows of merger analysis because it was considered to be too complex and unreliable. This seems to have changed. The DoJ and the FTC find it much easier to prevail with a merger challenge in court based on coordinated effects, which is probably due to the fact that the confidence in using this theory of harm as a basis of the economic argumentation has increased even though economic experts warn that coordinated effects analysis is prone to error.

2.3.5. Polypore

In *Polypore,* Polypore International, Inc. (***Daramic***) entered into an agreement to purchase all of the stock of Microporous Holding Corporation, the parent company of Microporous Products LP (***Microporous***) from Industrial Growth Partners II LP (***IGP***) and other stockholders.[1016] The FTC found out about the acquisition after the deal had been closed and then issued an administrative complaint alleging that the acquisition reduced competition and led to higher prices in several North American markets for battery separators.[1017]

Daramic manufactured a broad range of high performance battery separator membranes.[1018] For high performance polyethylene (***PE***) battery separators to the flooded lead-acid battery industry, Daramic supplied 50% of world demand.[1019] Microporous produced and marketed rubber separators, PE-rubber separators and PE separators.[1020]

The FTC was concerned about the likely anti-competitive unilateral and coordinated effects. It found that the acquisition resulted in a monopoly position of the merged entity in the deep cycle and motive market, and the merger eliminated possible future competition in the market for SLI battery separators in North America.[1021]

Coordinated effects were most likely to occur in the market for starter, lightening and ignition (***SLI***)[1022] batteries for automotive applications (e.g., cars and buses), where the merger kept the number of competitors at two.[1023] Daramic, and Entek International LLC (***Entek***) were the only suppliers of SLI battery separators.[1024] Microporous was about to enter that market. It

---

[1016] *In re Polypore International, Inc.*, Complaint, Docket No. 9327, 10 September 2008, available at: http://www.ftc.gov/os/adjpro/d9327/091008cmp9327.pdf, last viewed: 23 April 2013, p. 1.
[1017] FTC, Press Release, *Administrative Law Judge Rules That Polypore International's 2008 Acquisition of Rival Battery Separator Manufacturer Violated Antitrust Law,* 8 March 2010, available at: http://www.ftc.gov/opa/2010/03/polypore.shtm, last viewed: 23 April 2013.
[1018] Polypore, Complaint, p. 1.
[1019] Polypore, Complaint, p. 1.
[1020] Polypore, Complaint, p. 2.
[1021] Polypore, Complaint, pp. 21-24.
[1022] Polypore, Initial Decision by Chief Administrative Law Judge D. Michael Chappell, Filed on February 22, 2010, available at: http://www.ftc.gov/os/adjpro/d9327/100305polyporeincdecision.pdf, last viewed: 23 April 2013, p. 15.
[1023] Polypore, Complaint, p. 28, with further reference; Polypore, Initial Decision, p. 73.
[1024] Polypore, Complaint Counsel's Pre-Trial Brief, 23 April 2009, p. 28, with further reference.

already owned a production line that was capable of producing straight PE for SLI battery separators and planned to build more production lines that could be used for PE production for SLI batteries.[1025] It had already been marketing PE separators and had entered into negotiations with several customers.[1026] It had also already manufactured samples for SLI batteries for several customers including battery manufacturers in the EU.[1027]

Based on this, the administrative judge found that Microporous already had an (albeit small) market share in the SLI battery separator market of 4%, which was predicted to grow to 6% in 2010 (Entek held 49% and Daramic held 47% of the SLI battery separator market).[1028] The post-merger HHI was predicted to be at 5,005 in 2007.[1029]

The administrative law Judge rendered an extremely detailed decision of 387 pages based on intensive documentation:

> *"Over 2,100 exhibits were admitted, 35 witnesses testified, either live or by deposition, and there are 5,590 pages of trial transcript. The parties' proposed findings of fact, replies to proposed findings of fact, post-trial briefs total 2,329 pages."*[1030]

The FTC's expert witness was John Simpson, PhD, FTC economist. The respondent's expert witness was Henry J. Kahwaty, PhD, Director of LECG Corporation.[1031]

There were documents that indicated that Daramic and Entek considered Microporous to be a competitive threat:

> *"A 2007 Daramic document, Daramic's Strategy Audit, states: "There is currently not a lot of rivalry among competitors, but this could increase in future due to Asia and uncertainties with current competitors (Entek, [Microporous])." […] in comments on an earlier draft of this Strategy Audit, Tucker Roe of Daramic stated: "I would say that over the past years there has not been aggressive rivalry among competitors but this has changed when Microporous Products entered the market and more recently seen by Entek." […] Entek feared that Microporous would receive the support of JCI to become a third SLI competitor and thereby change the competitive landscape."*[1032]

[1025] Polypore, Initial Decision, pp. 73-74.
[1026] Polypore, Initial Decision, p. 74.
[1027] Polypore, Initial Decision, p. 104.
[1028] Polypore, Initial Decision, p. 75.
[1029] Polypore, Initial Decision, p. 75.
[1030] Polypore, Initial Decision, p. 3.
[1031] Polypore, Initial Decision, p. 12.
[1032] Polypore, Initial Decision, p. 74.

There was a hope that Microporous would enter the market for SLI separators as a new competitive force, ending the complacency of the two competitors Entek and Daramic, who were not really competing against each other. JCI provided striking examples of the lack of competition between Daramic and Entek and also of their fear that Microporous might one day soon become a price competitor in the market.

JCI was the largest manufacturer of flooded lead-acid batteries in the world. It described to the administrative judge that it had seen prices increase between 2004 and 2007 despite double digit growth in its separator purchases, and that its goal had been to bring more separator manufacturers into the industry to achieve more competition (JCI's so-called "*Global Separator Strategy*").[1033] JCI described the attitude of Daramic as "*complacent*", "*lazy*" and "*unresponsive, particularly with respect to pricing*".[1034] Daramic had been "*arrogant*" and "*difficult to deal with*" and had been unwilling to lower its prices during the last six to seven years.[1035]

Daramic coerced JCI into signing a worldwide supply contract for SLI battery separators when it believed that Microporous had offered to supply JCI under a five-year contract with continuous price reductions being passed on to JCI.[1036] The aim was to foreclose Microporous by taking the demand of the most important customer off the market.[1037] When JCI refused to sign the contract, Daramic threatened to close the production plant that had been supplying the bulk of JCI's separators, and ultimately did so.[1038] JCI turned to Entek and found that Entek was incapable of supplying the required amounts of SLI battery separators.[1039] There was no other supplier that JCI could turn to and so JCI therefore had no choice but to sign the long-term worldwide supply agreement that Daramic had offered.[1040]

Microporous had also been in the process of commercialising a new UPS separator that would have addressed the "*black scum problem*".[1041] "*Black scum*" results from the interaction of chemicals and oil components of a separator during oxidation. Microporous had been working on the LENO project ("*low electrical resistance, little or no oil*") at the request of a potential customer, EnerSys, developing a white PE product for flooded UPS batteries.[1042] Daramic stopped Microporous' work on the LENO project, as it viewed it as a "*cannibalizing*

[1033] Polypore, Initial Decision, p. 105.
[1034] Polypore, Initial Decision, p. 107.
[1035] Polypore, Initial Decision, p. 107.
[1036] Polypore, Initial Decision, p. 108.
[1037] Polypore, Initial Decision, p. 110.
[1038] Polypore, Initial Decision, pp. 108-109.
[1039] Polypore, Initial Decision, p. 109.
[1040] Polypore, Initial Decision, p. 110.
[1041] Polypore, Initial Decision, p. 101.
[1042] Polypore, Initial Decision, pp. 101-102.

product".[1043] Daramic had itself developed the "Darak product" which did not produce black scum but was costly and yielded high margins.[1044] The LENO product promised to be less expensive and would also have offered a lower margin.[1045]

But the very worst evidence came from Daramic itself. A memo presented in Court that dated from July 2003 and had been sent by Daramic's head of sales to Daramic's President summarised the rationale for the acquisition of Microporous:[1046]

> *"The only reason for acquisition would be purely defensive to secure our market share of the traction market and terminate the continued price erosion. […] The main disadvantage I see if we do* <u>*not*</u> *acquire Microporous is that [Microporous] may continue their plans for a second line resulting either in our loss of current customers or further reduction in our market pricing, hence loss of margins."*[1047]

The President of Daramic subsequently put the acquisition of Microporous on the top of the list of possible acquisitions and described the benefit from the transaction as "*[e]liminate price competitio*n".[1048]

The degree to which Daramic viewed Microporous as a competitive threat that had to be eliminated becomes clear from the following passage of the decision:

> *"One month later in October 2005, Frank Nasisi, advised Mr Toth that based on the information Daramic has received about Microporous building a plant in Europe for EnerSys, "[w]e must do everything possible to stop this process …. The bottom line is that [Microporous] can be another Entek: building plants to exclusively supply EnerSys, JCI, East Penn and so forth." […] Mr Hauswald felt that Daramic should "solve the [Microporous] case definitively."*[1049]

The market for SLI battery separators was also highly transparent. The administrative judge found that "*Daramic knew against whom it was competing if a customer was dual sourcing its separator needs. […] Daramic's salespeople would know if they only had a portion of the customer's separator needs and would see the competitor's separators at the customer's location.*"[1050]

[1043] <u>Polypore</u>, Initial Decision, p. 103.
[1044] <u>Polypore</u>, Initial Decision, p. 103.
[1045] <u>Polypore</u>, Initial Decision, p. 103.
[1046] <u>Polypore</u>, Initial Decision, p. 120.
[1047] <u>Polypore</u>, Initial Decision, p. 120.
[1048] <u>Polypore</u>, Initial Decision, p. 120.
[1049] <u>Polypore</u>, Initial Decision, pp. 121-122.
[1050] <u>Polypore</u>, Initial Decision, p. 117.

Moreover, Daramic's price increase in 2006 had been followed by Entek, which led Daramic's Vice President to inform his sales team that they should "*not be afraid to force the price increase*".[1051]

Based on these strong indications (the elimination of a future competitive force in the market and the fact that competitors followed suit if a rival raised its prices, as well as the general complacency of Daramic and Entek), as well as on various unilateral concerns that will not be described in detail here, the administrative judge ordered Polypore to divest Microporous to a buyer approved by the FTC within six months.[1052]

What *Polypore* clearly shows is that mergers to duopoly in which plaintiffs can successfully show that the merger eliminates potential entrants coupled with evidence that firms in the market are either coordinating their behaviour, or at least behaving complacently in the sense that they are not actively competing for contracts, will not go through. Maverick theories therefore carry significant weight and will kill the deal in a three-to-two-merger situation.

Furthermore, Daramic's behaviour during the time-period leading up to the deal and immediately following it would probably on its own have sufficed to show that the acquisition cemented a market situation that was likely to result in anti-competitive effects.[1053]

2.4. Are economic experts confident about their analysis?

Most transactions that are notified are approved and then closed without much publicity. They do not pose a threat to competition and are not investigated in depth. The few mergers that raise competition concerns receive most publicity.

[1051] Polypore, Initial Decision, p. 117.

[1052] FTC Press Release, *Administrative Law Judge Rules That Polypore International's 2008 Acquisition of Rival Battery Separator Manufacturer Violated Antitrust Law,* supra.

[1053] See Jon B. Dubrow/Shauna A. Barnes, *Post-Closing Challenges Illustrate Importance of Antitrust Review – Even for Small Transactions*, Bloomberg Law Reports, Antitrust & Trade, available at: http://www.mwe.com/info/pubs/post_closing_challenges.pdf, last viewed: 23 April 2013, pp. 1-2. *US v Syngenta AG* (2004)*, US v. Alcan Inc.* (2005). Other three-to-two mergers that will not be discussed in the same detail because they do not add any further insights to the analysis but which should nevertheless be briefly cited are 1) *US v Syngenta AG et al*, 1:04CV01442 (D.D.C. 2004), available at: www.justice.gov/atr/cases/f207500/207519.htm, last viewed: 23 April 2013. For further information about the case, see the materials on the website of the DoJ, available at: http://www.justice.gov/atr/cases/syngenta.htm, last viewed: 23 April 2013; 2) *US v Vulcan Materials Company et al.*, 1:07-cv-02044 (D.D.C. 2008), available at: www.justice.gov/atr/cases/f232700/232700.htm, last viewed: 23 April 2013. For further information about the case, see the materials on the website of the DoJ, available at: www.justice.gov/atr/cases/vulcan.htm, last viewed: 23 April 2013; 3) *US v Mittal Steel Company N.V.*, 1:06-CV-01360 (D.D.C. 2007), available at: www.justice.gov/atr/cases/f223500/223550.htm, last viewed: 23 April 2013. For further information about the case, see the materials on the website of the DoJ, available at: www.justice.gov/atr/cases/mittal.htm, last viewed: 23 April 2013.

The analysis has shown that the DoJ and the FTC are unlikely to challenge a merger based on coordinated effects unless post-merger concentration levels are high and there are only four or fewer competitors in the post-merger market. Nevertheless, US courts often side with the notifying parties in such injunction cases unless the challenged merger is a merger to duopoly, in which case the likelihood is high that the DoJ and the FTC will win the trial.

The record indicates that the DoJ and the FTC, and US courts, are afraid of wrongful intervention. The likelihood of such intervention is being reduced to the possible minimum by the large-scale use of expert testimonies in merger litigation. One would think that the use of expert testimony removes the uncertainty regarding the likely effects of the transaction on the affected markets. However, this is not the case. Economists who have acted as experts in merger litigations, even though they defend their analysis, admit if asked that they themselves and their peers are not comfortable to predict coordination in a specific market.[1054] The following quotes are just a few examples:

Gregory J. Werden, Senior Economic Counsel at the Antitrust Division of the DoJ, said:

> *"My impression is that antitrust lawyers have a lot of faith in coordinated effects theories […]. As an expert witness, I would be worried about having sufficient confidence in a coordinated effects theory to feel comfortable on the witness stand. Economics only lets us make very general statements, and that would bother me. […]"*
>
> *Moreover, our vague notions about when coordination is likely and when it is not likely are not totally borne out by the data. We see successful coordination among large numbers of firms on occasion, and we find successful coordination in other situations in which our theories say it ought to be hard."*[1055]

There are similar quotes. *Michael Salinger*, Professor of Economics at Boston University and special consultant to NERA, suggests that the structural presumption should continue to play a major role in coordinated effects analysis in the future because, beyond that, things become unclear.

> *"I don't think we should have much faith in our ability to predict with precision when coordinated effects will arise. Nor do I think we should have as much faith as some people suggest in our ability to predict unilateral effects. I think we've made a big mistake in dismissing structural evidence. […] often, structural evidence is the best*

[1054] See Elizabeth Bailey in theantitrustsource, *Coordinated Effects Analysis,* supra, p. 12.

[1055] theantitrustsource, *Coordinated Effects Analysis,* supra, pp 12-13. *Werden* added that the degree of sophistication was much higher in unilateral effects analysis and argued for a greater consideration of customer allocation.

evidence you have to say that coordinated effects are likely or unlikely. If you think you can go beyond that and say "well, yes, I know in this case we're going to have coordinated effects or not", the science isn't there; and I don't think it's going to be there in my life-time."[1056]

In addition, *Andrew Dick,* Vice-President of Charles River Associates, Inc., acknowledges that some industries do not seem to adhere to the rules. He therefore suggests that markets should be analysed individually to test whether coordination is likely. However, the checklist of factors should act as a "*guidepost*" and should not preclude an open-minded assessment of the industry.[1057]

Alexander Italiener, Director-General for Competition at the EC, made a similar statement on the general use of econometrics in merger control:

"[…] Having done a lot of econometrics myself, I'm the first one to recognize that there's no such thing as an ideal economic model or a perfect econometric model."

Therefore, the economists themselves are not certain that they can get it right. Coordinated effects analysis may have developed in recent years and may now be an indispensable part of in-depth merger reviews; however, even in fully litigated cases in which economic experts go to great lengths to fully understand the functioning of the affected market, expert testimony does not provide a guarantee that the effects of the merger on competition will be accurately predicted.

Nonetheless, even though econometric analysis does not guarantee getting it right, it is still the most useful available tool to analyse the merger's effects:

"But I know two things. The first is that an econometric model or an economic model is simply a mathematical representation of a line of argumentation. And what that means is that whatever your argument is, it will be presented in a logical way and the outcome of such models will be consistent with the underlying logic of the assumption. So it's a very handy tool to structure your thoughts and arguments. And that's why if your arguments are flawed and they are used as an input in a model, of course then the outcome of the model will also be flawed. […]

And the second thing is that with econometric models, they are based on statistical techniques, and statistical techniques generally rely on the law of large numbers. And what happens with the law of large numbers is that imperfections usually disappear.

[1056] theantitrustsource, *Coordinated Effects Analysis,* supra, p. 13.
[1057] theantitrustsource, *Coordinated Effects Analysis,* supra, pp. 12-13.

So it's a useful way to get to the core of the issue while being able to disregard the noise. So I would say that the use of models and techniques on balance are useful provided that one knows what one can do and what one cannot do with these models. In particular, they are extremely useful to detect inconsistencies in the reasoning of various parties, so I'm not at all surprised that on the basis of exactly the same data, two parties may arrive at contradictory conclusions using different models because they probably put in assumptions that are to their benefit. And it's precisely by looking at these models and by replicating them that one can try to spot the flaws and the inconsistencies in the argument."[1058]

2.5. Policy changes under the Obama Administration

There have been marked changes in merger control under the Obama Administration.[1059] Since the new Administration took office in 2009, the DoJ and the FTC have issued new Horizontal Merger Guidelines which incorporate the current agency practice. The Guidelines also broadened the scope for intervention, not least on the basis of concerns of post-merger coordinated effects (e.g., by removing the requirement for the agency to provide a "*story*" of how coordinated effects will work).

When *Barack Obama* came into office in 2009, he vowed to reinvigorate merger enforcement. Prior to his election, he criticised the Republican George W. Bush Administration for its lax merger enforcement, as compared to enforcement under his predecessor, President Clinton.[1060] Once in office, President Obama appointed *Christine A. Varney*, a former FTC Commissioner during the Clinton Administration, as Assistant Attorney General of the DoJ.[1061] *Varney* promised "*vigorous antitrust enforcement*" during her time in

[1058] theantitrustsource, *Interview with Dr. Alexander Italiener*, April 2011, available at: http://www.antitrustsource.com, last viewed: 9 January 2013, p. 11. Litvack et al., *Antitrust Enforcement under the Obama Administration,* supra, pp. 227-250.
[1059] It was generally expected that the election of President Obama would reinvigorate antitrust enforcement in the US See Ronan P. Harty, *Federal Antitrust Enforcement Priorities Under the Obama Administration*, Journal of European Competition Law & Practice, 2010, Vol. 1, No. 1, available at: http://jeclap.oxfordjournals.org/content/1/1/52.full.pdf+html, last viewed: 14 January 2013, p. 52, with further reference and comments on the lower enforcement rate under the Bush Administration.
[1060] Barack Obama, Senator, *Statement for the American Antitrust Institute*, 27 September 2007, available at: http://www.antitrustinstitute.org/files/aai-%20Presidential%20campaign%20-%20Obama%209-07_092720071759.pdf, last viewed: 14 January 2013. Also cited in Daniel A. Crane, Has the Obama Justice Department Reinvigorated Antitrust Enforcement, supra, p. 13. In the meantime, the link to Barack Obama's statement has gone inactive. Sean Gates, amongst others, quotes from the statement in: *Obama's Antitrust Enforcers: What Can We Expect?*, theantitrustsource, April 2009, available at: http://www.americanbar.org/content/dam/aba/publishing/antitrust_source/Apr09_Gates4_28f.authcheckdam.pdf, last viewed: 23 April 2013.
[1061] See also Harty, *Federal Antitrust Enforcement Priorities Under the Obama Administration*, supra, p. 53.

office.[1062] She also indicated that, in her view, "*inadequate antitrust oversight*" may have contributed to the financial crisis.[1063]

Assistant Attorney General *Varney* had a long-standing affiliation with the Democratic Party. She served as general counsel to the 1992 Presidential Inaugural Committee, general counsel to the Democratic National Committee, cabinet secretary to President Clinton and senior advisor to President Obama's transition team.[1064] However, as has been indicated in Chapter 1, the DoJ has been in lacking consistent leadership under the Obama Administration due to the fact that a string of (Acting) Assistant Attorney Generals have succeeded each other. The different Acting Assistant Attorney Generals only had an interim mandate and not enough time to leave a footprint on the division. Nevertheless, the political direction of the DoJ during the Obama Administration was set towards stronger merger control enforcement.

Once in office, President Obama appointed *Carl Shapiro* as Deputy Assistant Attorney General for Economic Analysis. *Shapiro* is Transamerica Professor of business Strategy in the Haas School of Business and Professor of Economics at the University of California (Berkeley).[1065] He had already served as Deputy Assistant Attorney General for Economics of the Antitrust Division in the Clinton Administration.

Shapiro advocated more vigorous horizontal merger enforcement already before he was called to serve as Deputy Assistant Attorney General in the Obama Administration:[1066]

> *"While some may welcome that result, we do not believe such [a] lax approach to merger enforcement is consistent with sound antitrust policy. Our survey respondents generally agree with us that the decline in merger enforcement over the past decade has been detrimental to effective competition policy. […] We seek to reinvigorate horizontal merger enforcement with presumptions that are both practical and based on sound economic analysis."*[1067]

[1062] Christine A. Varney, *Vigorous Antitrust Enforcement in this Challenging Era*, 11 May 2009, Remarks as Prepared for the Center of American Progress, available at: http://www.justice.gov/atr/public/speeches/245711.pdf, last viewed: 23 April 2013. See also Harty, *Federal Antitrust Enforcement Priorities Under the Obama Administration*, supra, p. 53.

[1063] Litvack et al., *Antitrust Enforcement under the Obama Administration,* supra, p. 227, with further reference.

[1064] Harty, *Federal Antitrust Enforcement Priorities Under the Obama Administration*, supra, p. 53, with further reference.

[1065] See RTT News, *Justice Department Announced New leadership Team for Antitrust Division*, 22 April 2009, available at: http://www.rttnews.com/920223/justice-department-announced-new-leadership-team-for-antitrust-division.aspx, last viewed: 11 January 2013.

[1066] See Jonathan B. Baker/Carl Shapiro, *Reinvigorating Horizontal Merger Enforcement That Has Declined as a Result of Conservative Economic Analysis*, in: Robert Pitofsky (ed.), How the Chicago School Overshot the Mark, The Effect of Conservative Economic Analysis on U.S. US Antitrust, Oxford University Press, 2008, pp. 235-288.

[1067] Baker et al., *Reinvigorating Horizontal Merger Enforcement That Has Declined as a Result of Conservative Economic Analysis*, supra, pp. 257-258.

He also called for a reinvigoration of coordinated effects analysis. *Shapiro* believed that US courts should be more restrictive in their analysis of efficiencies in the context of coordinated effects assessments, especially if the transaction resulted in the elimination of a maverick firm. He also asked for a more restrictive approach to efficiencies in maverick situations. To remove the competitive concerns, efficiencies not only needed to be merger-specific and verifiable, but the merging parties also needed to show that they caused the maverick to prefer a lower price or created a new maverick with the ability and incentive to compete more aggressively than before.[1068]

Carl Shapiro left the DoJ in 2011 and became a member of the President's Council of Economic Advisers in the White House.[1069] He was replaced by *Fiona Scott Morton*, Professor of Economics at Yale School of Management.[1070] *Fiona Scott-Morton* was herself replaced by *W. Robert Majure*, who is currently Acting Deputy Assistant Attorney General for Economic Analysis.[1071]

The Obama Administration changed not only to the DoJ's top personnel. On 2 March 2009, *Jon Leibowitz* - who had been Commissioner at the FTC since 3 September 2004 - was designated to serve as Chairman of the FTC. At the FTC, the Chairman has a strong agenda-setting function.[1072] Commissioner *Leibowitz* had been Democratic Chief Counsel and Staff Director for the US Senate Antitrust Subcommittee from 1997 to 2000 (amongst other positions).[1073] Commissioner *Leibowitz* was expected to step up merger review and single firm conduct analysis on the part of the FTC.[1074]

He named *Joseph Farrell* as Director of the FTC's Bureau of Economics.[1075] *Farrell* had been serving as Deputy Assistant Attorney General and Chief Economist for the Antitrust Division of the DoJ in the early 2000s and as Chief Economist for the FCC. *Joseph Farell* is Professor of Economics at the University of California, Berkeley, where he was Chair of the Competition Policy Center and an Affiliated Professor in the Haas School of Business.

[1068] Baker et al., *Reinvigorating Horizontal Merger Enforcement That Has Declined as a Result of Conservative Economic Analysis*, supra, p. 263.
[1069] See Carl Shapiro, Curriculum Vitae, available at: http://faculty.haas.berkeley.edu/shapiro/shapirocv.htm, last viewed: 11 January 2013.
[1070] See Yale School of Management, *Prof. Fiona Scott Morton to Serve in US Department of Justice*, 7 June 2011, available at: http://mba.yale.edu/news_events/CMS/Articles/7405.shtml, last viewed: 11 January 2013; Dep'mt of Justice, *Leading the Division's Economic Analysis Group,* Division Update Spring 2012, available at: http://www.justice.gov/atr/public/division-update/2012/scott-morton.html, last viewed: 11 January 2013.
[1071] DoJ, Deputy Assistant Attorneys General, available at: http://www.justice.gov/atr/about/daag.html, last viewed: 11 January 2013.
[1072] Daniel Sokol, *Change and Continuity in International Antitrust Under an Obama Administration*, GCP, Jan. 2009, No. 2, available at: https://www.competitionpolicyinternational.com/file/view/5784, last viewed: 14 January 2013, p. 10.
[1073] See on the homepage of the FTC, Jon Leibowitz, Chairman, available at: http://www.ftc.gov/commissioners/leibowitz/index.shtml, last viewed: 11 January 2013. See also Harty, *Federal Antitrust Enforcement Priorities Under the Obama Administration*, supra, p. 54
[1074] Harty, *Federal Antitrust Enforcement Priorities Under the Obama Administration*, supra, p. 54
[1075] FTC, *FTC Chairman Jon Leibowitz Appoints Senior Staff*, Press Release, 14 April 2009, available at: http://www.ftc.gov/opa/2009/04/seniorstaff.shtm, last viewed: 11 January 2013.

Joseph Farell was replaced by *Howard Shelanski*, effective on 1 July 2012.[1076] *Howard Shelanski* is professor at Georgetown University Law Center and Counsel to the law firm Davis, Polk & Wardwell. He holds a doctorate in economics from the University of California at Berkeley.[1077] *Howard Shelanski* worked in the FTC's Bureau of Economics as Deputy Director for Antitrust from 2009 to 2011. He also worked as Chief Economist of the FCC from 1999 to 2000 and as a Senior Economist for the President's Council of Economic Advisers at the White House from 1998 to 1999 during the Clinton Administration.[1078]

The Obama Administration overhauled much of the DoJ and the FTC's leading personnel. The new leadership promised to reinvigorate antitrust enforcement.

The analysed cases indicate that coordinated effects-based merger enforcement has increased under the Obama Administration. The Obama Administration's DoJ achieved its first victory in merger litigation in ten years in *AT&T*. The divestures imposed in *Dean Food* were notable as merger intervention in the agricultural sector is usually rare, also due to the fact that businesses there often do not meet the thresholds. In *Dean Foods*, the DoJ actually investigated a merger that did not meet the notification thresholds.

The figures speak the same language. The number of transactions receiving second requests has gone up a little. This indicates that the Obama Administration is more keenly on the look-out for anti-competitive mergers than the previous Administration, without being overly aggressive regarding the subject. However, it should be considered that the number of transactions receiving second requests depends on the nature of cases that are notified during the relevant time period.[1079] Some merger projects will also be put on hold if an administration vows to be especially strict about merger enforcement.[1080] Further distortions are possible due to the financial crisis, which reduced the number of large-scale transactions.[1081]

Meyer/Hartman have analysed how many transactions received second requests between 2009 and 2010. They found out that the number has gone up a little under the Obama Administration. 4.2% of the proposed transactions received second requests during that time compared to 2.8% in 2007 and 2008, the last two years of the George W. Bush Administration.[1082] However, they caution that most of the cases that attracted enforcement

[1076] FTC, *Howard Shelanski Named Director of FTC's Bureau of Economics*, Press Release, 14 May 2012, available at: http://www.ftc.gov/opa/2012/05/shelanski.shtm, last viewed: 11 January 2013.
[1077] FTC, *Howard Shelanski Named Director of FTC's Bureau of Economics*, supra.
[1078] FTC, *Howard Shelanski Named Director of FTC's Bureau of Economics*, supra.
[1079] See Mayer et al., *Merger Enforcement Two Years Later,* supra, p. 5. See also Crane, *Has the Obama Justice Department Reinvigorated Antitrust Enforcement?*, supra, p. 14, who cautions against relying on the number of cases brought to judge the severity of antitrust enforcement.
[1080] Crane, *Has the Obama Justice Department Reinvigorated Antitrust Enforcement?,* supra, p. 16.
[1081] Crane, *Has the Obama Justice Department Reinvigorated Antitrust Enforcement?,* supra, p. 16.
[1082] See Mayer et al., *Merger Enforcement Two Years Later,* supra, p. 4.

actions would also have done so during the last Administration, with the possible exception that more non-horizontal transactions received second requests.[1083]

Crane also analysed the merger challenges brought under the Obama Administration between 2009 and 2010 and the last two fiscal years of the Bush Administration (2007 and 2008). He did not find any evidence of increased merger enforcement under the Obama Administration. The Bush Administration even conducted more total merger investigations (185 under the Bush Administration compared to the Obama Administration's 154) and more Hart-Scott-Rodino investigations (152 compared to 127).[1084]

Crane also found that the number of "*second requests*" under the Hart-Scott-Rodino Act had not changed significantly (Bush 52, Obama 53). Merger challenges only went up slightly (Bush 16, Obama 19). Challenges by the Obama Administration resulted in more transactions being restructured or abandoned prior to filing a complaint (Bush 9, Obama 15). It is possible that there is a correlation between the perception of the merging parties that a competition authority has a vigorous enforcement record and their willingness to abandon the transaction as soon as the authority indicates competition concerns.[1085]

The Bush Administration conducted 0.04 investigations per Hart-Scott-Rodino Act filing while the Obama Administration conducted 0.05 investigations per filing. Second requests per Hart-Scott-Rodino Act filing increased from 0.013 per filing (Bush Administration) to 0.020 (Obama Administration).[1086]

Crane's analysis was attacked by *Baker* and *Shapiro*, who argued that the merger enforcement action to merger filing ratio has gone up during the first two years of the Obama Administration (2010-2011) compared to the first and second terms of the Bush (Junior) Administration (2002-2009).[1087] They identify a sub-normal enforcement rate of 0.75% and 0.9% for the first and second term of the George W. Bush Administration (1st term: FY 2002-2005; 2nd term: FY 2006-2009) and a close to average enforcement ration of 1.5% during Obama's first two years in office (FY 2010-2011).

Another question is whether the courts will support the more rigorous merger enforcement initiated by the Obama Administration. The DoJ was successful in litigating *AT&T*. However, this does not prove that it will generally be more successful in court than the previous

[1083] See Mayer et al., *Merger Enforcement Two Years Later,* supra, p. 5. See Litvack et al., *Antitrust Enforcement under the Obama Administration,* supra, pp. 227-228, 234-235, with similar results.
[1084] Crane, *Has the Obama Justice Department Reinvigorated Antitrust Enforcement?,* supra, p. 16.
[1085] Crane, *Has the Obama Justice Department Reinvigorated Antitrust Enforcement?,* supra, p. 16.
[1086] Crane, *Has the Obama Justice Department Reinvigorated Antitrust Enforcement?,* supra, p. 16.
[1087] Baker et al., *Response*, supra, pp 29-30. See also Daniel A. Crane, *The Obama Justice Department's Merger Enforcement Record: A Reply to Baker and Shapiro*, 65 Stan. L. Rev. Online 41, 6 September 2012, available at: http://www.stanfordlawreview.org/sites/default/files/online/articles/Crane-65-SLRO-41.pdf, last viewed: 15 January 2013.

administrations. It also remains to be seen whether the courts will apply the Obama Administration's 2010 Merger Guidelines. They are not obliged to follow the assessment laid out in the Guidelines and they have tended to be careful about government intervention.[1088]

What also seems striking is the greater use of behavioural remedies under the Obama Administration.[1089] This is also mirrored in the new Remedy Guidelines issued by the Obama Administration. The exact implications of the greater use of behavioural remedies remain unclear. However, they seem to allow for intervention where structural remedies are unavailable.

The available information indicates that the Obama Administration has indeed reinvigorated merger enforcement, also where it relies on coordinated effects as a theory of harm. It should be remembered, however, that coordinated effects analysis was at the heart of US merger control early on.[1090] Even during the George W. Bush Administration, the DoJ applied coordination theories. Deputy Assistant Attorney General of the DoJ's Antitrust Division, *William J. Kolasky*, said in an address before the ABA Section of Antitrust Law: "*I can assure you that at the Antitrust Division we remain very concerned about the potential of mergers to facilitate coordination and that we will bring coordinated effects cases where we think that potential is likely to be fulfilled*".[1091] Therefore, while we can see more active enforcement going on where coordinated effects are concerned, the changes are greater in the area of unilateral effects.

IV. Conclusion

Coordinated effects analysis in horizontal merger cases has recently undergone significant changes in the EU and the US, especially the shift towards stronger merger control under Commissioner Almunia and the Obama Administration, the introduction of the 2004 Merger Regulation in the EU, and the EU's commitment to a more economic assessment in merger control. These changes have an impact on the analysis of coordinated effects.

A major reason why EU merger control was reformed was the trans-Atlantic criticism that it was too structural and lacked a case-by-case economic approach.[1092] The divergence between the US and the EU's approach to merger control was especially visible in non-horizontal merger analysis. Non-horizontal merger analysis was rare in the US, based on the

[1088] See Sokol, *Change and Continuity in International Antitrust Under an Obama Administration*, supra, p. 11.
[1089] Litvack et al., *Antitrust Enforcement under the Obama Administration,* supra, p. 248, with examples.
[1090] Kolasky, *Coordinated Effects in Merger Review,* supra, p. 2.
[1091] Kolasky, *Coordinated Effects in Merger Review,* supra, p. 2.
[1092] See, for example, the criticism of William J. Kolasky following the EC's *Honeywell* decision, Kolasky, *GE/Honeywell*, supra, pp. 513-514. Other factors that played a role have explained in-depth in Chapter 1.

Chicago School's belief that non-horizontal mergers are either pro-competitive or competitively neutral.[1093] Regarding coordinated effects, the work of *Stigler* suggested that coordination without explicit communication could only be successful if concentration levels were very high.[1094] The EC acknowledged that non-horizontal mergers were not as likely as horizontal mergers to lead to anti-competitive effects. However, the EC never had the same hesitation as the US' DoJ or FTC to intervene in non-horizontal merger cases.[1095]

The different approaches led to tensions that escalated in *Honeywell*.[1096] The EC prohibited a merger between two US firms that the US' antitrust authorities had cleared.[1097] It was the first time that the EC had prohibited a merger between two US firms (a foreign-to-foreign merger) that the US antitrust authorities had approved.[1098] The EC's prohibition decision showed that the EC was prepared to assert the economic clout of the common market.[1099] US antitrust officials - amongst them William J. Kolasky, at that time Deputy Assistant Attorney General at the DoJ's Antitrust Division – criticised what they perceived was a general lack of an economic effects-based approach to merger control in the EC's analysis. The accusation was that the EU was more interested in protecting competitors rather than protecting competition.[1100] This criticism, of which we can expect that it was expressed at numerous conferences and official and unofficial meetings between antitrust officials, was in all likelihood a major driving factor behind the introduction of a more economic approach to merger control in the 2004 Merger Regulation, not only with respect to non-horizontal mergers but also with regard to horizontal merger analysis. It can therefore be said that the trans-Atlantic had an impact on the EU merger control system.[1101] Through the introduction of the more flexible SIEC-test, which replaced the dominance test contained in the former 1989 Merger Regulation, the EC was provided with a more flexible tool with which it could test the case-specific effects of the analysed merger.

The changes brought about by the SIEC-test are greater in the area of unilateral effects than in that of coordinated effects (as regards unilateral effects, the SIEC-test clarified that the EC

[1093] Richard A. Posner, *The Chicago School of Antitrust Analysis*, University of Pennsylvania Law Review, Vol. 127, No 4, 1979, pp. 925, 933.
[1094] Stigler, *A Theory of Oligopoly*, supra, p. 39, also referred to in Posner, *The Chicago School of Antitrust Analysis*, supra, p. 933.
[1095] Most notably on the basis of foreclosure effects. See, for example, Case No. COMP/M.3083, 2 September 2003, *GE/Instrumentarium*, OJ L 109, 16/04/2009, pp. 1-63; Case No. IV/M.877, 30 July 1997, *Boeing/McDonnell Douglas*, OJ L 336, 08/12/1997, pp. 16-47; Case No. COMP/M.2220, 3 July 2001, *General Electric/Honeywell*, OJ L 48, 18/02/2004, pp. 1-85.
[1096] Case No. COMP/M.2220, *General Electric/Honeywell*, supra.
[1097] DoJ, Press Release, *Justice Department Requires Divestitures in Merger Between General Electric and Honeywell*, supra.
[1098] Kolasky, *GE/Honeywell*, supra, pp. 513-514.
[1099] As had been the case with the EC's *Gencor* decision. See Baudenbacher, *The CFI's Gencor Judgment*, supra, pp. 558, 567.
[1100] See Kolasky, *Conglomerate Mergers and Range Effects*, supra; Platt Majoras, *GE Honeywell*, supra.
[1101] See also Basedow, *The Modernization of European Competition Law*, supra, p. 429, who states that the introduction of the 2004 Merger Regulation in the EU and the adoption of the "*more economic approach*" was probably the result of "*American and Anglo-Saxon influence on European competition law*".

is competent to intervene in situations in which the merging party is not dominant in the affected markets – former "*gap*" cases). However, the commitment to the "*more economic approach*" and the pressure exerted by the General Court's jurisprudence - in, e.g., *Airtours*[1102] - that clarified that the EC had to show *how* coordination was going to work post-merger also transformed the EC's coordinated effects analysis. Today, the EC is very reluctant to base its decisions on coordinated effects but, if it does, it tries to come up with a thoroughly reasoned decision.

An example of a thorough analysis of the changes to the market structure and their effects on the likelihood of post-merger coordination is *ABF*.[1103] In that decision, EC explained the merger's effects on the market structure in detail. Nevertheless, although the decision shows that the EC provides carefully reasoned explanations, these explanations still lack references to the economic and/or the econometric analysis that should have been used to test whether coordination between the remaining competitors will actually work.

The horizontal merger guidelines of the EC, the DoJ and the FTC are highly sophisticated. They provide a detailed insight into the factors that the competition authorities will consider in their merger assessments, also with regards to coordinated effects. The EC's Horizontal Merger Guidelines were issued shortly after the introduction of the new Merger Regulation. They not only incorporate the EC's decision-making practice and the jurisprudence of the European courts, but beyond that most of the economic fundamentals that are relevant for coordinated effects analysis. The EC's Horizontal Merger Guidelines, to a large extent, mirror the 1992 Joint Horizontal Merger Guidelines of the DoJ and the FTC. Their introduction therefore also contributed to greater trans-Atlantic convergence.

The US's FTC and DoJ have revised their 1992 Guidelines in 2010. The new Guidelines are certainly one of the main achievements of the Obama Administration in the area of merger control. They were overdue, because 18 years had elapsed since the last comprehensive overhaul (13 if we consider the revision to the 1992 Guidelines in 1997). As a result, much of the guidance in the Guidelines was no longer in line with the decision-making practice of the agencies and courts, and the economics also needed some updating.[1104]

The 2010 Guidelines have widened the gap between EU and US merger control. They have extended the notion of what counts as coordination to include "*parallel accommodating conduct not pursuant to a prior understanding*" (§ 7). The Guidelines mention coordination in other markets with similar characteristics and past failed attempts at collusion as a factor that indicates a likelihood of coordination in the affected market (§ 7.2). Under the 1992 US

[1102] General Court, Case T-342/99, *Airtours v Commission*, supra.
[1103] Case No. COMP/M.4980, *ABF/GBI Business*, supra.
[1104] See Meyer et al., *Merger Enforcement Two Years Later*, supra, p. 5.

Guidelines (and also under the 2004 EU Guidelines), the authorities only considered past instances of (successful) coordination in the affected market. The 2010 Guidelines broadened the scope of the authorities' assessment in this respect as well. Regarding failed attempts at collusion, it is not clear whether this requires bilateral action or whether a failed (unilateral) attempt by only one competitor to collude with a rival would be sufficient.

The Guidelines also seem to depart from the traditional *Stigler*-framework for coordinated effects analysis, which requires a showing of the ability of the merging parties to agree on the terms of coordination, to monitor rivals' behaviour, to punish deviation and a lack of jeopardising outsider reaction (§ 7). Instead, the new Guidelines only require that the relevant market shows signs of vulnerability to coordinated conduct and that the agency has a credible basis on which to conclude that the merger may enhance that vulnerability.[1105] As the General Court stated in *Airtours*, thereby introducing the concept into EU-law, competition authorities should show not only that the market characteristics are generally suitable for coordination, but also *how* coordination will work in practice.[1106] Against this background, the departure from the framework in the 2010 Guidelines is problematic. It should also be considered that merger enforcement often has a very strong political component and that the DoJ and the FTC are certainly not free from such influences. This is why competition authorities must clearly explain the theory of harm that justifies their intervention laying out *how* they expect that the transaction will negatively affect competition. The U.S. Guidelines provide no guarantee that this will be the case.

The 2010 Merger Guidelines have also been criticised by the former European CCE Kai-Uwe Kühn, who stated at the GCR's 2nd Annual Law Leaders Conference in Miami on 8 February 2013 that he was concerned about the expansion of the DoJ and the FTC's enforcement powers in the Guidelines, and that he feared that future decisions might not be based on sufficient evidence.[1107]

Another shortcoming of the U.S. Guidelines and of the accessible preparatory materials is that they do not explain how the 2006 Commentary should be used now that there are new Guidelines. The DoJ and the FTC have indicated that the Commentary remains valid but it no longer fits to the Guidelines. It would have made sense for the DoJ and the FTC to also provide an updated commentary. The far-reaching changes in the 2010 US Guidelines create a need for a comprehensive commentary that clearly explains how the new Guidelines should be applied.

[1105] 2010 Horizontal Merger Guidelines, § 7.1; Meyer et al., *Merger Enforcement Two Years Later*, supra, p. 8.
[1106] General Court, Case T-342/99, *Airtours*, para. 62; Röller et al., *The Office of the Chief Competition Economist at the European Commission*, supra, p. 4.
[1107] See Knox, *EU official: Theories of coordination in US merger review may lack evidence*, supra.

It is still unclear whether the courts will accept the new Guidelines and also what role they will play in the decision-making practice of the DoJ and the FTC.[1108] At first sight, they constitute a clear statement for greater merger enforcement. As far as coordinated effects are concerned, some of the changes seem to significantly increase the risk of wrongful intervention (for example, the possibility to take coordination in other than the affected market and failed attempts at coordination into account). In the short-term, the Guidelines will probably increase the number of commitment decisions. Merging parties usually prefer a quick clearance over lengthy litigation and therefore agree to provide structural or behavioural commitments in exchange for clearance.

The analysed US merger decisions support the impression from the Guidelines that the US is heading towards stronger merger enforcement, also with regards to coordinated effects. It was expected that the Obama Administration would be a tougher antitrust enforcer than the George W. Bush Administration.[1109] President Obama had heavily criticised the lax antitrust enforcement under the previous Bush Administration during his election campaign.[1110] This, and the fact that the Obama Administration appointed Christine Varney as Assistant Attorney General, sent out the message from the start that the Administration would step up intervention in antitrust and merger control.[1111] Assistant Attorney General Varney promised at the beginning of her tenure to engage in "*vigorous antitrust enforcement*".[1112]

The enforcement record of the DoJ during the Obama Administration shows more activity with regards to merger enforcement based on coordinated effects. The DoJ successfully litigated its first merger challenge since 2004 on this basis in *H&R Block,* a merger to duopoly.[1113] This, to an extent, repaired the damage it had suffered as a result of its defeat in the litigation of Oracle's acquisition of PeopleSoft under the George W. Bush Administration.[1114] The DoJ submitted detailed evidence to prove the alleged competition concerns ("*over 800 exhibits, totalling many thousands of pages*"), as well as expert testimonies.[1115] TaxACT had been something of a maverick and the market was transparent.[1116] It was, therefore, one of the easier cases to win but it was nevertheless an important case for the DoJ because it reinstated the DoJ's confidence that it could in fact win merger injunctions in court.

[1108] See also Meyer et al., *Merger Enforcement Two Years Later,* supra, p. 9.
[1109] See, for example, Harty, *Federal Antitrust Enforcement Priorities Under the Obama Administration*, supra, p. 52.
[1110] Obama, *Statement for the American Antitrust Institute*, supra. See also Crane, *Has the Obama Justice Department Reinvigorated Antitrust Enforcement?*, supra, p. 13.
[1111] Harty, *Federal Antitrust Enforcement Priorities Under the Obama Administration*, supra, p. 53.
[1112] Varney, *Vigorous Antitrust Enforcement in this Challenging Era*, supra.
[1113] H&R Block, supra.
[1114] Oracle Corporation, supra.
[1115] H&R Block, p. 6. See also H&R Block, *Declaration of Ravi Dhar*, supra; H&R Block, *Declaration of Mark E. Zmijewski*, supra.
[1116] H&R Block, p. 62.

The DoJ also successfully challenged the four-to-three merger between AT&T and T-Mobile.[1117] However, that success should partly be attributed to the fact that the law firm working for AT&T accidentally posted a partly-redacted document on the FCC's website that indicated that the main reason AT&T pursued the transaction was to eliminate T-Mobile as a competitor.[1118] Nevertheless, the DoJ made an impressive argument in court that went far beyond the structural presumption and showed why the market characteristics were favourable to coordination.

The DoJ also challenged the acquisition of the De Pere and Waukesha Plants from Foremost Farms USA by Dean Foods Company.[1119] This was part of the DoJ's pledge under the new Obama Administration to step up its scrutiny of the agricultural sector.[1120] The DoJ conducted an in-depth investigation and required Dean to divest the Waukesha plant to a suitable buyer within 90 days following the filing of the proposed final judgment.[1121] The transaction itself did not even meet the thresholds for compulsory notification.[1122] The aftermath of the deal was less than pleasant for the DoJ because the Waukesha plant went bankrupt in January 2013 and unexpectedly closed down.[1123] This started a discussion about wrongful government intervention, the sensibility of accepting OpenGate Capital, which had little to no experience in the dairy business as a suitable buyer, and whether the plant had been left with sufficient business to survive following the transaction.[1124]

Not only the DoJ but also the FTC has become tougher on merger enforcement under the Obama Administration. The FTC exacted commitments from Grifols, SA in exchange for the clearance of its acquisition of Talecris Biotherapeutics Holdings Corp., a four-to-three merger, in the medical industry.[1125] The FTC also sought and obtained a preliminary injunction against the merger between OSF Healthcare Systems and Rockford Health Systems, which would have reduced the number of acute-care inpatient hospital services in the Rockford region from three to two.[1126] After the FTC's court victory, OSF abandoned that

---

[1117] AT&T, supra.
[1118] Bode, *Leaked AT&T Letter Demolishes Case for T-Mobile Merger,* supra.
[1119] Dean Foods, available at: http://www.justice.gov/atr/cases/deanfoods.htm, last viewed: 24 March 2013.
[1120] See Balto, *Reinvigorating Antitrust Enforcement*, supra, pp. 11-12.
[1121] Dean Foods, Competitive Impact Statement, *Dean Foods*, supra, III.A. See also the Final Judgment, supra.
[1122] Balto, *Reinvigorating Antitrust Enforcement*, supra, pp. 11-12.
[1123] See Catan, *First Obama Antitrust Case Sours as Milk Plant is Shut*, supra.
[1124] For some of the immediate comments by market participants, see Content, *Waukesha dairy plant Golden Guernsey suddenly closes*, supra and Ekvall, *Get out of the whey*, supra.
[1125] Grifols, supra.
[1126] OSF, supra.

transaction.[1127] Stricter scrutiny of healthcare mergers was another commitment of the Obama Administration.[1128]

If we look at coordinated effects-based merger scrutiny overall, we find that both the George W. Bush Administration and the Obama Administration analysed coordinated effects and sometimes challenged mergers on this basis. However, the challenges were unsuccessful with regards to six-to-five and five-to-four mergers. The DoJ and the FTC have lost the three six-to-five and five-to-four mergers that have been discussed in this Chapter (*Foster, Arch Coal* and *Kraft General Foods*). This is because the courts do not accept arguments that are only based on the structural presumption in merger cases that leave five or four competitors, instead requiring strong economic arguments beyond the structural presumption. Defendants therefore stand a real chance to rebut the government's *prima facie* case in six-to-five and five-to-four mergers if they can show that post-merger coordination is unlikely.

It is, therefore, not surprising that economic expert testimonies play a huge role in six-to-five and five-to-four merger litigations. In *Kraft General Foods*,[1129] the State of New York acting as plaintiff and Kraft acting as defendant, each had their own economics experts.[1130] Of great importance was the parties' econometric analysis, which they used to prove their arguments.[1131] The case also illustrates the limits of such an analysis. The number of demand elasticity calculations, for example, had to be narrowed down by dividing the cereal products into different segments ("*adult*", "*all family*" and "*kid*") and aggregating the brands in these segments. This, in turn, increased the risk of error.[1132] The case also shows that, where the merger challenge is unsuccessful, the same goal can be reached through politics. After the Court had ruled in favour of the defendants, a jawboning strategy initiated by Congressman Samuel Gejdenson and Senator Charles E. Schumer ensured that the cereal manufacturers got bad publicity for charging excessive prices to the American public.[1133] As demand dropped, the cereal manufacturers gave in and lowered their prices.[1134] The decision was, therefore, resolved in the manner that the plaintiffs wanted, though not because of successful merger litigation but rather because of politics.

[1127] FTC Press Release, *OSF Healthcare System Abandons Plan to Buy Rockford in Light of FTC Lawsuit*, supra.
[1128] Balto, *Obama's Healthcare Trust Busting*, supra; Cantor et al., *A Watchful Antitrust Eye in Healthcare*, supra; FTC, *Antitrust Under the Obama Administration*, supra, p. 12; Kendall, *Regulators Seek to Cool Hospital-Deal Fever*, supra.
[1129] Kraft, supra.
[1130] Rubinfeld, *Market Definition with Differentiated Products,* supra, p. 165; Gotts et al., *Just the Facts*, supra, p. 1234; Cotterill, *Jawboning Cereal*, supra, p. 8.
[1131] Rubinfeld, *Market Definition with Differentiated Products*, supra, p. 165.
[1132] Rubinfeld, *Market Definition with Differentiated Products*, supra, pp. 174-175.
[1133] Cotterill, *Jawboning Cereal*, supra, pp. 11-12.
[1134] Cotterill, *Jawboning Cereal*, supra, p. 13.

In *Arch Coal*,[1135] the defendants rebutted the government's *prima facie* case even though it was clear from statements that the competitors were at least willing to collude and several market characteristics were favourable to collusion.[1136] The Court held that it was not sufficient for competition authorities to rely upon the "*Stigler-Posner checklist*" as the basis of their merger challenge without an explanation on how to weigh conflicting evidence. The case shows that the courts will not grant an injunction just because there is evidence that companies *would like* to coordinate their actions if the plaintiffs cannot also show why they will be able to do so.

Altogether, six-to-five and five-to-four mergers are excellent battlegrounds for economic experts. US courts accept detailed economic assessment of the effects of transactions. Customer evidence, on the other hand, which is given great weight by the EC, is treated with scepticism by the US courts, who rightly doubt that customers have the expertise to state what will happen in the market.

The only four-to-three merger which is important from a coordinated effects perspective was *AT&T*, which I have just commented on in the context of the changes brought about by the new Obama Administration.

When it comes to three-to-two mergers, the antitrust agencies have won every single one of the analysed large-scale mergers recent years. The defendants in merger to duopoly litigation have to provide very good reasons to rebut the *prima facie* case. Nevertheless, even in the case of a merger to duopoly, the structural presumption by itself will, in most cases, not be sufficient to obtain an injunction in court. The plaintiffs have to engage in a case-by-case analysis of the affected markets. As a result, litigation in merger-to-duopoly cases also tends to be highly complex, with numerous exhibits, depositions and affidavits - as, for example, in *Heinz*[1137] - and economic expert testimonies. An interesting aspect of *Heinz* was that the defendants tried to argue that the transaction would not result in anti-competitive coordinated effects because it produced efficiencies that increased Heinz's incentive and ability to raise its market share post-merger.[1138] The court, however, was not convinced that the claimed efficiencies were more than mere speculation, were merger-specific and could not have been achieved by other, less anti-competitive means.[1139]

The analysed cases therefore show that parties stand a very good chance to win six-to-five and five-to-four mergers in which the theory of harm is coordinated effects. On the other hand, they will have a hard time convincing the courts of the lack of competitive harm in

[1135] Arch Coal, supra.
[1136] Arch Coal, p. 137.
[1137] Heinz, supra.
[1138] Kolasky, *Lessons from Baby Food*, supra, p. 86.
[1139] Heinz, p. 22.

mergers to duopoly. The courts are prepared, however, to hear arguments beyond the structural presumption even in merger-to-duopoly cases. There is a case-by-case assessment even of transactions that only leave two competitors.

The EU also seems to be heading towards stronger merger enforcement. Commissioner Almunia has made himself a name as a tough competition law enforcer. During his time in office, the mergers between Aegean Airlines and Olympic Air,[1140] Ryanair's third attempt to purchase Aer Lingus,[1141] UPS's $ 6.9 billion bid for TNT Express[1142] and the merger between Deutsche Boerse and NYSE Euronext[1143] were prohibited. Four out of five prohibition decisions under the 2004 Merger Regulation were rendered during Commissioner Almunia's tenure.

Even though merger enforcement has gone up under Commissioner Almunia's tenure, coordinated effects-based merger enforcement has not. Since the *Impala*[1144] and *Airtours*[1145] decisions of the General Court, and even though General Court's decision in Impala was later overturned by the European Court of Justice, the EC does not base commitment decisions on coordinated effects for fear of having its decisions overturned by the General Court. The EC prefers to use unilateral effects theories that do not require dominance. This explains why coordinated effects were not discussed in *tele.ring*.[1146] *Kühnert* states that the increased reliance on unilateral effects in cases that would lend themselves to conducting a coordinated effects analysis is problematic. Indeed, there is reason to be concerned that the EC relies on unilateral effects to bypass the more burdensome coordinated effects analysis required in *Airtours*.[1147]

Coordinated effects analysis is, therefore, moving in different directions in the EU and the US even though the guidelines (even the US' 2010 Guidelines) in both countries are similar. The US is experiencing a revival of coordinated effects analysis. The EC is still not putting the concept on an equal footing with unilateral effects.

[1140] Case No. COMP/M.5830, *Olympic/Aegean Airlines*, supra.
[1141] Case No. COMP/M.6663, *Ryanair/Aer Lingus III*, supra.
[1142] Case No. COMP/M.6570, *UPS/TNT Express*, supra.
[1143] Case No. COMP/M.6166, *Deutsche Börse/NYSE Euronext*, supra.
[1144] Case No. COMP/M.3333, *Sony/BMG*, supra.
[1145] Case No. IV/M.1524, *Airtours*, supra.
[1146] Case No. COMP/M.6497, 12 December 2012, *Hutchison 3G Austria/Orange Austria*. The non-confidential version of the decision has not yet been published. *Hutchison* was the second consolidation in the Austrian telecommunications market after T-Mobile had acquired tele.ring in 2006. Case No COMP/M.3916, 26 April 2006, *T-Mobile/tele.ring*, OJ L 88, 29/03/2007, pp. 44-46. The EC mentioned coordinated effects in its Article 6(1)(c) decision of 28 June 2012 to open an in-depth review of the transaction. However, coordinated effects did not play a role in the later statement of objetions.
[1147] Kühnert, *Widening the gap*, supra, p. 10.

When it comes to the economic modelling of coordinated effects, the EC also still lags behind. Even the highly detailed coordinated effects analysis in *ABF*[1148] does not refer to any economic models that assess the likelihood of coordination. The decision instead relies on competitors' testimonies and - as *Amelio et al.* have stated - a general *"common sense approach*".[1149] This is surprising when we take into account the fact that the EC has a team of highly trained economists and has committed itself to a case-by-case assessment based on a "*more economic approach*". However, the EC still seems to be "*ticking off the boxes*". It lists factors that are known to increase the likelihood of post-merger coordination in an affected market, but does not provide a model or a "*story*" of *how* coordination will work in the specific market. The assessments of the CCE and his team are not published and even the merging parties do not have a right to access them. This prevents an informed discussion on an equal footing between the EC's economists and the economists of the merging parties. There is no level playing field. The parties will submit the assessment of their economic experts but they do not have equal access to the work of the CCE and his team and are unable to check whether the EC's assessment is correct.

This is a major difference between the EU and the US (federal) merger control system. In the US, the DoJ and the FTC have to go to court to obtain an injunction. There, they have to present the findings that, in their view, justify the injunction, including expert testimonies that explain why the transaction will have the alleged effects. The merging parties can - and for large-scale transactions will - bring their own economic experts to testify in court. As a result, high-level merger litigation in the US comes with a real exchange of economic ideas regarding the specific transaction.

The analysis has not yielded a definite answer on the number of competitors that the EC considers necessary for continued competition in the market. In most cases, the EC does not conclude its coordinated effects analysis and, instead, renders its decision based on unilateral effects. Of the three European five-to-four mergers that I have analysed, the EC only concluded its coordinated effects analysis in *Blackstone*.[1150] The EC stated that, due to firm structure asymmetry, expected capacity growth, overcapacities, low levels of market transparency and high levels of demand elasticity, post-merger coordination between the remaining competitors was unlikely.[1151] It therefore cleared the merger without conditions on the basis of Article 8(1) of the Merger Regulation. In *Arjowiggins*[1152] and *Tele.ring*,[1153] on the other hand, coordinated effects were mentioned and the question of whether they were likely

[1148] Case No. COMP/M.4980, *ABF/GBI Business*, supra.
[1149] Amelio et al., *ABF/GBI Business,* supra, p. 96.
[1150] Case No. COMP/M.3625, *Blackstone/Acetex*, supra.
[1151] *Blackstone*, paras. 100-103.
[1152] Case No. COMP/M.4513, *Arjowiggins/M-real Zanders Reflex*, supra.
[1153] Case No. COMP/M.3916, *T-Mobile Austria/Tele.ring*, supra.

to arise post-merger was left undecided.[1154] In the four-to-three merger *Schneider Electric*, coordinated effects were only mentioned on the sidelines.[1155]

The analysed three-to-two mergers, on the other hand, yielded very interesting findings: in two of the three analysed decisions, the EC decided that anti-competitive post-merger coordinated effects were unlikely. In *Syniverse*,[1156] the market shares of the merged entity and the only remaining competitor Mach were relatively homogeneous (50-60%/55-65% for Mach and 30-40%/40-50% for Syniverse, depending upon the geographic market definition).[1157] However, the market for data and financial clearing services for GSM roaming was highly dynamic and marked by technological leap-frogging. Customers regularly switched suppliers and prices had been falling steadily.[1158] This assured the EC that anti-competitive coordinated effects were unlikely, even though the transaction resulted in a duopoly.

Similarly, in *KLM*[1159] the EC decided that the post-merger duopoly consisting of the merged entity KLM/Martinair and ArkeFly would not be able to coordinate its actions on the Amsterdam-Curacao and Amsterdam-Aruba routes.[1160] The market shares of the remaining two competitors were highly asymmetric (80-90% for the combined company and 10-20% for ArkeFly).[1161] ArkeFly, when questioned by the EC, had also commented that it would be able to accommodate extra demand within a short timeframe should the combined company decide to raise its prices.[1162] Demand was unstable because the main customers on the affected routes were leisure travellers.[1163] The lack of stable demand also market transparency. The remaining two firms found it difficult to assess whether a decrease in demand was caused by demand fluctuations or a deviation from the terms of coordination.[1164] Because of he target's difficult financial situation and the 50% shareholding of KLM in the target, the transaction did not eliminate an important competitive force in the market.[1165]

The abovementioned decisions show that the parties can convince the EC that coordination will not work even in duopolistic markets. Nevertheless, the EC will look at these mergers

---

[1154] *Arjowiggins*, paras. 434, 544; *T-Mobile Austria*, para. 129.
[1155] Case No. COMP/M.5755, *Schneider Electric/Areva T&D*, supra, para. 73.
[1156] Case No. COMP/M.4662, *Syniverse/BSG*, supra.
[1157] *Syniverse*, paras. 46, 104.
[1158] *Syniverse*, para. 105.
[1159] Case No. COMP/M.5141, *KLM/Martinair*, supra.
[1160] *KLM*, para. 345.
[1161] *KLM*, para. 307.
[1162] *KLM*, para. 346.
[1163] *KLM*, para. 348.
[1164] *KLM*, para. 348.
[1165] *KLM*, para. 347.

closely. It will only clear them, if post-merger coordination can be excluded based on the market characteristics.

In *ABF*, the EC still presumed that mergers to duopoly facilitate coordination.[1166] It has moved on since then and undertakes a case-by-case analysis of the market characteristics.

If the market characteristics indicate that the duopoly will be able to coordinate its actions, the EC will usually demands structural commitments, accompanied by behavioural remedies. An example was *Antalis*.[1167] There, the market shares of the remaining two competitors were relatively homogeneous (30-40% for both the combined company and PPX).[1168] The EC deliberated whether the large product ranges of the two remaining competitors rendered coordination too complex to be successful.[1169] However, it was concerned that the combined company and PPX would find a way to pass on information despite the complexity (e.g., because customers passed on pricing information and handed out individualized price lists).[1170] The EC accepted Antalis' commitment to divest Premier to a suitable buyer and to enter into a logistics service contract with the purchase through MAP UK's logistics arm gm2.[1171] The EC then cleared the transaction in Phase I on the basis of Article 6(2) of the Merger Regulation. The structural commitments ensured that three competitors would be left in the post-merger market and thereby removed the coordination concerns.

Even mergers to duopoly may be approved unconditionally. In *Syniverse* and *KLM* the EC decided in Phase II that there was no need to require commitments and cleared the transaction according to Article 8(1) of the EU Merger Regulation.

There is, therefore, no excessive bias towards mergers to duopoly, at least as far as coordinated effects are concerned. The EC is also prepared to use a case-by-case approach in markets with very high concentration levels and only two remaining competitors.

ABF and *Antalis* were the only two mergers in the set of analysed mergers in which the EC demanded commitments based on coordinated effects. In all of the other cases, the EC intervened based on unilateral effects. Another finding is, therefore, that the EC does not feel comfortable basing a commitment decision on coordinated effects except in three-to-two merger cases.

[1166] *ABF*, para. 284.
[1167] Case No. COMP/M.4753, *Antalis/MAP*, supra.
[1168] *Antalis*, para. 24.
[1169] *Antalis*, para. 66. See also Albæk et al., *Transparency and Coordinated Effects in European Merger Control,* supra, p. 12.
[1170] *Antalis,* para. 67.
[1171] *Antalis*, para. 85.

At the same time, the EC's assessment could be more case-by-case and more economic. Currently, the EC seems to use a "checklist" of factors that are known to favour coordination. The EC's decisions do not provide any information with regards to modelling or quantitative analysis or, indeed, the analysis of the CCE and his team. The only references that are made are to customer and competitor testimonies, which the EC seems to value very highly in its assessment. This is a disappointing finding because the EC's decisions would gain in quality if they laid out what economic assessments were undertaken, whether and how modelling was used and how these tests confirmed the assumptions.

This is all the more important because the EC enjoys a "*margin of discretion*" with regards to its economic analysis. Therefore, it is difficult for the notifying party to challenge the EC's economic reasoning in court.[1172] The system is even more biased in favour of the EC if the statement of objections and the final decision do not provide the details of the economic assessment that was undertaken.

Overall the assessment of horizontal coordinated effects by the EC, the DoJ and the FTC, is similar. The DoJ, the FTC and the EC have stepped up coordinated effects-based merger enforcement, as is evidenced by the 2010 Horizontal Merger Guidelines and the enforcement record. The EC prefers to rely on unilateral effects without dominance. If it relies on coordinated effects, it does not lay out the details of its economic analysis.

Chapter 3 concentrates on non-horizontal coordinated effects analysis in the EU and the US.

[1172] See, for example, General Court, Case T-342/07, *Ryanair*, para. 29.

Chapter 3: Coordinated effects analysis in vertical and conglomerate merger cases

I. Introduction

Antitrust authorities are far less likely to challenge vertical or conglomerate mergers than horizontal mergers. Vertical and conglomerate transactions do not result in the loss of direct competition. They also often produce substantial efficiency gains.[1173]

Only a small number of vertical and conglomerate merger notifications have been analysed in-depth in the US and the EU. Having said that, it should be borne in mind that most horizontal mergers are also approved unconditionally without an in-depth review. Nonetheless, the percentage of mergers that undergo an in-depth review is even smaller for non-horizontal mergers than for horizontal mergers.

In the US, challenges to vertical and conglomerate mergers by the DoJ and the FTC have nearly disappeared since the 1970s. This is due to the rise of the Chicago School, which has argued that non-horizontal acquisitions are either competitively neutral or else pro-competitive. Non-horizontal merger analysis picked up again in the 1990s. Coordinated effects only seldom play a role in non-horizontal merger analysis, although there have been some cases since the 1990s in which the likelihood of post-merger coordinated effects was analysed on the basis of post-merger anti-competitive information exchange.

The careful re-invigoration of non-horizontal merger analysis was driven by advances in industrial economics that indicated that non-horizontal mergers are not always competitively neutral or pro-competitive. Advocates of stronger antitrust enforcement based on recent advances in industrial economics are often referred to in the US as “Post-Chicagoans”. They do not reject the basic tenants of the Chicago School. However, they use newer and better models to show that there are previously not-noted situations in which mergers will be anti-competitive.

Some “Post-Chicagoans” would probably object to the name. Nor do they form a homogeneous group that shares the same economic or political views. For the sake of simplicity, modern industrial economists that identify harm to competition based on improved models where the Chicago School believed that the transaction would either be neutral or pro-competitive will be referred to as “*Post-Chicagoans*” in this dissertation.

[1173] 2008 Non-Horizontal Merger Guidelines, paras. 12-13; 1984 Merger Guidelines, §§ 3.5, 4.135. The 1984 Merger Guidelines of the DoJ are still the relevant authority for vertical and conglomerate merger cases, as the 1992 US Horizontal Merger Guidelines only cover horizontal combinations.

Chapter 3 focuses on coordinated effects analysis in vertical and conglomerate merger cases. It follows the same structure as Chapter 2, starting with an overview of the economic fundamentals and the Guidelines, and moving on to the enforcement practice.

II. Economics

Non-horizontal coordinated effects economics is a relatively new and controversial area of industrial economics. The game-theoretic analysis is more complex if different markets have to be taken into account.

The following section first discusses coordinated effects in vertical merger cases and then in conglomerate merger cases.

1. Vertical mergers

Post-Chicagoans believe that vertical mergers may raise competitive concerns in situations that the Chicago School missed. Coordinated effects are especially likely to arise if the upstream market is conducive to coordination.[1174] Vertical integration into the downstream market can increase the likelihood of successful upstream coordination because the vertically integrated upstream division gains information about upstream rivals' behaviour through the downstream division. This is just one example of how vertical integration increases the likelihood of upstream coordination. Further examples will be provided in the course of this section.

The word "*upstream market*" will be used in this dissertation to refer to a market that is closer to the raw materials of production. "*Downstream market*" refers to a market that is closer to the end-customer.

Non-horizontal merger analysis is horizontal merger analysis in which additional markets have to be taken into account. The factors that increase the likelihood of coordination (see

[1174] See William Comanor, *Vertical Mergers, Market Powers, and Antitrust* Laws, The American Economic Review, Vol. 57, No. 2, Papers and Proceedings of the Seventy-Ninth Annual Meeting of the American Economic Association, 1967, p. 262. *Comanor* was one of the first to observe that firms may vertically integrate in order to coordinate their pricing. He argued that structural and behavioural factors may form a route through which a firm may bypass markets that resist oligopolistic control. For this, firms need to have sufficient market power to extend their market position to the second stage, and they must be unable to harvest all the advantages of market power. Unfortunately, a study that would have made a valuable contribution to this section no longer seems to be available: Simon Bishop/Andrea Lofaro/Francesco Rosati/Juliet Young, *The Efficiency-Enhancing Effects of Non-Horizontal Mergers,* Brussels, 2005.

Chapter 1) therefore continue to play a role in non-coordinated merger analysis (e.g., market transparency, product homogeneity or the elimination of a maverick).[1175]

The coordinated effects analysis of non-horizontal mergers is a multi-level horizontal coordinated effects analysis in which the different levels interact which makes the analysis more complicated. Nevertheless, the first step is to analyse the horizontal interaction on the different levels. The number of major players in the market following the transaction and the degree of concentration therefore remain the starting point of the analysis. Beyond that, industrial economics has identified factors that are related to the interaction between the different levels and that affect the likelihood of coordination. These factors will now be explained.

1.1. Elimination of a disruptive buyer

That the elimination of a disruptive buyer through a vertical merger may facilitate upstream coordination has already been stated by US' 1984 Guidelines:

> *"The elimination by vertical merger of a particularly disruptive buyer in a downstream market may facilitate collusion in the upstream market. If upstream firms view sales to a particular buyer as sufficiently important, they may deviate from the terms of a collusive agreement in an effort to secure that business, thereby disrupting the operation of the agreement. The merger of such a buyer with an upstream firm may eliminate that rivalry, making it easier for the upstream firm to collude effectively."*[1176]

The EU's 2008 Non-Horizontal Merger Guidelines paraphrased the US' 1984 Guidelines:[1177]

> "*A vertical merger may also involve the elimination of a disruptive buyer in a market. If upstream firms view sales to a particular buyer as sufficiently important, they may be tempted to deviate from the terms of co-ordination in an effort to secure their business. Similarly, a large buyer may be able to tempt the co-ordinating firms to deviate from these terms by concentrating a large amount of its requirements on one supplier or by offering long-term contracts. The acquisition of such a buyer may increase the risk of co-ordination in a market.*"[1178]

The contribution of recent industrial economics has been to put the theory on a firmer economic footing.

[1175] Michael Riordan/Stephen Salop, *Evaluating Vertical Mergers: A Post-Chicago Approach,* Antitrust L.J., Vol. 63, 1994-1995, p. 560.

[1176] 1984 Non-Horizontal Merger Guidelines, § 4.222. See also Volker Nocke/Lucy White, *Vertical Merger, collusion, and disruptive buyers,* International Journal of Industrial Organization 28, 2010, p. 350.

[1177] Nocke et al., *Vertical Merger, collusion, and disruptive buyers,* supra, p. 350.

[1178] 2008 Non-Horizontal Merger Guidelines, para. 90.

The elimination of a disruptive buyer facilitates upstream coordination under three cumulative conditions: (1) the upstream market must be sufficiently concentrated and conducive to coordination; (2) sales to the disruptive downstream firm must be particularly important to upstream firms; and (3) there must be evidence that the buyer was able to disrupt upstream coordination before the merger took place.[1179]

Upstream companies may be willing to sell input to the disruptive buyer at lower prices because they expect higher sales in the future.[1180] This expectation is based on the assumption that the disruptive buyer will expand due to its cost advantages.[1181] The existence of a powerful buyer in the downstream market creates an incentive for upstream firms to deviate from the terms of coordination.[1182] It thereby makes coordination in the upstream market less sustainable.[1183]

Following vertical integration, the downstream division will be able to obtain (at least a part of) its input from the upstream division at marginal costs. Therefore, it no longer has an incentive to exert buyer power on upstream firms to obtain input at lower prices that would, in any case, still be above the upstream firm's marginal costs. Even where the integrated firm still obtains part of its input from the upstream market, upstream firms that deviate from coordination will no longer want to sell to the integrated downstream division because doing so would alert the integrated upstream division to the deviation (since the downstream division would be expected to act as a "*conduit of information*").[1184]

Whereas the 1984 Guidelines require that the eliminated buyer "*differs substantially*" from other firms in the market, *Nocke and White* state that the removal of an upstream buyer facilitates upstream coordination even if downstream firms are symmetric.[1185]

Even more importantly, sustainable upstream coordination is now in the interest of the integrated downstream firm, as it enables higher profits at the level of the upstream

---

[1179] Jeffrey Church, *The Impact of Vertical and Conglomerate Mergers on Competition*, Report for DG Competition, European Commission, 2005, p. 248. *Church* points out that this situation is also recognised by the 1984 Merger Guidelines.

[1180] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 538.

[1181] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 538. *Nocke and White* show that what matters most is the capacity of the downstream buyer. The elimination of a downstream buyer with large capacity is painful for upstream firms who can no longer maximise deviation profits by selling to all downstream firms (*outlets effect*). However, vertical integration with a large-capacity buyer also shields the integrated firm against punishments for deviation (*punishment effect*). The vertically integrated firm may therefore have an increased incentive to deviate from coordination in the upstream market. However, *Nocke and White's* calculation show that the outlet effect will normally outweigh the punishment effect which means that vertical integration overall increases the likelihood of post-merger coordination. See Nocke et al., *Vertical Merger, collusion, and disruptive buyers,* supra, p. 351.

[1182] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 538.

[1183] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 538.

[1184] Nocke et al., *Vertical Merger, collusion, and disruptive buyers,* supra, p. 354.

[1185] Volker Nocke/Lucy White, *Do Vertical Mergers Facilitate Upstream Collusion?,* The American Economic Review, 2007, pp. 1323-1324.

division.[1186] Downstream companies that are not sufficiently integrated to obtain all their input in-house need to source the input in the upstream market. Coordination in the upstream market therefore increases the profit of the now vertically integrated entity's upstream division.[1187] At the same time, the vertically integrated downstream entity has a competitive advantage because it can source the input in-house at marginal costs. This might enable it to gain a larger share of the downstream market.[1188]

As a result, the integrated downstream division will no longer have an incentive to disturb upstream coordination.[1189]

> *"If such a disruptive firm merges with an upstream competitor, its disruptive influence will be reduced. It will have no interest in disrupting upstream pricing coordination directed at its rivals. It will have a greater incentive to match the higher price of its downstream rivals in order to facilitate coordinated input pricing. Thus, in situations where the downstream merger partner previously has been a disruptive input buyer, it is more likely that the merger will lead to input price increases that raise rivals' costs."*[1190]

However, it should be noted that a vertical merger can also have the opposite effect: it can create a new maverick and reduce the likelihood of coordination. This is likely to happen if the vertical merger increases the asymmetries between upstream and downstream firms or reduces upstream market transparency by enabling the merged entity to secretly expand its sales through its downstream division.[1191] This may be the case where the merged company is the only vertically integrated company in the upstream market. In that case, the merged company's cost structure (and with it its incentives) would differ from that of its rivals. Vertical integration also often produces substantial efficiencies and this again affects the likelihood of successful coordination.

If the downstream entity still procures part of its input from third parties, vertical integration may reduce the threat that the deviation of the merged company from the terms of coordination will be successfully punished. If the competitors started a price war, the downstream division of the merged company would profit from the punishment as it could

[1186] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 538.
[1187] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 542.
[1188] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 542.
[1189] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 538. *Church* gives an overview of *Riordan and Salop's* theory in his study for the EC. See Church, *The Impact of Vertical and Conglomerate Mergers on Competition*, supra, pp. 248-249.
[1190] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 538.
[1191] Church, *The Impact of Vertical and Conglomerate Mergers on Competition*, supra, p. 252, with reference to the 1984 Non-Horizontal Merger Guidelines, §2.12; Baker, *Mavericks, Mergers, and Exclusion*, supra, pp. 176-177.

obtain its inputs at lower costs.[1192] This would offset some of the losses incurred by the integrated upstream division and would render the punishment phase less painful for the integrated upstream firm than for its non-integrated rivals.[1193] The integrated company would know that it could come out of the punishment situation stronger than its rivals. However, *Nocke and White* hold that vertical integration with an efficient downstream firm will, overall, facilitate upstream coordination because the reduction of the threat of punishment for the vertically integrated firm does not outweigh the effect that the increased capability of the vertically integrated firm to punish rivals itself has on the sustainability of upstream coordination.[1194]

This is because the vertically integrated company will itself be able to retaliate more effectively by responding more quickly and on several market levels. The threat of punishment by the vertically integrated company becomes more credible as a result of the transaction. This increases the stability of upstream coordination, as upstream competitors no longer dare to deviate from the terms of coordination. In this context, *Nocke and White* have shown that in Bertrand price competition, the non-integrated upstream rivals may not be able to react to perceived deviation because they are already bound by their contracts to downstream customers, whereas the integrated firm can sell to its own downstream division.[1195]

As a result of the abovementioned effects, *Nocke and White* suggest that antitrust authorities should be wary of vertical integration with large buyers (the larger the buyer, the greater the competition concerns). An appropriate response would be to require the firms to divest part of their downstream capacity or products to suitable purchasers before allowing the merger.[1196]

1.2. Anti-competitive information exchange

Vertical integration increases the likelihood of sustainable coordination in the upstream market if it facilitates the exchange of pricing information or other sensitive information between upstream competitors and thereby increases transparency in the upstream

---

[1192] Nocke et al., *Do Vertical Mergers Facilitate Upstream Collusion?,* supra, pp. 1322-1324. *Nocke and White* call this the "*outlets effect*" and the "punishment effect". See also Michael Riordan, *Competitive Effects of Vertical Integration,* in: Paolo Buccirossi (ed.), Handbook of Antitrust Economics, MIT Press, Ch. 4, p. 160.
[1193] Nocke et al., *Do Vertical Mergers Facilitate Upstream Collusion?,* supra, pp. 1323-1324. *Nocke and White* call this the "*punishment effect*." The punishment effect is unlikely to offset or exceed the outlets effect. A vertical merger with an upstream market that is conducive to coordination will therefore facilitate coordination.
[1194] Nocke et al., *Do Vertical Mergers Facilitate Upstream Collusion?,* supra, pp. 1323-1324.
[1195] Nocke et al., *Do Vertical Mergers Facilitate Upstream Collusion?,* supra, pp. 1323-1324.
[1196] Nocke et al., *Vertical Merger, collusion, and disruptive buyers,* supra, p. 354.

market.[1197] The vertically integrated downstream division acts as a "*conduit*" of information. It transmits information about the behaviour of the upstream division's rivals that it has witnessed in the downstream market to the upstream division. This happens in the following way: the downstream division continues to buy part of its input from competitors of its upstream division.[1198] Through its interaction with upstream companies, it gains information about the prices that these companies charge in the downstream market.[1199] It then communicates deviations from the terms of coordination to the upstream division.[1200] The downstream division therefore acts as a "*monitoring device*".[1201]

The exchange of anti-competitive information is probably the most severe and best researched form of anti-competitive coordinated effects resulting from a vertical merger. Several studies in the EU and the US have investigated the threat of post-merger anti-competitive information exchange.

Riordan and Salop have identified three conditions for anti-competitive information exchange: (1) the information disclosed by downstream competitors must be projectable; (2) the information must be unique; and (3) the structure of the upstream market must be conducive to price coordination.[1202]

Projectability requires that the price information is reliable. The vertically integrated company must be able to draw conclusions regarding the behaviour of upstream rivals from the downstream information.[1203] This is the case if the prices charged to the integrated downstream entity are the same – or at least similar to – the prices charged to other downstream entities.[1204]

However, the prices charged to the integrated downstream division will often differ from those charged to other downstream companies.[1205] The vertically integrated company will have a greater bargaining power, which enables it to negotiate lower prices.[1206] Rivals of the

---

[1197] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 557.
[1198] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 558.
[1199] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 558.
[1200] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 558.
[1201] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 558.
[1202] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 558.
[1203] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 558.
[1204] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 558.
[1205] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 558. Lower prices may be the result of the awareness of the non-integrated upstream firm that the integrated downstream firm is able to obtain input from its upstream division at marginal costs. As a result, the vertically integrated firm will not be inclined to pay a price that is substantially above the inputs marginal costs. However, an non-integrated upstream rival may also conclude that the integrated downstream firm would have satisfied its input needs using internal supplies had these inputs been sufficient and suitable. It may therefore decide to charge more for the input. If the non-integrated upstream rival foresees that the information will be transmitted to the integrated upstream division, it may decide to charge the price it would demand from the integrated firm's rivals in order to facilitate upstream collusion. However, it may also quote a deceptively high price in order to undercut the integrated upstream division in the downstream market. Pp. 558-559.
[1206] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 558.

upstream division may fear that their cheating may be detected if they offer prices below the coordination level to the downstream division, as they anticipate that the downstream division will pass on the information to the upstream division. The price charged to the downstream division does not therefore necessarily represent the prices upstream competitors charge to other buyers.

The information-channel must have unique benefits.[1207] This is the case if the information is not available by other feasible means. Unique benefits do not exist if upstream firms use single list-price schedules for sales to downstream companies.[1208] If unique benefits are absent, vertical integration is unlikely to increase the likelihood of successful upstream coordination (i.e., there is a lack of causality).[1209]

There may also be a trade-off between the uniqueness of the transmitted information and its projectability. Perfectly unique information will seldom be projectable and projectable information will seldom be unique.[1210]

However, vertical integration can still make information transmission easier due to the fact that having a downstream division is key to obtaining relatively undistorted information. The alternative would be to collect information about the pricing behaviour of rivals from customers. However, customers follow their own agenda and may understate the price charged by upstream firms in order to obtain a better offer.[1211]

The third condition for anti-competitive information exchange is that the structure of the upstream market must favour coordination. This is where the factors discussed in Chapter 2 come into play (e.g., the number of major players in the market, market concentration levels, product homogeneity or symmetry between firms).[1212]

1.4. Cartelisation through exclusive contracts

Vertical integration can enable cartelisation in the downstream market.[1213] This will be the case if the upstream firm convinces non-integrated downstream firms to accept exclusive

[1207] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 559.
[1208] Riordan et al., *Evaluating Vertical Mergers,* supra, pp. 559-560. Downstream firms may also have an incentive to disclose pricing information to upstream firms despite the risk of upstream collusion, if they feel that they might obtain better deals by referring to the more competitive prices charged by their rivals.
[1209] Riordan et al., *Evaluating Vertical Mergers,* supra, pp. 559-560. Downstream firms may also have an incentive to disclose pricing information to upstream firms despite the risk of upstream collusion, if they feel that they might obtain better deals by referring to the more competitive prices charged by their rivals.
[1210] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 560.
[1211] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 560.
[1212] Riordan et al., *Evaluating Vertical Mergers,* supra, p. 560.
[1213] Yongmin Chen/Michael Riordan, *Vertical Integration, exclusive dealing and ex post cartelization,* The RAND Journal of Economics, Vol. 38, No. 1, 2007, pp. 1-21. See also Riordan, *Competitive Effects of Vertical*

supply contracts on supra-competitive terms. To motivate non-integrated downstream firms to enter into the deal, the integrated upstream firm can either use rewards, direct compensation for foregone supply, or it can threaten to start a price war if the non-integrated downstream entity refuses to enter into an exclusive-dealing agreement.[1214]

Chen and Riordan show that by charging a higher marginal price to non-integrated downstream rivals, the integrated upstream firm creates a "*more collusive*" downstream outcome. The resulting industry profits are shared with other market participants through lump-sum transfers.[1215] The vertically integrated firm threatens to lower the price charged by its downstream entity (and thereby to increase the competitive pressure in the downstream market) in order to persuade non-integrated downstream firms to accept the exclusive dealing agreement.[1216] Whether downstream cartelisation is possible or feasible depends upon the degree of heterogeneity among downstream firms, the degree of downstream market concentration and the degree to which downstream competition is localised.[1217]

Nevertheless, cartelisation attempts, like the one described above, suffer from commitment problems. The vertically integrated upstream firm - the "*cartel ringmaster*" - may be tempted to "*cheat*" by offering "*individual sweetheart deals*" to non-integrated downstream firms.

Again, vertical integration can help to overcome the commitment problem by altering the incentive structure of the newly integrated upstream supplier.[1218] Following vertical integration, deviations from cartelisation will strengthen the rivals of the integrated downstream division, which will negatively affect the profits of the latter. Deviation therefore comes at a higher cost for the vertically integrated firm, which is more likely to follow what *Riordan* calls a "*strategy of coordinated exclusive contracting*" post-merger.[1219]

1.5. Conclusion

The current developments in economic theory indicate that vertical mergers are not – as the Chicago school believes – always either competitively neutral or pro-competitive. Industrial

---

Integration, supra, Ch. 4, p. 161. The coexistence of vertical integration and exclusive contracts is especially common in intermediate product markets. The model used by Chen and Riordan assumes the existence of a bidding market, downstream "*winner-take-all competition*" for the supply of each customer, the production of goods to order, heterogeneity of products and at least some price sensitivity. Chen et al., *Vertical Integration, exclusive dealing and ex post cartelization*, supra, p. 14.

[1214] Chen et al., *Vertical Integration, exclusive dealing and ex post cartelization,* supra, p. 14.

[1215] Chen et al., *Vertical Integration, exclusive dealing and ex post cartelization,* supra, p. 15, with further reference.

[1216] Chen et al., *Vertical Integration, exclusive dealing and ex post cartelization,* supra, p. 15, with further reference.

[1217] Chen et al., *Vertical Integration, exclusive dealing and ex post cartelization,* supra, p. 1.

[1218] Riordan, *Competitive Effects of Vertical Integration,* supra, Ch. 4, p. 161.

[1219] Riordan, *Competitive Effects of Vertical Integration,* supra, Ch. 4, p. 161.

economics has recently identified an array of situations in which a merger should be subjected to in-depth review by an antitrust authority.

2. Conglomerate Mergers

Since *Edwards* first remarked that a multiplicity of contact between conglomerate enterprises "*may blunt the edge of their competition*", several studies have analysed the relationship between multimarket contact and the likelihood of sustainable collusion.[1220]

In their 1990 paper, *Bernheim and Whinston* showed that multimarket contacts can relax the incentive constraints which limit the extent of collusion.[1221] Multimarket contacts facilitate collusion if there are asymmetries: (1) between markets that repeatedly interact with each other, or (2) between firms and across different markets in which they interact.[1222]

Bernheim and Whinston's model has the drawback that it was based on perfect monitoring as a simplifying assumption. *Matsushima* later complemented *Bernheim and Whinston's* analysis by concentrating on a two-person infinitely-repeated game with imperfect monitoring.[1223] He reached the following conclusion:

> "*[W]hen firms encounter each other in multiple markets and make their supply choices in each distinct market dependent not only on the history of the prices realized in that market but also on the histories of the prices realized in all other markets, it is much easier for these firms to achieve implicit collusion than when they encounter each other in only a single market*".[1224]

Spagnolo further elaborated on *Bernheim and Whinston's* analysis by showing that multimarket contact will always facilitate collusion as long as the firm's static objective

[1220] Corwin Edwards, *Conglomerate Bigness as a Source of Power,* in National Bureau of Economic Research (NBER) (eds.), Business Concentration and Price Policy, NBER conference report, Princeton: Princeton University Press, 1955, available at: www.nber.org/chapters/c0967.pdf, last viewed: 23 April 2013. See also Douglas Bernheim/Michael Whinston, *Multimarket Contact and Collusive Behavior,* RAND Journal of Economics, Vol. 21, No. 1, Spring 1990, p. 1; Church, *The Impact of Vertical and Conglomerate Mergers on Competition*, supra, p. 255.

[1221] Bernheim et al., *Multimarket Contact and Collusive Behavior,* supra, pp. 1-26. On *Bernheim and Whinston's* contribution, see also William Evans/Ioannis Kessides, *Living by the "Golden Rule" -- Multimarket contact in the US Airline Industry*, Quarterly Journal of Economics 109, 1994, pp. 341-366.

[1222] Bernheim et al., *Multimarket Contact and Collusive Behavior,* supra, p. 22**.** Multimarket contacts do not necessarily have undesirable effects on the market. The extent to which they affect prices and profits depends on the affected markets. *Bernheim and Whinston* found out that, if firms are identical and markets differ, multimarket contacts are likely to cause profits and prices to rise in some markets but fall in others. If firms' cost structures differ, multimarket contacts cause prices to rise or fall depending on the discount factor. Bernheim et al., *Multimarket Contact and Collusive Behavior,* supra, p. 22.

[1223] Hitoshi Matsushima, *Multimarket Contact, Imperfect Monitoring, and Implicit Collusion,* Journal of Economic Theory 98, 2001, pp. 159, 161. *Matsushima* explains that "*the multimarket effect in the perfect monitoring case is quite limited, because […] when markets and firms are identical, multimarket contact never enhances firms' ability to enforce implicit collusion*".

[1224] Matsushima, *Multimarket Contact, Imperfect Monitoring, and Implicit Collusion,* supra, p. 159.

function is strictly concave (*downward-sloping*) due to real-world imperfections.[1225] The result does not depend upon the existence of asymmetries. If firms have strictly concave objective functions, their actions will be interdependent. In this case, one firm's profit evaluation in one market will depend upon the profits realised by another.[1226]

Spagnolo showed that collusion will always be facilitated if two factors are present: (1) the expected utility losses from simultaneous retaliations in several markets are larger than those expected from independent retaliation, and (2) short-run profits from simultaneous deviations are less than short-run gains from independent deviations.[1227]

In a recent paper*, Sorenson* reached the conclusion that, in the case of firms enjoying reciprocal advantages across markets, multimarket contact allowed them to implement sub-game perfect strategies that are weakly renegotiation-proof.[1228] In other words, if several firms enjoy advantages across markets, multimarket contacts may enable them to coordinate their behaviour. That coordination will not be stable, but it will not directly falter due to deviation either ("*weakly renegotiation proof*"). "*Renegotiation*" in the game-theoretic context means that players depart from the common pattern of behaviour because they feel that their incentives are better served by deviating.

Coordination is renegotiation-proof if there is a credible threat of punishment. Firms' incentives to deviate from the terms of coordination are therefore reduced, as they are aware that their deviation will lead to retaliation by the other firms, with costs that offset or exceed deviation profits.

However, the credibility of the punishment is reduced if the punishment is subject to renegotiation. This is the case if firms have an incentive not to retaliate because they would profit more from letting "*bygones be bygones*".[1229] After all, retaliation comes at a cost for the retaliating companies, too. If they engage in a price war, they lose out on profits they could otherwise have gained by charging a higher price.

A strategy is "*renegotiation-proof*", if the incentive structure of the participating firms is such that deviation from joined retaliation is unfeasible. *Sorenson* explains that "*[n]one of the firms should be able to gain more by deviating from its punishment strategy than it would subsequently lose as a result of its deviation.*"[1230]

[1225] Giancarlo Spagnolo, *On Interdependent Supergames: Multimarket Contact, Concavity, and Collusion,* Journal of Economic Theory 89, 1999, p. 128.
[1226] Spagnolo, *On Interdependent Supergames*, supra, p. 128.
[1227] Spagnolo, *On Interdependent Supergames*, supra, p. 128.
[1228] Timothy Sorenson, *Credible Collusion in Multimarket Oligopoly,* Manag. Decis. Econ. 28, 2007, p. 115.
[1229] Sorenson, *Credible Collusion in Multimarket Oligopoly,* supra, p. 116.
[1230] Sorenson, *Credible Collusion in Multimarket Oligopoly,* supra, p. 115.

Multimarket contacts may also enable a transfer of collusive potential form one market to another. *Sorenson* states that conglomerate firms active in markets with differing conditions may be able to "*transfer slack in the incentive constraints from a market where cooperation is sustainable on a stand-alone basis to another where it is not*".[1231]

Firms may also follow a cooperative "*spheres of influence*" strategy, expanding in markets in which they are successful and retreating from others in which their competitive position is weak.[1232]

Similarly, *Fu* showed that the multimarket contact of US newspaper chains often led to reduced circulation competition as well as to higher prices for advertising spaces in the newspapers.[1233] *Parker and Röller* obtained similar results for the US mobile telephone industry. Analysing a market that is characterised by dualistic competition, they found that multimarket contact offered a partial explanation for the non-competitive prices in the US mobile telephone industry.[1234] Their advice to governments planning to adopt limited entry schemes for regulated monopolistic markets was to be aware of the dangers of cross-market ownership and multimarket contact.[1235]

On the other hand, multimarket contacts can also hinder coordination. Coordination becomes more difficult to monitor, and the information exchange becomes more complex, as multimarket contacts between conglomerate firms increase. At the same time, destabilising events may also spill from one market into another.[1236]

3. A Word of caution

The situations described are examples how non-horizontal mergers facilitate coordination. All of the models described above have been based on simplifying assumptions.

The authors of the cited literature admit that the calculations work on the basis of simpler-than-life situations.[1237] The use of simplifications is necessary to enable modelling. However,

---

[1231] Sorenson, *Credible Collusion in Multimarket Oligopoly,* supra, p. 116.

[1232] Sorenson, *Credible Collusion in Multimarket Oligopoly,* supra, p. 116. *Sorenson* states that, in this way, the payoffs from collaboration rise while the payoffs from deviation fall.

[1233] Wayne Fu, *Multimarket Contact of US Newspaper Chains: Circulation Competition and Market Coordination,* Information Economics and Policy 15, 2003, p. 501. Increased advertising prices result if the paper profits from a homogeneous local readership that is targetable by advertisers. This is often the case if the paper supplies a population within a certain geographic area. Fu, *Multimarket Contact of US Newspaper Chains*, supra, p. 505. Local newspapers therefore have an incentive to keep rival newspapers out of their geographic area of distribution.

[1234] Philip Parker/Lars-Hendrik Röller, *Collusive conduct in duopolies: multimarket contact and cross-ownership in the mobile telephone industry,* RAND Journal of Economics, Vol. 28, No. 2, 1997, p. 304.

[1235] Parker et al., *Collusive conduct in duopolies*, supra, p. 321.

[1236] Evans et al., *Living by the "Golden Rule",* supra, p. 342, with further reference.

[1237] E.g., Nocke et al., *Do Vertical Mergers Facilitate Upstream Collusion?,* supra, p. 1324.

it also risks displaying as predictable circumstances that are hard to predict because they are affected by numerous factors. Not all of those factors are known. Therefore, the models' predictions may be wrong. This and the costs of modelling (including the time spent) are the main reasons why competition authorities often prefer to use a common sense approach, even though it is doubtful whether that approach is more likely to get it right.[1238]

III. Guidelines

1. EU

The EC published its non-horizontal merger Guidelines several years after the introduction of the 2004 Merger Regulation and more than four years after the publication of the 2004 Horizontal Merger Guidelines.[1239] The 2008 Non-Horizontal Merger Guidelines fully endorse economic analysis.[1240] They mirror the Horizontal Merger Guidelines as much as possible. They recognise that non-horizontal transactions will, in most cases, either be competitively neutral or pro-competitive. Nevertheless, they identify certain situations in which non-horizontal transactions may facilitate coordination.

The EC's non-horizontal merger guidelines are up-to-date. The US guidelines on non-horizontal mergers date from 1984. They were written at a time when the understanding of the effects of non-horizontal mergers was much less developed than it is today.

Like the Horizontal Merger Guidelines, the Non-Horizontal Merger Guidelines distinguish between unilateral and coordinated effects.[1241] Coordinated effects are likely to arise "*where the merger changes the nature of competition in such a way that firms that previously were not coordinating their behaviour, are now significantly more likely to coordinate to raise prices or otherwise harm effective competition*".[1242]

[1238] Amelio et al., *ABF/GBI Business: coordinated effects baked again,* supra, p. 96.
[1239] The EC probably intended to wait until the General Court had handed down a decision in *"Honeywell"*.See Case No. COMP/M.2220, *General Electric/Honeywell*, supra; General Court, Case T-210/01, *General Electric*, supra. See also Baron, *Vorbemerkung zur FKVO*, supra, para. 17.
[1240] Baron, *Vorbemerkung zur FKVO*, supra, para. 17.
[1241] 2008 Non-Horizontal Merger Guidelines, para. 17.
[1242] 2008 Non-Horizontal Merger Guidelines, para. 19.

1.1. Vertical mergers

1.1.1. Number of major competitors in the market and concentration levels

The number of major competitors in the market is the most important indicator of post-merger coordinated effects in EU merger control. Concentration levels also are also an important factor.[1243]

The EC is unlikely to engage in an in-depth investigation unless the transaction results in a post-merger market share of at least 30% and a post-merger HHI of at least 2,000.[1244] The EC also claims that it will not extensively investigate a non-horizontal merger unless: (1) it involves a company that is likely to expand significantly in the near future (e.g., due to innovation); (2) there are significant cross-shareholdings or cross-directorships; (3) one of the merging firms has a high likelihood of disrupting coordinated conduct (e.g., a merger involving an industry maverick); and (4) there are indications of past or ongoing coordination or facilitating practices.[1245]

1.1.2. Requirements for successful coordination

Four conditions are necessary for coordination: (1) the ability to reach an agreement on the terms of coordination; (2) the ability to monitor whether competitors adhere to the terms of coordination; (3) the existence of deterrence mechanisms (i.e., some credible form of timely retaliation); and (4) a lack of compromising outsider reaction or countervailing buyer-power.[1246]

The basic requirements for sustained coordination are, therefore, the same in horizontal and non-horizontal merger cases.[1247] Non-horizontal coordinated effects analysis is horizontal coordinated effects analysis in which the effects of actions on other market levels are taken into account. Most of the rules for horizontal coordinated effects analysis therefore also apply to non-horizontal coordinated effects analysis.

[1243] 2008 Non-Horizontal Merger Guidelines, para. 24.
[1244] 2008 Non-Horizontal Merger Guidelines paras. 25, 27. The Guidelines emphasise that the thresholds do not give rise to a legal presumption.
[1245] 2008 Non-Horizontal Merger Guidelines, para. 26.
[1246] 2008 Non-Horizontal Merger Guidelines, para. 81.
[1247] For comparison, see the 2008 Horizontal Merger Guidelines, para. 22. Please refer to Chapter 1 for the concept of coordinated effects.

1.1.2.1. Understanding on the terms of coordination

Vertical mergers can make it easier for firms to reach an understanding on the terms of coordination.[1248] They do not directly reduce the number of main competitors in the market. However, the reduction may happen in the long-run through foreclosure. The remaining competitors may then find it easier to coordinate.[1249]

Non-horizontal transactions can increase the degree of symmetry between competing firms. As has been explained in Chapter 2, higher levels of symmetry (whether product, capacity or cost structure symmetry) increase the probability of successful coordination because the coordinating companies have similar incentive structures. Non-horizontal transactions can also increase the level of transparency.[1250] Ths may happen if the downstream division acts as a "*conduit of information*" for the upstream division. This is the case if the downstream division informs the upstream division about the prices charged by the upstream division's rivals to customers.

A special threat to competition exists where the merger leads to the elimination of a maverick in the upstream or downstream market. It has already been explained in Chapter 2 that a maverick company has an incentive structure that varies from that of its competitors. For the maverick, coordination is less profitable than continued competition. Many maverick companies are low-cost competitors that gain higher profits by undercutting rivals than from coordinated price-setting. A vertical merger may eliminate a maverick in three ways:

(1) Direct elimination: This will be the case, if the maverick is being vertically integrated. The vertically integrated company is likely to engage in different pricing behaviour than the former maverick because it has a different cost structure. Another company may then take up the maverick position. However, the new maverick is likely to have a higher equilibrium pricing level than the eliminated firm. Otherwise, it would have acted as a maverick before the merger took place. The new maverick will exert less pressure on its competitors with the result that coordination is now more likely to be sustainable.

(2) Lon-run foreclosure: The maverick may be eliminated in the long-run through foreclosure. This will increase the likelihood of successful coordination between the remaining firms in the long-run.[1251]

[1248] 2008 Non-Horizontal Merger Guidelines, para. 82.
[1249] 2008 Non-Horizontal Merger Guidelines, para. 83.
[1250] 2008 Non-Horizontal Merger Guidelines, para. 84.
[1251] In this case, the vertical merger's direct effect would be foreclosure. Its secondary or indirect effect would be coordination. The non-coordinated effect would be the elimination of an upstream or downstream rival, the coordinated effect would be the increased likelihood of (long-run) coordination due to the foreclosure (e.g. of a former maverick).

(3) The maverick's incentive structure may be altered by the merger so as to make coordination more profitable than deviation. This is the case if retaliation becomes feasible post-merger because the integrated firm can punish deviations at different levels of the supply chain. It has been explained in Ch. 3, II. that this is a realistic scenario. Vertically integrated firms can deal out more effective punishments and their ability to detect cheating increases if the downstream division acts as a "*conduit of information*".

Unfortunately, the Guidelines only discuss the direct elimination of the maverick:

> "*[The] vertical integration of a maverick may alter its incentives to such an extent that co-ordination will no longer be profitable*."[1252]

The Guidelines do not take the other alternatives into account.

The Non-Horizontal Guidelines also fail to mention that and how vertical mergers create new mavericks. If this happens, the merger reduces the likelihood of successful coordination. *Church* incorporated this aspect into his Report for DG Competition.[1253] He laid out that vertical mergers that increase the asymmetry between upstream and downstream firms or reduce market transparency by enabling the merged entity to secretly expand its sales through its downstream division, will alter the incentive structures of the other market participants, with the result that deviation is more profitable than coordination.

1.1.2.2. Monitoring deviations

Companies must be able to monitor rival behaviour in order to detect deviations. Vertical transactions sometimes make it easier to monitor rival behaviour. This will be the case if the vertically integrated downstream firm passes on information from the downstream purchasing market to the upstream division.[1254]

Another situation with a similar effect is vertical integration in a downstream market in which price information is public and an upstream market in which pricing information is confidential.[1255]

Vertical integration will also make the market more transparent if it reduces the number of competitors (e.g., through successful post-merger foreclosure).[1256]

[1252] 2008 Non-Horizontal Merger Guidelines, para. 85.
[1253] Church, *The Impact of Vertical and Conglomerate Mergers on Competition*, supra, p. xlvii.
[1254] 2008 Non-Horizontal Merger Guidelines, para. 86.
[1255] 2008 Non-Horizontal Merger Guidelines, para. 86.

1.1.2.3. Deterrence mechanisms

Vertical mergers can create more effective deterrence mechanisms. This will be the case if the vertically integrated company is a crucial customer or supplier.[1257] Competitors in the coordination market not only have to take into account the likely punishment on their own market level. They need to consider the harm that can arise from losing a crucial customer or supplier.

Companies that depend on the vertically integrated firm will not risk deviating from the terms of coordination since they will fear that the punishment will occur at several market levels.[1258] As has already been mentioned, the vertically integrated company may also be able to detect punishment more quickly due to increased market transparency or the fact that the downstream division acts as a "*conduit of information*" which increases the credibility of the threat of punishment.

1.1.2.4. Reaction of outsiders

Vertical mergers can reduce the likelihood of destabilising outsider reaction. One way in which this can happen is because the merger increases entry barriers.[1259] The vertically integrated company may be able to react to a new entrant on several levels of the supply chain. For example, it can refuse to supply the new entrant.

Destabilising outsider reaction becomes less likely if the merger eliminates a disruptive buyer.[1260] This will be the case if the downstream division (the former disruptive buyer) satisfies most of its input demand in-house post-merger at marginal costs.

1.2. Conglomerate mergers

The EC Guidelines contain a very short three paragraphs on the coordinated effects of conglomerate mergers. For comparison, the section on the coordinated effects of vertical mergers comprises 26 paragraphs.[1261]

[1256] 2008 Non-Horizontal Merger Guidelines, para. 87.
[1257] 2008 Non-Horizontal Merger Guidelines, para. 88.
[1258] 2008 Non-Horizontal Merger Guidelines, para. 88.
[1259] 2008 Non-Horizontal Merger Guidelines, para. 89.
[1260] 2008 Non-Horizontal Merger Guidelines, para. 90.
[1261] 2008 Non-Horizontal Merger Guidelines. For the section on coordinated effects, see paras. 119-121. For the section on unilateral effects, see paras. 93-118.

The Guidelines state that most conglomerate mergers are not anti-competitive.[1262] The Guidelines define conglomerate mergers as mergers between firms that are in a relationship which is neither purely horizontal nor vertical.[1263] The focus of the Guidelines is on conglomerate mergers between companies that are active in closely-related markets.[1264]

Conglomerate mergers may give rise to unilateral or coordinated effects. Coordinated effects are likely to arise, if: (1) the affected markets are conducive to coordination (horizontal market analysis on the basis of the factors laid out in Chapter 2), and (2) the merger results in any of the following:

- The number of rivals in any of the affected markets is reduced to (or was already at) a point where coordination is possible.

- The rivals find themselves in a more vulnerable position due to multi-market contacts with the conglomerate firm. For example, the conglomerate firm might be in a better position to detect and punish deviation through its multi-market contacts.[1265]

Altogether, the Guidelines' section on conglomerate mergers is too short to provide real guidance on the EC's coordinated effects analysis in the context of conglomerate mergers.

The Guidelines do not discuss the transfer of collusive potential from one market to another.[1266] Nor are the effects of conglomerate transactions on the complexity of the market discussed. Conglomerate mergers can increase the complexity of the market with the result that monitoring and the passing on of information between different markets becomes more difficult which reduces the likelihood of successful coordination.[1267]

[1262] 2008 Non-Horizontal Merger Guidelines, para. 92.
[1263] 2008 Non-Horizontal Merger Guidelines, para. 91.
[1264] 2008 Non-Horizontal Merger Guidelines, para. 91.
[1265] 2008 Non-Horizontal Merger Guidelines, paras. 120-121.
[1266] See Ch. 3, II.2.
[1267] See Ch. 3, II.2.

2. US

The current non-horizontal merger guidelines in the US date from 1984. They were written during the Reagan Administration (1981-1989) and under the influence of the Chicago School. They are no longer up to date. The DoJ disregards the Guidelines where they seem out-of-date. The 2010 US Horizontal Merger Guidelines, as the name suggests, only apply to horizontal mergers. The lack of up-to-date non-horizontal merger guidelines negatively affects the willingness of the DoJ and the FTC to review such mergers. The officials lack administrative guidance on which they could base their decision. The following section provides an overview of the content of the 1984 Non-Horizontal Merger Guidelines with regards to coordinated effects analysis of vertical and conglomerate mergers.

2.1. Vertical mergers

It should be mentioned that, in 1984, the Non-Horizontal Merger Guidelines constituted a real breakthrough. The Chicago School had finally found its way into the DoJ's administrative practice. The 1984 Guidelines were published during the term of Attorney General William Baxter during the conservative Reagan Administration.[1268]

The sentiment of the time was that vertical mergers are almost always efficiency (and thereby welfare) enhancing, or at least competitively neutral, with only few exceptions.[1269] The Guidelines distinguished between unilateral and coordinated anti-competitive effects. The latter were only thought to arise if the transaction: (1) led to the elimination of specific potential entrants, (2) increased barriers to entry, (3) facilitated of post-merger collusion, (4) eliminated a disruptive buyer, or (5) evaded rate regulation.[1270]

Market concentration levels are believed to be critical beyond an HHI of 1,800.[1271] Mergers leading to a somewhat lower HHI will be met with scrutiny if other factors indicate that there is a high risk of collusion in any of the affected markets.[1272] On the basis of the "*sliding-scale approach*", in-depth reviews are increasingly likely with rising concentration levels.[1273]

[1268] Reagan's first term in office started on 20 January 1981. He was re-elected in 1984.

[1269] 1984 Non-Horizontal Merger Guidelines, §§ 4.0, 4.24; Thomas Rosch, *Terra Incognita: Vertical and Conglomerate Merger and Interlocking Directorate Law Enforcement in the United States,* 11 September 2009, available at: http://www.ftc.gov/speeches/rosch/090911roschspeechunivhongkong.pdf, last viewed: 23 April 2013, p. 11.

[1270] 1984 Non-Horizontal Merger Guidelines, §4.

[1271] 1984 Non-Horizontal Merger Guidelines, §4.

[1272] 1984 Non-Horizontal Merger Guidelines, §4.

[1273] 1984 Non-Horizontal Merger Guidelines, §4.

2.1.1. Elimination of a potential entrant

A non-horizontal merger with a potential entrant increases the likelihood of successful post-merger coordination if the potential entrant acted as a restraining force on the market.[1274]

As long as the potential entrant acts as a restraining force on the market, the companies in the market will forego maximum profits to avoid outside entry. The potential new entrant may also be a customer that would enter the market if inputs became too expensive.[1275] Once the potential entrant has been eliminated, prices in the market are likely to rise to the equilibrium coordination price as long as no (perceived) new entrant has to be deterred.[1276]

The DoJ is unlikely to challenge a merger with a potential competitor if the acquired company has a market share of only 5% or less.[1277] Inversely, the DoJ is likely to challenge a merger if the acquired company has a market share of 20% or more and additional conditions indicate a likelihood of post-merger anti-competitive effects.[1278]

2.1.2. Barriers to entry

The DoJ may challenge a vertical merger that strengthens entry barriers and also increases the HHI in the primary market to more than 1,800. A vertical mergers increase barriers to entry if: (1) new entrants have to enter both the upstream and the downstream market at the same time; (2) the requirement of simultaneous entry makes successful market entry significantly more difficult; and (3) the structure and characteristics of the upstream or the downstream market are "*otherwise so conducive to non-competitive performance*" that coordination is likely post-merger.[1279]

If there are at least three other potential entrants, the elimination of the fourth will not significantly increase the likelihood of coordination.[1280] The chances that the DoJ challenges the transaction because of the elimination of a potential entrant are inversely related to the number of potential entrants post-merger.[1281]

2.1.3. Likelihood of post-merger coordination

[1274] 1984 Non-Horizontal Merger Guidelines, §4.
[1275] 1984 Non-Horizontal Merger Guidelines, §4.
[1276] 1984 Non-Horizontal Merger Guidelines, §4.111.
[1277] 1984 Non-Horizontal Merger Guidelines, §4.
[1278] 1984 Non-Horizontal Merger Guidelines, §4.
[1279] 1984 Non-Horizontal Merger Guidelines, §4.
[1280] 1984 Merger Guidelines, §4.
[1281] 1984 Non-Horizontal Merger Guidelines, §4.

Barriers to entry and the elimination of a potential entrant can affect both the likelihood of post-merger unilateral and coordinated anti-competitive effects.

However, the Guidelines also list some factors that contribute specifically to post-merger coordination. These are: (1) vertical integration at the retail level, and (2) the elimination of a disruptive buyer.[1282]

2.1.3.1. Retail-level vertical integration

A high level of vertical integration into the retail market can facilitate coordination in the upstream market by making it easier for upstream firms to monitor prices.[1283]

Retail prices tend to be more transparent than prices in the upstream market because they are usually made public (advertisements, goods being sold in stores, etc.).[1284] Moreover, through vertical integration, an upstream company can gain information about the actions of its competitors through its downstream division.[1285]

These factors allow for the more efficient monitoring of upstream rivals' actions. The downstream division can communicate information gathered through its dealings with upstream companies in the downstream purchasing market to the upstream division (unless it procures all of its input in-house).[1286] This also reduces the time-lag between the deviation and the punishment and makes the punishment more efficient.[1287]

[1282] 1984 Non-Horizontal Merger Guidelines, §§4.221, 4.222.
[1283] 1984 Non-Horizontal Merger Guidelines, §4.221.
[1284] 1984 Non-Horizontal Merger Guidelines, §4.221. A merger is unlikely to be challenged on the basis of possible post-merger collusion, unless the overall concentration in the upstream market exceeds an HHI of 1800.
[1285] 1984 Non-Horizontal Merger Guidelines, §4.221.
[1286] 1984 Non-Horizontal Merger Guidelines, §4.221.
[1287] 1984 Non-Horizontal Merger Guidelines, §4.221. For example, this will be the case, if products in the upstream market are sold through vertically integrated retail outlets.

2.1.3.2. Elimination of a disruptive buyer

Vertical integration increases the risk of coordinated effects if it eliminates a disruptive buyer. The effect that a disruptive buyer has on coordination has been described in Chapter 3, II. The US' 1984 Guidelines state the following:

> *"If upstream firms view sales to a particular buyer as sufficiently important, they may deviate from the terms of a collusive agreement in an effort to secure that business, thereby disrupting the operation of the agreement. The merger of such a buyer with an upstream firm may eliminate that rivalry, making it easier for the upstream firm to collude effectively."*[1288]

A merger that eliminates a disruptive buyere therefore eliminates a destabilising outside force (as is the case if a company merges with a potential competitor) and thereby increases the likelihood of successful coordination.

Following the vertical integration, the former disruptive buyer no longer has an incentive to obtain input at prices below the coordinated price level due to the fact that it can obtain at least some of its input at marginal costs from the upstream division.

The elimination of a disruptive buyer can, therefore, render coordination more sustainable. However, coordination will only occur if the upstream market is generally conducive to coordination.[1289]

2.2. Conglomerate Mergers

Based on the 1984 Merger Guidelines, non-horizontal mergers harm competition if they: (1) result in the elimination of a specific potential entrant or, in the case of a vertical merger, if they (2) create objectionable barriers to entry or (3) result in the need for two-level entry. The Guidelines fail to discuss conglomerate mergers in more detail.

[1288] 1984 Non-Horizontal Merger Guidelines, §4.222.
[1289] 1984 Non-Horizontal Merger Guidelines, §4.222.

IV. Merger enforcement

1. EU

Early non-horizontal merger analysis in the EU was almost exclusively based on foreclosure theories.[1290] The EU investigated non-horizontal transactions and occasionally prohibited them, as happened in *GE/Honeywell*.[1291]

With the introduction of the 2008 Non-Horizontal Merger Guidelines, based on the 2004 Merger Regulation, the EC developed a framework that clearly laid out how to assess coordinated effects of non-horizontal transactions.[1292] The 2008 Merger Guidelines incorporate the enforcement practice of the EC and the jurisprudence of the European Courts, insofar as it remained applicable after the introduction of the 2004 Merger Regulation.

The new Regulation - the publication of the first non-horizontal merger guidelines and the commitment of the EC to endorse a "more economic approach" - made room for a modern, case-by-case analysis of non-horizontal mergers.

The question of how the EC's analysis of coordinated effects of non-horizontal mergers has developed since the introduction of the 2004 Merger Regulation will be analysed in the following section.

1.1. Vertical Mergers

1.1.1. TomTom

Two of the few vertical merger cases in which coordinated effects were discussed in detail were *TomTom*[1293] and *Nokia*.[1294] The two notification were submitted in close succession and concerned the only two major competitors in the upstream market for navigable digital map databases. As *TomTom* was submitted first, the EC analysed the merger without taking the effects the other proposed merger (*Nokia*) would have on the market into account.[1295]

[1290] Killick et al., *Horizontal and Vertical Mergers in the Reformed EC Merger Control*, supra, Ch. 11.II.A., p. 471.
[1291] Case No. COMP/M.2220, *General Electric/Honeywell*, supra.
[1292] 2004 EU Merger Regulation, pp. 1-22.
[1293] Case No. COMP/M.4854, *TomTom/Tele Atlas*, 14 May 2008, OJ C 237, 16/09/2008, pp. 8-13.
[1294] Case No. COMP/M.4942, *Nokia/NAVTEQ*, 2 July 2008, OJ C 13, 20/01/2009, pp. 8-13.
[1295] See *TomTom,* para. 187.

The reasoning of the EC in the two decisions was roughly the same. Both mergers were cleared without commitments on the basis of Article 8(1) of the Merger Regulation after an in-depth review.

In *TomTom,* TomTom NV (***TomTom***) planned to buy all of the issued and outstanding publicly listed shares of Tele Atlas NV (***Tele Atlas***).[1296] TomTom was a manufacturer of portable navigation devices (***PNDs***) and supplied navigation software for use in navigation services.[1297] Tele Atlas was one of only two main suppliers of digital map databases for navigation and other end-uses in Europe and North America.[1298] The EC was concerned about the merger's effects on competition. For this reason, it initiated proceedings pursuant to Article 6(1)(c) of the Merger Regulation (*Phase I investigation*) on 18 December 2007.[1299]

On 29 February 2008, two months after the initiation of the Phase I investigation, the EC sent a statement of objections to TomTom (Article 18 of the Merger Regulation), a non-confidential version of which was also provided to interested third parties for comments.[1300] The EC also finalized an empirical study on the merged firm's incentives to engage in vertical foreclosure and the impact of the proposed transaction on the PND market.[1301]

The EC defined a worldwide upstream market for navigable digital map databases (*upstream market*) in which Tele Atlas (*the target*), but not TomTom (*the acquirer*), was active.[1302] Navigable digital map databases are a necessary input for navigation software and PNDs. The upstream market was a duopoly. The only major competitor of Tele Atlas was NAVTEQ Corporation (***NAVTEQ***). Tele Atlas was the larger market player, with larger market shares in the total market and in the "*markets*" for databases with regional and European coverage for the larger individual countries (such as Germany, France, Italy, Spain and the UK).[1303]

Navigation software combines the geographic positioning from a GPS-receiver with data from the navigable digital database to provide navigation functionality.[1304] The EC defined a separate worldwide intermediate product market for the provision of navigation software.[1305] The major players in the market for navigation software were Navigon, Nav n'go and

[1296] *TomTom,* para. 3.
[1297] *TomTom,* para. 2. For more information about TomTom, see http://tomtom.corporate.com, last viewed: 4 January 2013.
[1298] *TomTom,* para. 2. As the transaction would have been notifiable in Germany, the Netherlands, Spain and Portugal, TomTom asked for and was granted referral of the case to the EC pursuant to Article 4(5) of the Merger Regulation. See *TomTom,* paras. 5-6.
[1299] *TomTom,* para. 8. See Initiation of proceedings, Case No. COMP/M.4854 – *TomTom/Tele Atlas*, OJ C 290, 4/12/2007, p. 4.
[1300] *TomTom,* para. 10.
[1301] *TomTom,* para. 11.
[1302] *TomTom,* paras. 17-44.
[1303] *TomTom,* para. 80.
[1304] *TomTom,* para. 45.
[1305] *TomTom,* paras. 45-53.

Destinator, with market shares of 10-20% each.[1306] The rest of the market consisted of TomTom and a large number of other competitors, with market shares of 0-10% each.[1307]

Navigation software and navigable digital map databases are a necessary input for navigation devices. The EC identified a separate, at least EEA-wide, downstream product market for PNDs.[1308] There were three main players in the market for PNDs: TomTom, MioTech & Navman and Garmin, with market shares of 30-50%, 10-20% and 10-20% respectively.[1309]

The EC assessed whether the transaction was likely to result in unilateral effects, access by the merged entity to confidential information in the market for PNDs and coordinated effects in the market for navigable digital map databases (the upstream duopoly market). It was not concerned about coordination in the PND market because the PND market was a dynamic market with numerous players.[1310]

Coordination between Tele Atlas and the only major competitor - NAVTEQ - in the market for navigable digital map databases was unlikely. The EC did not find any evidence of past coordination in the upstream market.[1311] On the contrary, Tele Atlas and NAVTEQ had been competing both on price and non-price aspects. As a result, database prices had been declining substantially and map innovations had been important over the past years.[1312]

Map database prices were not transparent. The market for the provision of navigable digital map databases was marked by large and infrequent contracts with secret offers.[1313] Large and infrequent contracts reduce the likelihood of successful coordination because these contracts are too important to be foregone. The firms were tempted to deviate from coordination and to make a competitive offer for the contract.

Another factor that favoured deviation was the existence of high fixed costs and low variable costs.[1314] Fixed costs have to be paid for regardless of the quantity produced by a given firm. Variable costs increase with every additional unit of output. If a company has high fixed and low variable costs, producing more will be profitable for that firm because it can gain additional revenue at very low additional costs. This effect works both in the case of output and price coordination. There will be a strong incentive to deviate from output coordination.

[1306] *TomTom,* para. 168.
[1307] *TomTom,* para. 168.
[1308] Lack of interchangability, different distribution methods and prices indicated that the different types of navigation devices did not belong to the same product market. See *TomTom,* paras. 54-71.
[1309] *TomTom,* para. 117.
[1310] *TomTom,* para. 282.
[1311] *TomTom,* para. 278.
[1312] *TomTom,* para. 278.
[1313] *TomTom,* para. 280.
[1314] *TomTom,* para. 280.

As has been explained, producing more will be profitable. However, there will also be an incentive to deviate from price coordination, as offering the product at a lower price will increase demand and will therefore generate an increase in output.

The EC concluded that the transaction did not reduce the number of major players in the upstream market, did not eliminate a maverick and did not increase the level of pricing transparency.[1315] It also reduced the level of symmetry, as Nokia and NAVTEQ were not vertically integrated.[1316]

The EC commented that the fact that one downstream customer was now integrated with Tele Atlas could reduce the ability of NAVTEQ to deviate from a collusive agreement with Tele Atlas.[1317] The EC probably meant that NAVTEQ could no longer deviate by selling to TomTom in the downstream market because TomTom would be able to purchase the software in-house from Tele Atlas. However, MioTech & Navman and Garmin remained as major alternative customers. On the other hand, vertical integration reduced the threat of punishment for the vertically integrated company and, therefore, increased its incentives to deviate from coordination.[1318]

The merging parties argued that the merger created substantial efficiencies. The EC did not discuss the effect of efficiencies on coordination. With this, the EC followed its usual practice, which is to discuss efficiencies as part of its unilateral effects discussion. This makes it difficult to understand whether - and to what extent - efficiencies were also considered in the context of the coordinated effects analysis.

The EC acknowledged that the elimination of double mark-ups may create an incentive for a firm to expand its sales and to pass on some of the marginal cost reductions to consumers in the form of lower prices.[1319]

The parties also argued that efficiencies would arise from the integration of TomTom's data into Tele Atlas's map databases. The EC decided that these efficiencies were difficult to quantify, and that the estimates provided by the parties were unconvincing.[1320]

[1315] *TomTom,* para. 281.
[1316] *TomTom,* para. 281.
[1317] *TomTom,* footnote 195.
[1318] *TomTom,* footnote 195.
[1319] *TomTom,* para. 240.
[1320] *TomTom*, para. 246. The Parties to the concentration advanced two methods of calculating the efficiency benefits . First, it calculated cost-savings to provide the same level of map database quality post-merger. Second, it calculated additional costs necessary to achieve the same level of database-quality as would be achieved post-merger with pre-merger technology. Para. 247.

Altogether, the EC came to the conclusion that the proposed transaction was unlikely to lead to post-merger coordinated effects. The transaction was cleared without commitments pursuant to Article 8(1) of the Regulation.

1.1.2. Nokia

Shortly after *TomTom* had been notified, the EC received another notification that led to the vertical integration of the remaining independent upstream firm NAVTEQ. Nokia, Inc., which belongs to Nokia Corporation (together, ***Nokia***), planned to acquire control of the whole of NAVTEQ Corporation (***NAVTEQ***) through a share purchase agreement.[1321] As has already been explained above, NAVTEQ was the only other major competitor, apart from Tele Atlas, in the upstream market for navigable digital map databases.[1322]

The EC found that the concentration raised serious doubts as to its compatibility with the common market and, by a Decision dated 28 March 2008, initiated proceedings pursuant to Article 6(1)(c) of the Merger Regulation.[1323] This was three months after proceedings had been initiated in *TomTom*. In *TomTom*, the EC had sent its statement of objections on 29 February 2008.

The EC investigated the acquisition's likely effects on the affected markets. This included sending out two sets of questionnaires to producers of mobile handsets, mobile network operators (***MNOs***) and on-line providers of location-based Services (***LBS***).[1324] The EC also carried out an empirical study in which it analysed the undertaking's incentives to engage in vertical foreclosure as well as the impact of the transaction in the downstream market for the provision of navigation applications on mobile handsets and the downstream market for the provision of mobile handsets.[1325] Unfortunately, the empirical studies are not publicly available.

Nokia was a manufacturer of handsets for mobile telephony.[1326] However, the company more generally provides equipment, solutions and services for electronic communications

---

[1321] Case No COMP/M.4942, *Nokia/NAVTEQ*, 2 July 2008, OJ C 13, 20.1.2009, pp. 8-13, para. 1.
[1322] For more information about NAVTEQ, see http://www.NAVTEQ.com, last viewed: 4 January 2013.
[1323] *Nokia,* para. 2.
[1324] *Nokia,* para. 6.
[1325] *Nokia,* para. 6.
[1326] *Nokia,* para. 7. For more information about Nokia, see http://www.nokia.com/global, last viewed: 4 January 2013.

networks.[1327] Nokia planned to pre-install navigation applications in its handsets in the future.[1328]

As in *TomTom*, the EC defined worldwide upstream markets for navigable and non-navigable digital map databases and a worldwide intermediate market for navigation software.[1329] The affected downstream markets in *Nokia* were the EEA-wide markets for navigation applications for mobile handsets and the market for mobile handsets.[1330]

In the duopolistic upstream market for navigable digital map databases, NAVTEQ and Tele Atlas had market shares of 40-50% and 50-60% respectively.[1331] NAVTEQ was, therefore, the second largest player in the market after Tele Atlas.

Prices in the duopolistic upstream market had been declining in recent years, roughly 20-25% during the three years preceding the notification.[1332] A Fortis study had predicted that the price for NAVTEQ's databases would further decline by 7% in 2007. Fortis also predicted a 10% price decrease for the products of the rival Tele Atlas.[1333] The EC's market investigation indicated that prices were likely to further decline in oncoming years, albeit at a smaller rate.[1334]

Different to the situation in *TomTom*, mobile handset manufacturers usually did not have contractual relationships with NAVTEQ and Tele Atlas. They sourced their navigable databases bundled with navigation software from navigation software providers (the intermediate market).[1335]

The EC analysed the likelihood of coordination between the vertically integrated TomTom and Nokia. It decided that coordination on the downstream markets was unlikely. TomTom and Nokia were not active on the same downstream markets. TomTom was a leading supplier of PNDs in Europe and had only a marginal presence in the market for navigation applications in mobile handsets, through the sale of TomTom Mobile Navigator 6.[1336]

Nokia was, at that time, the leading manufacturer of boiler handsets and only had a marginal presence in the market for PNDs.[1337] The EC did not exclude the possibility that PNDs and

---

[1327] *Nokia,* para. 7.
[1328] *Nokia,* para. 15.
[1329] *Nokia,* paras. 23-42, 65-71, 72-95.
[1330] *Nokia,* paras. 94-140.
[1331] *Nokia,* paras. 153-155. The EC got similar market share results for a market that took into account all navigable digital databases with EEA coverage, all navigable digital map databases with regional and European coverage and all navigable digital databases covering a particular State.
[1332] *Nokia,* para. 164.
[1333] *Nokia,* para. 168.
[1334] *Nokia,* para. 169.
[1335] *Nokia,* para. 170.
[1336] *Nokia,* para. 392.
[1337] *Nokia,* para. 392.

navigation services on mobile handsets exerted some influence on each other.[1338] However, it considered that PNDs and navigation services for mobile handsets belonged to different product markets.[1339] Nokia and TomTom were therefore not competing against each other and there was no risk that they would align their behaviour.

The EC then analysed the likelihood of coordination between the vertically integrated Tele Atlas and NAVTEQ in the upstream market for navigable digital map databases. The EC repeated the finding in *TomTom* that there was no indication of past or present coordination in the market. On the contrary, the results of the market investigation indicated that Tele Atlas and NAVTEQ had been competing both on price and non-price aspects prior to the merger.[1340]

The most important difference between *TomTom* and *Nokia*, considering the likelihood of post-merger coordinated effects, was that *Nokia* increased the homogeneity of the firm structure of the only two competitors in the upstream market.[1341] *TomTom* was the first merger to be notified and, therefore, the second transaction (*Nokia*) was ignored in the analysis of the effects of the transaction. As a result, *TomTom* resulted in the vertical integration of Tele Atlas while the only rival in the upstream market that was not integrated was NAVTEQ. The two companies in the upstream market therefore had different firm structures, which were taken as an indication that their incentives would also differ.

Nokia, on the other hand, led to vertical integration of the remaining competitor in the upstream market. Following the merger, both upstream companies were going to be vertically integrated. Their firm structure became more homogeneous as a result of the transaction.[1342] This pointed towards an increased likelihood of post-merger coordination.

Nevertheless, the EC came to the conclusion that post-merger coordination was unlikely because important differences in the firm structure of the two vertically integrated firms remained and because the downstream markets were highly dynamic with a strong predicted growth of demand.[1343]

The integrated Nokia/NAVTEQ was had small market shares in the market for the production and distribution of PNDs while it was strong in the manufacturing and the distribution of mobile handsets with navigation solutions. On the other hand, the vertically integrated TomTom/Tele Atlas was strong in the manufacturing and distribution of PNDs and had hardly

[1338] *Nokia,* para. 393.
[1339] *Nokia,* para. 393.
[1340] *Nokia,* para. 395.
[1341] *Nokia,* para. 396.
[1342] *Nokia,* para. 396.
[1343] *Nokia,* para. 401.

any presence in the market for the manufacturing and distribution of mobile handsets with navigation solutions. Both markets were growing fast and offered substantial revenues. The vertically integrated firms, therefore, had a strong incentive to increase their sales in those markets.[1344] This was why the EC was not worried about the vertical integration of the only two competitors, despite substantial entry barriers.[1345]

The EC also believed that NAVTEQ and Tele Atlas would not be able to agree on the terms of coordination, due to a lack of market transparency. Contracts between map suppliers and their customers were not public and their terms were not known by other firms.[1346] Nor did the EC find any evidence of a geographic split. Tele Atlas and NAVTEQ competed in the same regions. The EC found no evidence that Tele Atlas and NAVTEQ had been able to agree on the geographical division of the market.[1347] The allocation of customers was also difficult because the downstream markets were highly dynamic as numerous new firms regularly entered the downstream markets.[1348]

The EC also believed that Garmin was likely to destabilise any coordination between NAVTEQ and Tele Atlas regarding the sale of maps for mobile handsets. Garmin had a long-term contract with NAVTEQ. [1349] The contract guaranteed the supply of digital maps. Garmin had also already announced the launch of a smartphone with navigation functionalities. It had also announced that Garmin navigation solutions would be made available on Samsung handsets in Europe.[1350]

1.1.3. Philips

In *Philips*, the EC (briefly) assessed the likelihood of coordinated effects in the market for the supply of magnetic resonance imaging systems (***MRI-systems***). The market had three major players. The coordinated effects discussion in *Philips* was much shorter than in *TomTom* and *Nokia*.

Koninklijke Philips Electronics NV (***Philips***) planned to acquire sole control of Intermagnetics General Corporation (***Intermagnetics***).[1351] Philips marketed a wide range of electronic

[1344] *Nokia,* paras. 399-400.
[1345] *Nokia,* paras. 227-232.
[1346] *Nokia,* para. 403.
[1347] *Nokia,* para. 403.
[1348] *Nokia,* para. 403.
[1349] *Nokia,* para. 406.
[1350] *Nokia,* para. 406.
[1351] Case No. COMP/M.4300, *Philips/Intermagnetics*, 7 November 2006, OJ C 123, 5.6.2007, p. 1, para.1.

products.[1352] Intermagnetics was mainly active in the production and distribution of magnetic resonance imaging, medical devices and research into superconducting applications for energy technology.[1353]

The EC reviewed the transaction after a referral pursuant to Article 4(5) Merger Regulation.[1354] It defined a separate market for the supply of MRI-systems to end-users. MRI-systems use magnets, radio frequency systems and computers to map the distribution of hydrogen molecules in the human body to produce three-dimensional images of human body organs.[1355] Philips had a market share of 30-40% in the EEA for all MRI systems. Intermagnetics was not active in the supply of MRI systems to end-users. Two other major competitors existed in the market: Siemens AG (***Siemens***) and GE Company (***GE***).[1356]

Intermagnetics had a market share of more than 25% at the EEA-level on the upstream market for the supply of magnets and RF coils.[1357] Philips was not active in that market.

The EC analysed whether there was a likelihood of successful post-merger coordination in the downstream market for MRI systems. After the closing of the transaction, all three competitors (Siemens, GE and Philips) were going to be vertically integrated and were predicted to have similar cost structures.[1358]

Nevertheless, successful coordination in the MRI market was unlikely due to the high degree of technology and innovation involved in MRI systems.[1359] Highly innovative markets in which new products are regularly introduced are not stable enough for coordination. Market participants strive to keep up with technological development. Any coordination on prices or output will therefore not be sustainable.

Finally, coordination was unlikely because Siemens, GE and Philips had a different focus in their marketing strategies. GE's primary focus was on the customer relationship, with a secondary focus on cost, and a third focus on technology.[1360] Siemens focused first on technology, then on costs and third on customer relationships.[1361] Philip focused first on

[1352] *Philips,* para. 2. For more information about Philips, see http://www.philips.com/about/company/index.page, last viewed: 4 January 2013.
[1353] *Philips,* para. 3.
[1354] *Philips,* para. 6.
[1355] *Philips,* para. 9.
[1356] *Philips,* para. 46.
[1357] *Philips,* para. 47.
[1358] *Philips,* para. 65.
[1359] *Philips,* para. 65.
[1360] *Philips,* para. 65.
[1361] *Philips,* para. 65.

technology, then on customer relationships and finally on costs.[1362] Due to their different priorities, Siemens, GE and Philips had different incentives.

The EC reached the conclusion that the transaction was unlikely to result in coordinated effects. There was no indication that the transaction would cause unilateral anti-competitive effects either. The EC therefore cleared the merger without an in-depth investigation pursuant to Article 6(1)(b) of the Merger Regulation.

1.2. Conglomerate Mergers

While there are few EC decisions on vertical mergers that discuss coordinated effects, there are even fewer on conglomerate effects that discuss coordination. The only decision that discussed the coordinated effects in detail was *ABF*, which has already been discussed in Chapter 2.

ABF is an international food, ingredients and retail group. One of its core activity was the production and distribution of different types of yeast.[1363] ABF planned to acquire GBI's yeast business in continental Europe from the Dutch equity firm Gilde. The EC was concerned about the coordinated effects of the transaction in the markets for dried yeast in Portugal and Spain. In these markets, both ABF and GBI were active (see Chapter 2 for more details).

However, the EC defined different national geographic markets for the production and distribution of dried yeast. The EC was concerned that extensive multi-market contact in different geographic areas of a single product market could help ABF/GBI and Lesaffre to mute market level asymmetries.[1364]

ABI, GBI and Lesaffre had extensive presence in geographic markets worldwide, both in dry and compressed yeast, as well as in other bakery ingredients.[1365] The merger led to a more symmetric position of GBI/ABF and Lesaffre at a worldwide level.[1366]

The EC explained how multi-market contacts facilitate overcoming coordination difficulties:

> "*Generally, it is possible that market conditions or incentives facilitating coordinated conduct may be less strong within some of these individual geographic markets. For example, demand could grow rapidly on one particular geographic market and grow slowly on a neighbouring one. It is also possible that on one market, firms can*

[1362] *Philips,* para. 65.
[1363] *ABF*, paras. 5-6.
[1364] *ABF*, paras. 202-205.
[1365] *ABF*, para. 203.
[1366] *ABF*, para. 203.

observe or respond more quickly to cheating and thus punishment starts sooner. In these cases, there is a range of parameters, for which with multi-market contact and tacit coordination is facilitated and induced on both markets, whereas, in the absence of such contacts, tacit coordination would be comparatively more difficult to sustain on one market individually. In a similar way, tacit coordination in one market can make more effect or sustainable tacit coordination in an adjacent market served by the same players [...].

[T]he pooling of the incentive constraints across both markets relaxes the binding constraint on the second market enabling colluding firms to raise overall profits there".[1367]

Lesaffre, for example, had significant spare capacity in Valladolid (Spain), close to the Portuguese border. The spare capacity corresponded to a significant part of the whole Portuguese compressed yeast market.[1368] Lesaffre had established a presence in Portugal and was, therefore, able to expand its presence in Portugal without having to overcome entry barriers.

However, there was a risk that the combined ABF/GBI would punish any efforts on the part of Lesaffre to extend its presence in Portugal with tougher competition in the more important Spanish yeast market.[1369] Later on in the decision, the EC added that retaliation could also take place in other geographic markets for dry yeast or liquid yeast, or with respect to a specific group of customers (e.g., direct customers).[1370] Multi-market contacts (the Portuguese and Spanish markets) were therefore likely to make coordination in the Portuguese market more stable.

Multi-market contacts can also reduce the likelihood of coordination. The EC did not comment on this. If market players are active in adjacent geographic markets, they will often find it easier to enter into another geographic market than other potential entrants that are active on a different product market. The potential new entrant from another geographic market profits from its expertise, existing production and distribution network, and can often bring some of its reputation into the adjacent geographic market. The fact that the major players of a product market interact in several geographic markets can, therefore, also mean that there is a higher risk of future new entry should prices in any geographic market be high enough to make such entry profitable. Multi-market contacts should, therefore, in some cases, act as a restraining force on coordination.

[1367] *ABF*, para. 204, footnote 110.
[1368] *ABF*, para. 205.
[1369] *ABF*, para. 205.
[1370] *ABF*, para. 244.

As has been explained in Chapter 2, the EC's coordinated effects analysis in *ABF* is unusually detailed. It is one of the only decisions since *Airtours* in which the EC has relied on coordinated effects alone to explain the potential harm of the transaction. Roughly one month after *ABF*, the EC published the Non-Horizontal Merger Guidelines.[1371]

1.3. Conclusion

Detailed coordinated effects discussions in non-horizontal merger cases are rare. Very few non-horizontal mergers raise competition concerns. Furthermore, the EC prefers to base its decisions on unilateral rather than coordinated effects theories.

All three vertical merger cases in which the EC analysed the potential for post-merger coordination happened in extremely concentrated markets, with only two (as in *TomTom* and *Nokia)* or three competitors (as in *Philips*). In all three cases, the EC approved the transactions unconditionally. All three cases have in common that the affected markets were highly technology driven and dynamic. In *TomTom* and *Nokia*, the worldwide market for navigable digital map databases, in which Tele Atlas and NAVTEQ were the only two competitors, was highly competitive. The market had seen prices decline in the past years. In order to retain their market shares, Tele Atlas had to compete with both on price and non-price elements and had to keep up with the changes in digital map technology.

In *TomTom*, the EC also acknowledged that the transaction did not eliminate a maverick and reduced the level of symmetry between Tele Atlas and NAVTEQ, as both at that time were not vertically integrated. It therefore cleared the transaction unconditionally after a detailed review on the basis of Article 8(1) of the Merger Regulation.

In *Nokia*, the EC decided that, despite the fact that both Tele Atlas and NAVTEQ were going to be vertically integrated, the vertically integrated companies were going to differ in important aspects and that the markets in which these companies were active were highly dynamic and not sufficiently transparent to allow for coordination. The EC therefore unconditionally approved the transaction on the basis of Article 8(1). In both decisions, the EC sent out questionnaires to market participants. In *Nokia*, it also carried out an empirical study in which it analysed the integrated firm's incentive to engage in vertical foreclosure.

TomTom and *Nokia* show that the EC conducts an in-depth investigation in situations in which the only two competitors in a market integrate vertically. The fact that the markets in

[1371] ABF was decided on 29 September 2008. The 2008 Non-Horizontal Merger Guidelines were published on 18 October 2008.

question were technology-driven and, as a result, highly dynamic, was the main reason why the transaction was cleared.

Similarly, in *Philips*, the EC approved the merger based on Article 6(1)(b) Merger Regulation even though it led to the vertical integration of the three major competitors in the market for the supply of MRI-systems. The main reason why the merger was nevertheless cleared was that the MRI-market was characterised by a high degree of technology and innovation which meant that coordination would be unstable. It should be mentioned though that Siemens, GE and Philips also had a different focus in their marketing strategies.

Even though the EC sometimes analyses the coordinated effects of vertical mergers, it prefers to base its assessment on unilateral effects. I have not found a single case under the 2004 Merger Regulation in which the EC demanded commitments based on coordinated effects concerns. The EC is not comfortable to intervene based on coordinated effects. It clears mergers, even in duopolistic markets, after a discussion of the likelihood of post-merger unilateral and coordinated effects. Whenever it gets “tough” though, the EC relies on unilateral effects.

In conglomerate merger cases, coordinated effects analysis is even rarer. The only decision I have found in which coordinated effects were discussed in detail, with regards to a proposed conglomerate merger, was *ABF*. In that decision, the EC stated that multi-market contacts can make it easier to overcome coordination difficulties. GBI/ABF and Lesaffre were active in different geographic markets for compressed yeast. Because of the multi-market contacts, retaliation could take place in several markets which, in the view of the EC, increased the stability of coordination.

ABF was primarily a horizontal merger. The EC would probably not have demanded commitments if GBI/ABF and Lesaffre had not been active in the same geographic markets unless there had been clear indications that the multi-market contacts by themselves led to a likelihood of coordination. The threshold for this finding will be high - i.e., the EC will be reluctant to demand commitments purely on the basis of conglomerate coordinated effects.

The analysis of the EC’s non-horizontal merger decisions on coordinated effects thus shows that the EC is also interested in applying coordinated effects theories in the context of non-horizontal mergers but that it is not prepared to demand commitments on the basis of these theories. Coordinated effects, therefore, still lead a “*life in the shadows*” in non-horizontal merger cases.

The following section analyses the treatment of coordinated effects in non-horizontal merger cases by the DoJ and the FTC.

2. US

2.1. Vertical mergers

When Barack Obama took office, federal antitrust law enforcement agencies had not litigated a single vertical merger challenge to its conclusion.[1372] However, some consent decrees that discussed non-horizontal effects had been rendered.[1373] The main reason for the lack of enforcement was the influence of the Chicago School. The Chicago School believed that non-horizontal mergers were either competitively neutral or else pro-competitive.

The lack of non-horizontal merger enforcement is probably one of the reasons why the Non-Horizontal Merger Guidelines were not updated. The Horizontal Merger Guidelines of the DoJ and the FTC were updated in 1992, 1997 (a revision of the 1992 Guidelines) and, more recently, in 2010.

The current Non-Horizontal Merger Guidelines date from 1984, a time when the approach to non-horizontal mergers was very different.[1374] The lack of modern guidelines means that antitrust authorities lack guidance in their assessment of non-horizontal concentrations. This contributes to their reluctance to conduct such an assessment.

2.1.1. Premdor

Premdor, Inc. (***Premdor***) planned to acquire 100% of the Masonite business of International Paper Company (***International***).[1375] Masonite was the largest of only three major manufacturers for moulded door skins (***the upstream market***). Premdor was one of two manufacturers of moulded doors (***the downstream market***).[1376] Interior moulded door skins are the primary input for moulded doors.[1377]

[1372] Rosch, *Terra Incognita*, supra, pp. 7-8. *Rosch* counted about 20 consent decrees in which non-horizontal effects were part of the analysis. Examples of vertical merger cases that were based on unilateral effects are *FTC v Alliant Techsystems Inc,* District Court for the District of Columbia Circuit, 19 November 1992, available at: http://dc.findacase.com/research/wfrmDocViewer.aspx/xq/fac.19921118_0000289.DDC.htm/qx, last viewed: 19 July 2011; *US v Monsanto*, Competitive Impact Statement, 31 May 2007**,** available at: http://www.usDoJ.gov/atr/cases/f223600/223682.htm, last viewed: 19 July 2011. These decisions will not be analysed as they do not contribute to coordinated effects analysis**.**

[1373] Rosch, *Terra Incognita,* supra, p. 7-8.

[1374] Leon B. Greenfield/Jeffrey Ayer, *Vertical Mergers in the United States*, available at: http://www.wilmerhale.com/uploadedFiles/WilmerHale_Shared_Content/Files/Editorial/Publication/Vertical%20Mergers%20in%20USA%20Paper_IBA%20Conference.pdf, last viewed: 23 April 2013, p. 1.

[1375] US *v Premdor, Inc.,* Competitive Impact Statement, 1:01CV01696 (D.C.C. 2001). For more information on Premdor, Inc. and International Paper Company, see the webpages available at: http://www.premdor.co.uk and http://www.internationalpaper.com, last viewed: 23 April 2013.

[1376] Sigrid Stroux, US *and EC Oligopoly Control: United States And European Commission Oligopoly Control*, 2004, p. 189; Premdor*,* Competitive Impact Statement, II.C.2.

[1377] Premdor*,* Competitive Impact Statement, II.C.2.

The merger resulted in the vertical integration of the most important competitive force in the upstream market. Masonite was also the largest producer in the upstream market. At the time of the notification, it was not vertically integrated into the downstream market.[1378] Masonite sold door skins to non-integrated customers. The largest customer of Masonite was the acquiring company Premdor.[1379] A vertically integrated competitor used almost all of its upstream production captively.[1380] The remaining upstream manufacturers only had minute market shares of less than 1%.[1381]

The DoJ was concerned about post-merger output and price coordination, both in the upstream and the downstream markets.[1382] Its concerns were based on the increase of concentration levels and the homogeneity of the products in question.[1383]

Prior to the proposed transaction, coordination had not been successful because of: (1) the threat of Premdor's expansion into the interior moulded door skin market; (2) Masonite's incentive to disrupt coordination in the downstream market; (3) competitive constraints in the upstream and downstream markets flowing from the vertically integrated competitor; and (4) asymmetries of information available to firms about upstream and downstream markets.[1384]

The market investigation suggested that *"[i]f Premdor were to acquire Masonite, the price-constraining effect of Premdor's potential expansion in the interior moulded door skin market would be eliminated*."[1385]

The DoJ believed that Masonite had acted as a restraining force on the downstream market prior to the proposed acquisition.[1386] The DoJ believed that downstream output coordination would have been feasible for the downstream companies.[1387] Any reduction of downstream output, however, would have reduced the demand for moulded door skins in the upstream market. Therefore, Masonite had an interest in preventing downstream output coordination.[1388] The DoJ suggested that Masonite may have interrupted coordination in the

---

[1378] Premdor, Competitive Impact Statement, II.C.2.
[1379] Premdor, Competitive Impact Statement, II.C.2.
[1380] Premdor, Competitive Impact Statement, II.C.2.
[1381] Premdor, Competitive Impact Statement, II.C.2.
[1382] Premdor, Competitive Impact Statement, II.C.2.
[1383] Premdor, Competitive Impact Statement, II.C.2.
[1384] Premdor, Competitive Impact Statement, II.C.2.
[1385] Premdor, Competitive Impact Statement, II.C.2; Stroux, *US and EC Oligopoly Control*, supra, p. 189. Masonite had negotiated lower interior door skin prices for Premdor which led to the signing of a strategic alliance agreement between Premdor, Masonite and IP in 1999. Masonite not only lowered its prices to Premdor but also lowered the prices it charged to the other interior moulded door manufacturers. The competitive impact statement stated that Masonite did this in order to keep other moulded door manufacturers competitive and thus to assure a broader customer base.
[1386] Premdor, Competitive Impact Statement, II.C.2.
[1387] Premdor, Competitive Impact Statement, II.C.2.
[1388] Premdor, Competitive Impact Statement, II.C.2.

downstream market by increasing sales to other, non-vertically integrated downstream producers.[1389]

The vertically integrated Masonite was going to have an incentive to compete against its downstream customers through its downstream division.[1390] Output reductions in the downstream markets would still reduce the profits gained from sales from the upstream division to downstream customers.[1391] The losses, however, would be at least partially offset by the improved competitive position of the downstream entity, which would be able to source moulded door skins in-house at marginal costs, and which would also benefit from any price increase resulting from output reduction in the downstream market.[1392]

The merger also increased the degree of symmetry between the major companies in the vertically related markets.[1393] Prior to the notification, the vertically integrated competitor had acted as a significant restraining force in both the upstream and the downstream market.[1394] It had profited from the cost advantages that resulted from its vertical integration.[1395] Lower costs gave it an incentive to offer lower prices in order to gain a larger market share.[1396] Its incentives therefore varied from those of its competitors with a less efficient cost structure.

Coordination gets easier as the symmetry between competitors increases. The incentives of companies in a given market depend upon their respective cost structures. The more these cost structures align, the higher is the likelihood that a given common behaviour will be profitable for all of them and that they will be able to agree on the terms of coordination. By increasing the degree of symmetry in the market, the merger therefore increased the likelihood of successful coordination.

The DoJ also believed that Premdor might act as a conduit of information with regards to the pricing and output behaviour of Masonite's upstream rivals.[1397] An improvement of the ability to monitor deviations by rivals through the transmission of information by the vertically integrated division increases the likelihood of successful coordination in the market with respect to which the information is being provided. The stability of the coordination increases because deviations can be more easily detected and, as a result, the thread of punishment becomes more credible.[1398]

[1389] Premdor, Competitive Impact Statement, II.C.2.
[1390] Premdor, Competitive Impact Statement, II.C.2.
[1391] Premdor, Competitive Impact Statement, II.C.2.
[1392] Premdor, Competitive Impact Statement, II.C.2.
[1393] Premdor, Competitive Impact Statement, II.C.2.
[1394] Premdor, Competitive Impact Statement, II.C.2.
[1395] Premdor, Competitive Impact Statement, II.C.2.
[1396] Premdor, Competitive Impact Statement, II.C.2.
[1397] Premdor, Competitive Impact Statement, II.C.2.
[1398] Premdor, Competitive Impact Statement, II.C.2.

That the vertically integrated firm might act as a conduit of information is not reflected in the 1984 Guidelines, while it is reflected in the EU Non-Horizontal Merger Guidelines. Nevertheless, the DoJ considered this factor in its assessment. *Premdor* is a case in which the DoJ went beyond the 1984 Guidelines in its analysis.

The DoJ did not believe that the non-vertically integrated moulded door manufacturers could sufficiently expand their output to defeat coordination. They relied on these upstream suppliers for their supply of moulded door skins.[1399] New entry was unlikely, would not have been timely to refute the competitive concerns, and would probably not have been sufficient to prevent the collective exercise of market power.[1400] The complaint was settled with a consent order that required Masonite to divest Towanda, Pa, one of its two door skin plants in the US, to a new entrant in the door skin market.[1401] With this, the DoJ ensured that another company that was not vertically-integrated entered the upstream market.

2.1.2. PepsiCo

PepsiCo was decided under the new Obama Administration. PepsiCo, Inc. (***PepsiCo***) acquired the outstanding voting securities of three independent bottlers, Pepsi Bottling Group, Inc. (***PBG***), PepsiAmericas, Inc. (***PAS***) and Pepsi-Cola Bottling Co. (***PYC***). PepsiCo also entered into a licence agreement with Dr Pepper Snapple Group, Inc. (***DPSG***), which provided that PepsiCo would continue to produce and distribute several soft drink brands of DPSG.[1402]

PepsiCo was the second-largest producer of carbonated soft drinks in the US after Coca-Cola Company. It is diversified into the snack food and cereal businesses. The subsidiaries Pepsi Co Americas Beverages, Frito-Lay, and Quaker Foods, are responsible for the beverages, snack food and cereal businesses respectively.[1403]

DPSG produces concentrate for the DPSG carbonated soft drink brands distributed by its bottlers (including the brands Dr Pepper, Diet Dr Pepper, Crush, Schweppes, Canada Dry, Vernor's, A&W Root Beer, 7-UP, Hires Root Beer, IBC RC Cola, Diet Rite, Welch's Grape

---

[1399] Premdor, Competitive Impact Statement, II.C.2.
[1400] Premdor, Competitive Impact Statement, II.C.2.
[1401] Premdor, Final Judgment, Civil No.: 1:01CV01696 (D.D.C 2002), available at: http://www.justice.gov/atr/cases/f8900/8909.htm, last viewed: 23 April 2013, IV; Riordan, *Competitive Effects of Vertical Integration*, supra, Ch. 4, at 168.
[1402] *PepsiCo, Inc.*, Complaint, FTC File No. 091 0133, 28 September 2010, available at: http://www.ftc.gov/os/caselist/0910133/100928pepscocmpt.pdf, last viewed: 11 January 2013, preliminary remarks, p. 1.
[1403] PepsiCo, Complaint, supra, para. 2.

Soda, Sunkist and Squirt).[1404] DPSG is the third-largest producer of carbonated soft drinks in the US.[1405] Altogether, there are three major producers of carbonated soft drinks in the US.

PBG and PAS were the two largest independently-owned bottlers of the carbonated soft drinks brands of PepsiCo. They accounted for approx. 75% of the sales of PepsiCo's carbonated soft drinks and approx. 20% of DPSG's sales of carbonated soft drinks in the US.[1406]

The FTC was concerned that the acquisition of PBG and PAS combined with the licence agreement between PepsiCo and DPSG would lead to post-merger unilateral and coordinated effects in the downstream markets for the bottling and distribution of branded concentrate (national) and branded and direct-store-door delivered carbonated soft drinks (locally-based on the territory of the bottler).[1407]

Following the acquisitions, PepsiCo planned to bottle and distribute both its own products and those of DPSG. Concentrate manufacturers like DPSG have to share competitively sensitive information about the concentrate with bottling manufacturers for the bottling process. The FTC was concerned that PepsiCo would either use access to the information provided to PBG and PAS to unilaterally exercise market power or else that access to the confidential information might facilitate coordinated conduct in the industry.[1408]

To remedy the alleged competitive concerns associated with PepsiCo's access to confidential information about its competitor, the FTC entered a Consent Agreement with PepsiCo, which provided that PepsiCo had to set up a firewall to prevent persons responsible for concentrate-related functions from gaining access to DPSG information.[1409] This ensured that only those persons assigned to traditional bottler functions had access to DPSG's information.[1410]

[1404] PepsiCo, Aid to Public Comment, 75 Fed. Reg. 10795, 9 March 2010, available at: http://www.gpo.gov/fdsys/pkg/FR-2010-03-09/pdf/2010-4894.pdf, last viewed: 11 January 2013.

[1405] See DPSG, Annual Report 2011, available at: http://www.drpeppersnapplegroup.com/annualreport/2011/DPSG%202011%20Annual%20Report%20for%20Web.pdf, last viewed: 11 January 2013, p. 6. For more information about DPSG, see the webpage of the company, available at: http://www.drpeppersnapplegroup.com/, last viewed: 11 January 2013.

[1406] PepsiCo, Complaint, supra, para. 9.

[1407] PepsiCo, Aid to Public Comment, supra.

[1408] PepsiCo, Aid to Public Comment, supra.

[1409] PepsiCo, Aid to Public Comment, supra. See also *In re. PepsiCo*, Decision and Order, FTC File No. 0910133, 28 Sept. 2010, available at: http://www.ftc.gov/os/caselist/0910133/100928pepscocmpt.pdf, last viewed: 11 January 2013.

[1410] PepsiCo, Aid to Public Comment, supra.

2.1.3. Coca-Cola

Coca-Cola is another case that was decided under the new Obama Administration. On 25 February 2010, The Coca-Cola Company (***TCCC***) entered into an agreement to acquire all of the outstanding shares of Coca-Cola Enterprises, Inc. (***CCE***) which included 100% of CCE's North America operations.[1411] On or about 7 June 2010, TCCC entered into a licence agreement with DPSG, whereupon TCCC obtained the right, following the acquisition of CCE, to distribute the Dr Pepper and Canada Dry carbonated soft drink brands of DPSG in the former CCE territories.[1412]

TCCC produces the concentrate for the TCCC carbonated soft drink beverage brands (e.g., Coke, Diet Coke, and Sprite). These are distributed by independent bottlers.[1413] DPSG is the third-largest producer of carbonated soft drinks in the US.

CCE was the largest independently-owned bottler of the carbonated soft drink brands of TCCC (70%), and it also bottled about 14% of DPSG's brands of carbonated soft drinks.[1414]

As in PepsiCo, the FTC was concerned that the access to competitively sensitive information provided by DPSG to the bottler, as part of the licence agreement led to unilateral and/or coordinated anti-competitive effects in the markets for branded, direct-store-delivered carbonated soft drinks and branded concentrate used to produce branded, direct-store-delivered carbonated soft drinks.[1415]

The FTC's Consent Decree therefore required TCCC to set up firewalls to prevent those persons responsible for concentrate-related functions from gaining access to confidential DPSG information and to restrict that type of information to persons assigned to "*traditional bottler functions*".[1416]

The publicly available documents do not yield any additional insights beyond that gained from the similar case *PepsiCo*. *Coca-Cola* will therefore not be discussed in any more detail.

[1411] *In re The Coca-Cola Company*, Complaint, FTC File No. 1010107, 5 Nov. 2010, available at: http://www.ftc.gov/os/caselist/1010107/101105cocacolacmpt.pdf, last viewed: 11 January 2013, preliminary remarks, para. 17.
[1412] Coca-Cola, Complaint, supra, para. 17.
[1413] Coca-Cola, Complaint, supra, para. 2.
[1414] Coca-Cola, Complaint, supra, para. 10.
[1415] Coca-Cola, Complaint, supra, paras. 21, 28.
[1416] See Coca-Cola, Decision and Order, FTC File No. 1010107, 5 Nov. 2010, available at: http://www.ftc.gov/os/caselist/1010107/101105cocacolado.pdf, last viewed: 11 January 2013.

2.1.4. GrafTech

GrafTech is yet another vertical merger that was investigated by the new Obama Administration. GrafTech International Ltd. (***GrafTech***) planned to acquire 81.1% of Seadrift Coke LP's (***Seadrift's***) stock. GrafTech is the largest manufacturer of graphite electrodes sold in the US and one of two leading providers of graphite electrodes worldwide.[1417] Graphite electrodes are large columns of virtually pure graphite used in metallurgy furnaces.[1418] The DoJ defined a separate worldwide market for graphite electrodes (***the downstream market***).

The key input in the manufacture of graphite electrodes in North America is petroleum needle coke.[1419] Needle coke is a nearly pure form of carbon that can be derived from petroleum or coal tar pitch.[1420] Four firms supplied petroleum needle coke to graphite electrode producers: Seadrift, ConocoPhilips Company (***ConocoPhilips***), and two Japanese vendors. The DoJ defined a worldwide market for the production and sale of petroleum needle coke (***the upstream market***).[1421]

The DoJ was concerned that the transaction would substantially lessen competition in the upstream market for the production and distribution of petroleum needle coke. On 29 November 2010, the DoJ filed a civil antitrust complaint seeking to enjoin GrafTech's acquisition of Seadrift.[1422]

GrafTech had entered into a supply agreement with Seadrift's only US rival ConocoPhilips. The termination clause of the supply agreement, which had been triggered in response to the proposed merger, initiated a three-year wind-down period, during which GrafTech had to buy specific volumes each year and ConocoPhilips had to provide the petroleum needle coke on a most-favoured customer basis (***MFN***).[1423] The prices that ConocoPhilips charged GrafTech had to match the lowest price charged by ConocoPhilips for the relevant grade of coke to all of its other coke customers.[1424]

In order to ensure compliance with the agreement, GrafTech and ConocoPhilips had accorded each other the mutual right to audit each other's books, records and documents

---

[1417] *US v. GrafTech Int. Ltd. and Seadrift Coke L.P.,* Competitive Impact Statement, II. A, 1:10-cv-02039 (D.D.C. 2010), available at: http://www.justice.gov/atr/cases/f264600/264608.htm, last viewed: 5 January 2013. For further information about GrafTech, see the webpage of the company available at: http://www.graftech.com/CORPORATE-INFO.aspx, last viewed: 5 January 2013.

[1418] GrafTech, Competitive Impact Statement, II. A., II.B.1.

[1419] GrafTech, Competitive Impact Statement, II. A., supra, II.A.

[1420] GrafTech, Competitive Impact Statement, II. A., supra, II.B.1.

[1421] GrafTech, Competitive Impact Statement, II. A., supra, II.B.1.

[1422] GrafTech,Competitive Impact Statement, II. A., supra, I.

[1423] GrafTech, Competitive Impact Statement, II. A., supra, II.B.2.

[1424] GrafTech, Competitive Impact Statement, II. A., supra, II.B.2.

which were likely to include information on current costs, production schedules and similar competitive information.[1425]

The DoJ was concerned that Seadrift would have access to the information provided to GrafTech post-merger. This would have enabled Seadrift to verify the "*real-time, customer-specific pricing*" of its main competitor and the "*volume of petroleum needle coke sold to nearly every electrode manufacturer in the world*".[1426]

The access to the prices and output of its main US competitor increased the likelihood that Seadrift and Conoco coordinated their actions in the market for petroleum needle coke. GrafTech had a right to audit the books of Seadrift's main US rival. It therefore had access to current pricing and output information regarding ConocoPhilips.

The DoJ saw the risk that GrafTech could pass on information to Seadrift, acting as a conduit of information. Seadrift then would have been able to detect any cheating from the terms of coordination by ConocoPhilips. Vertical integration therefore would have helped Seadrift to overcome coordination problems resulting from a lack of market transparency.

Vertical integration also threatened to increase the credibility of the threat of punishment. ConocoPhilips would have become aware that any cheating on its part was going to be detected and would have had an increased incentive to stick to the terms of coordination.[1427] Furthermore, under the agreement with GrafTech, ConocoPhilips would have had to provide the same discount for the large volumes sold to GrafTech.[1428] GrafTech intended to continue to purchase petroleum needle coke from ConocoPhilips on the basis of other supply agreements after the expiry of the three-year extension to the existing supply agreement.[1429]

The final judgment required the deletion of the audit rights and the MFN clause in the supply agreement and a commitment to not incorporate audit, MFN or similar clauses in any future contract with ConocoPhilips in relation to the provision of petroleum needle coke. GrafTech also had to ensure that Seadrift's customers' confidential information was not provided to GrafTech employees and that petroleum needle coke suppliers' confidential information was not provided to any Seadrift employees (*firewall provision*).[1430]

[1425] GrafTech, Competitive Impact Statement, II. A., II.B.2.
[1426] GrafTech, Competitive Impact Statement, II. A., II.B.2.
[1427] GrafTech, Competitive Impact Statement, II. A., II.B.2.
[1428] GrafTech, Competitive Impact Statement, II. A., II.B.2.
[1429] GrafTech, Competitive Impact Statement, II. A., II.B.2.
[1430] GrafTech, Final Judgment, 1:10-cv-02039 (D.D.C. 2010), available at: http://www.justice.gov/atr/cases/f268900/268995.htm, last viewed: 5 January 2013, IV-V. For another vertical merger in which coordinated effects were discussed, see *In the Matter of Union Oil Company of California*,

2.2. Conglomerate Mergers

Conglomerate merger challenges by US antitrust authorities have been extremely rare since the late 1960s. In fact, the DoJ and the FTC have not challenged a merger based on conglomerate effects to its conclusion since 1966.[1431] In-depth reviews, if they occur, are usually based on the theory that the transaction eliminates a fringe competitor.[1432] Under the new 2010 Horizontal Merger Guidelines, the elimination of a potential or fringe competitor is treated as a horizontal rather than a conglomerate concern.[1433] Coordinated effects may play a role in conglomerate merger cases if there are multi-market contacts between parties that are active in the same product market but in different geographic markets.

A recent case under the new Obama Administration in which the DoJ analysed the effects of multi-market contacts on the likelihood of post-merger coordination was Perdue Farms, Inc.'s (***Perdue's***) parent company FPP Family Investments' (**FPP's**) acquisition of Coleman Natural Foods (***Coleman***).[1434] Perdue is the third largest processor of conventional chicken in the US.[1435] The company is family-owned and consists of the Perdue Farms and the Perdue AgriBusiness.[1436] Coleman produces natural, antibiotic free and organic chicken.[1437] The case is another example of the Obama Administration's plan to step up merger enforcement in the agricultural sector.[1438]

Perdue and Coleman were not active in chicken-processing in the same regions. Coleman's plants were located in Fredericksburg (Pennsylvania), Petaluma (California) and Mount Vernon (Washington State).[1439] Perdue had a number of processing plants on the East coast, of which the closest was 50 miles from Coleman's plant in Fredericksburg. It did not have any plants on the West Coast.[1440] Notwithstanding the exact product market definition, there

---

Statement of the FTC, Docket No. 9305 and *In the Matter of Chevron Corporation and Unocal Corporation*, 2 August 2005, available at: http://www.ftc.gov/os/adjpro/d9305/050802statement.pdf, last viewed: 10 March 2013.

[1431] Rosch, *Terra Incognita,* supra, p. 8.

[1432] Robert Pitofsky, *Past, Present and Future of Antitrust Enforcement at the Federal Trade Commission,* The University of Chicago Law Review, Vol. 72, No. 1, Symposium: Antitrust, 2005, p. 218.

[1433] See Chapter 2.

[1434] See also Smith et al., *New Merger Guidelines and Enforcement Trends*, supra, pp. 306-307.

[1435] DoJ, *Statement of the Department of Justice's Antitrust Division on Its Decision to Close Its Investigation of Perdue's Acquisition of Coleman Natural Foods*, 2 May 2011, available at: http://www.justice.gov/atr/public/press_releases/2011/270591.pdf, last viewed: 29 January 2013.

[1436] See the webpage of Perdue, available at: http://www.perdue.com/Corporate/Our_Company/, last viewed: 29 January 2013.

[1437] DoJ, *Statement of the Department of Justice's Antitrust Division on Its Decision to Close Its Investigation of Perdue's Acquisition of Coleman Natural Foods*, supra. See also the information on the webpage of Coleman, available at: http://www.colemannatural.com, last viewed: 29 January 2013.

[1438] See DoJ, *Competition and Agriculture: Voices from the Workshops on Agriculture and Antitrust Enforcement in our 21st Century Economy and Thoughts on the Way forward,* available at: http://www.justice.gov/atr/public/reports/283291.pdf, last viewed: 10 March 2013, p. 1.

[1439] DoJ, *Statement of the Department of Justice's Antitrust Division on Its Decision to Close Its Investigation of Perdue's Acquisition of Coleman Natural Foods*, supra.

[1440] DoJ, *Statement of the Department of Justice's Antitrust Division on Its Decision to Close Its Investigation of Perdue's Acquisition of Coleman Natural Foods*, supra.

was no geographic overlap of the merging parties' activities, as the "markets" for chicken processing were regional in scope. It was, therefore, a conglomerate transaction.

The DoJ took a close look at the transaction in order to investigate whether the remaining chicken processors would find it easier to coordinate their behaviour (e.g., payment for grower services) as they interacted in more numerous regions. Perdue competed for chicken grower services with another major chicken processor in the area around Coleman's Fredericksburg plant. The DoJ, however, concluded that the transaction was unlikely to increase the risk of coordination. The exact reasons for the finding were not disclosed. As the investigation did not result in a complaint, no further materials, except for the cited statement, were made available on the agency's webpage.[1441]

Having said this, the DoJ emphasised that coordinated effects analysis will "*continue to be an area of division focus in merger review*" and that it will continue to apply its "*multi-market theory*" to future transactions, especially those "*involving agricultural markets where processors interact in numerous local markets for the purchase of goods or services from producers*".[1442] This means that coordinated effects analysis is one of the tools with which the Obama Administration's DoJ plans to invigorate merger analysis in the agricultural sector.[1443]

It seems that there are no more conglomerate merger cases in which coordinated effects have played a substantial role. The analysis of the treatment of coordinated effects in this area of merger control therefore suffers from lack of cases and materials on them. Nevertheless, what is to be expected is that the trend towards stronger non-horizontal merger enforcement under the Obama Administration will also lead to more coordinated effects analysis in conglomerate merger cases. We should, therefore, see more of these cases in the future.

2.3. Difficulties of non-horizontal merger enforcement

Pitofsky analysed merger challenges by the FTC during the Clinton and Bush Administrations and found that the three vertical mergers challenged during the Clinton Administration and the one challenged during the second Bush Administration could not have

[1441] DoJ, *Statement of the Department of Justice's Antitrust Division on Its Decision to Close Its Investigation of Perdue's Acquisition of Coleman Natural Foods*, supra.
[1442] DoJ, *Statement of the Department of Justice's Antitrust Division on Its Decision to Close Its Investigation of Perdue's Acquisition of Coleman Natural Foods*, supra.
[1443] The Obama Administration has been stepping up merger enforcement in the agricultural sector. An example is the divestiture the DoJ required in the dairy merger *Dean Foods*. See Chapter 2.

been brought if the vertical merger guidelines had been more closely followed.[1444] *FTC Commissioner Harbour* said the following in 2005 on the similar issue of vertical restraints:[1445]

> *"[...] [A]t the end of the day, I want to be able to say that the Federal Trade Commission had an effective program of vertical restraint enforcement during my tenure. I also want to be able to say, with a good deal of conviction that we did "no harm" in the process."*[1446]

The US approach to non-horizontal mergers has been marked by a fear of over-enforcement. It was commonly believed that non-horizontal interaction between companies could not harm competition except for a few exceptional situations. The general reasoning was that the aim of a non-horizontal merger is not to remove a competitor. The management hopes to make the firm better and more successful in the market. The merger may create efficiencies through vertical integration resulting in cheaper and/or better products.

US enforcement decisions were made (or rather not made) not on the basis of what enforcers knew but "*in fear*" of what enforcers "*did not know*".[1447] The analysis of non-horizontal coordinated effects is even more complex than that of horizontal coordinated effects analysis because the implications of actions on different markets need to be taken into account. It is therefore not surprising that there was, for a long time, almost no coordinated effects analysis in non-horizontal merger situations.

Even today, US non-horizontal merger decisions tend to discuss coordinated effects only on the sidelines.[1448] The likely reason for the lack of coordinated effects analysis in non-

---

[1444] Robert Pitofsky, *Past, Present and Future of Antitrust Enforcement at the Federal Trade Commission,* supra, pp. 220-221, with further reference.

[1445] The US was similarly hesitant to intervene against vertical restraints. Vertical restraints are agreements between firms that are active on different levels of the supply chain. On the discussion about the effects of vertical restraints in the U.S., see Robert Pitofsky, *Vertical Restraints and Vertical Aspects of Mergers – A US Perspective,* Fordham Corporate Law Institute, 24th Annual Conference on International Antitrust Law and Policy, 16-17 October 1997, available at: http://www.ftc.gov/speeches/pitofsky/fordham7.shtm, last viewed: 4 January 2013.

[1446] Pamela Jones Harbour, *Vertical Restraints Federal and State Enforcement of Vertical Issues,* ALI-ABA Course of Study Product Distribution and Marketing, 17-19 March 2005, available at: http://www.ftc.gov/speeches/harbour/070308vertical.pdf; last viewed: 23 April 2013, p. 13. The comments on vertical restraints also apply to vertical merger enforcement.

[1447] Harbour, *Vertical Restraints*, supra, p. 11. Commissioner Harbour feared that, if economists failed to address the remaining questions concerning the effects of vertical restraints in certain industries, the antitrust authority might be in a position to advocate a policy without providing a role for the pro-competitive elimination of vertical restraints. See also her reference to Robert L. Steiner, *Marketing Productivity in Consumer Goods Industries – A Vertical Perspective,* 42 J. Market 60, 1978, pp. 61-62 and *A Dual Stage view of the Consumer Goods Economy,* 35 J. Econ. Iss. 27, 2001.

[1448] See for example US *v Bemis Company, Inc.*, Competitive Impact Statement, 24 February 2010, available at: http://www.justice.gov/atr/cases/f255600/255638.htm, last viewed: 4 January 2013. The DoJ focused on unilateral effects. It only briefly mentioned coordinated effects (with regards to the market for flexible packaging shrink bags for fresh meat): "*In addition, Bemis's elimination of Alcan as an independent competitor would result in only two suppliers accounting for nearly all of the market. Such an increase in concentration would make coordination more likely.* "

horizontal merger enforcement today is the complexity associated with multi-level coordination modelling. Unilateral effects concentrate on the ability of one market player to act independently of its rivals and other market participants. This requires consideration of fewer factors than a multi-level game-theoretic analysis.

The use of a game theoretic analysis requires modelling. Economists and antitrust authorities still have problems getting the modelling right. They have to find the right model and insert the correct estimates, and they also require the time and resources to conduct the exercise.

Michael A. Salinger, former Director of the FTC's Bureau of Economics, commented on the limits of modelling in a speech given in 2005:

> "*Regrettable as that might initially seem, the power of modelling comes from simplifying reality. Yet, when we use a model to understand the real world, we must always confront whether the results of the model are real or whether they are modelling distortions*."[1449]

An assessment that relies on economic modelling for the analysis of coordinated effects of vertical transactions is especially prone to error:

> "*Because the numbers are small, it is natural to consider game theoretic models, but vertical settings pose a particular challenge for how we model equilibrium. [...] If you think about it, though, not every actor's behaviour is constant. When a firm sells another unit of output, someone buys it, so the behaviour of the buyer is not held constant. In a standard Cournot model, the buyers are not formal players in the game, so we treat the equilibrium as a Nash equilibrium. In a model of vertical market structure, though, one must confront the issue of whether vertically integrated firms sell the intermediate good. The difficulty that arises is that if they do, the customers, i.e., the downstream firms, are themselves players in the game. When one firm changes its output, there is simply no logical way for it to conjecture that the behaviour of both the other upstream and the other downstream firms remain constant.*"[1450] [emphasis by the author]

Game-theoretic models rely on keeping factors constant, which distances them from dynamic, real-world situations. In other words, the reality of market interaction is often too complex to be pressed into game-theoretic models, which necessarily fail to take all possible actions into account.

[1449] Michael A. Salinger, *Is it Live or Is it Memorex? Models of Vertical Mergers and Antitrust Enforcement,* Association of Competition Economics Seminar on Non-Horizontal mergers, 7/8 September 2005, available at: http://www.ftc.gov/speeches/salinger/050927isitlive.pdf, last viewed: 23 April 2013, p. 2.
[1450] Salinger, *Is it Live or Is it Memorex?,* supra, p. 3.

According to *Salinger*, unilateral effects models that concentrate on the specific business rather than on the actions of several market players are less prone to what he calls "*economic memorex*", that is the likelihood of believing that the results obtained by modelling are real when they are, in actuality, merely modelling distortions.[1451]

However, there are no plausible alternatives to the use of modelling: relying solely on structural criteria (i.e., ticking off the list of factors that are thought to contribute to coordination) would be the alternative, but it is also problematic as it is too structural and does not go into the peculiarities of the specific transaction. *Salinger* commented on this issue too:

> *"I agree with Professor Church that identifying a purely structural set of criteria is problematic. In the United States, we are reluctant to base a horizontal merger case on purely structural criteria except in extreme cases where the number of remaining suppliers is very small. Purely structural cases would seem to be even more problematic with vertical mergers, where even the theoretical links are tenuous."*[1452]

Customer testimonies do not provide a solution either as they lack reliability. Customers tend to have their own agenda that differs from the protection of competition. They may also lack the knowledge to provide an informed answer as to the effects of the transaction. Again, *Salinger* provides a useful quote:

> "*How about customer testimony? In the wake of the Arch Coal and Oracle decisions in the US, the role of customer testimony in judicial decisions on horizontal mergers has been called into question. Customer testimony would be more problematic in a vertical mergers case as the directly affected customer might also be a competitor."*[1453]

"*Hot documents*", which clearly spell out the parties' intentions are often unavailable.[1454] Even if they do exist, it is unclear whether the parties' intentions will become true after the merger. A party may have the worst intentions (e.g., it may merge to eliminate a maverick competitor). However, higher profits due to successful post-merger coordination may be short-lived. They may attract new entry into the market. The merging parties themselves do not have perfect oversight as to the market (which can also be gleaned from the fact that many mergers are not successful).

[1451] Salinger, *Is it Live or Is it Memorex?,* supra.
[1452] Salinger, *Is it Live or Is it Memorex?,* supra, p. 2.
[1453] Salinger, *Is it Live or Is it Memorex?,* supra, p. 2.
[1454] Salinger, *Is it Live or Is it Memorex?,* supra, p. 2.

Antitrust officials and policy-makers need to decide whether the risks of over-enforcement are higher than the risks of under-enforcement. This is where competition law meets politics.

Conservative (republican) administrations tend to favour a policy of non-intervention, unless there is a firm economic basis that indicates that the vertical merger will be anti-competitive. They also tend to favour Chicago-School analysis and fear the prospect of over-enforcement. More liberal (democratic) administrations, like the Obama Administration, are more likely to worry about big companies, tend to be more interventionist and worry more about under- rather than over-enforcement.

The statement is a generalisation, but it is in its essence correct. Antitrust agencies brought more actions during the Clinton office than during either the first or second part of the George W. Bush Administration, and we are seeing an increase in enforcement again under the current Obama Administration.[1455] Merger enforcement changes with the each presidential election. This is especially true for the DoJ, which is directly controlled by White House policy. The FTC, as an independent agency, has more constant enforcement patterns. However, even the FTC adapts to the current enforcement policy.

Assistant Attorney General of the Antitrust Division Varney stated the following regarding vertical restraints and vertical merger enforcement under the new Administration:

> "*[T]he Antitrust Division, drawing upon the significant expertise of my new leadership team, will have the opportunity to explore vertical theories and other new areas of civil enforcement, such as those arising in high-tech and internet-based markets. [...] We thus plan to devote attention to understanding the unique competition-related issues posed by these markets. In the past, the Antitrust Division was a leader in its enforcement efforts in the technology industries, and I believe that we will take this mantle again.*"[1456] [emphasis added by the author]

During her time as Commissioner at the FTC during the 1990s, then-Commissioner *Varney* already supported several vertical merger enforcement decisions.[1457] Up to mid-2011, the

[1455] For statistics on Hart-Scott-Rodino Merger Notifications and Actions from 1991-2001, see also Carl Shapiro's webpage at University of California, Berkeley, available at: http://faculty.haas.berkeley.edu/shapiro/atcharts.pdf, last viewed: 23 April 2013. The source of the statistics is the DoJ's Antitrust Division, *Workload Statistics 1991-2001*. However, these statistics are no longer available on the DoJ's webpage. For more recent statistics, see DoJ, *Ten Year Workload Statistics Report*, available at: http://www.justice.gov/atr/public/workload-statistics.html, last viewed: 23 April 2013. The FTC also publishes annual competition enforcement reports under www.ftc.gov/bc/anncompreports.shtm, last viewed: 23 April 2013.

[1456] Varney, *Vigorous Antitrust Enforcement in this Challenging Era,* supra, p. 16.

[1457] See, for example, *Statement of Chairman Robert Pitofsky and Commissioners Janet D. Steiger and Christine A. Varney in the Matter of Cadence Design Systems, Inc./Cooper & Chyan Technology, Inc.*, File No. 971-0033, available at http://www.ftc.gov/os/1997/05/state01.htm, last viewed: 23 April 2013. See also Rosch, *Terra Incognita*, supra.

DoJ analysed a number of vertical transactions.[1458] However, Commissioner Varney then quit and was succeeded by a number of Acting Assistant Attorney Generals.

IV. Conclusion

Coordinated effects still lead a "*life in the shadows*" in non-horizontal merger enforcement, especially in the EU. This is true, despite the fact that the EC has developed highly sophisticated tools to assess coordinated effects of non-horizontal mergers. It has issued its first non-horizontal merger guidelines in 2008, which fully endorsed the application of economic analysis in the assessment of the effects of non-horizontal transactions. It has also introduced the position of the CCE who (together with his team) can assist the EC's case team with the analysis. The US, by comparison, still relies on outdated Guidelines from 1984.

Despite the extremely modern Guidelines, the EC is even more reluctant than the DoJ and the FTC to intervene on the basis of coordinated effects. This conclusion can be drawn from the fact that coordinated effects are discussed in only a very small number of non-horizontal merger cases, whereas the vast majority of in-depth reviews of non-horizontal transactions are based on unilateral effects. Moreover, whereas coordinated effects may have been absent in many of the cases that were assessed only on the basis of non-coordinated effects, the ratio of non-coordinated versus coordinated effects assessments undertaken by the EC strongly suggests that some decisions that could have been based on coordinated effects were based on unilateral effects. The major reasons for the preference of the EC for unilateral effects analysis is the complexity of coordinated effects assessments and a greater confidence in rendering a decision that will withstand a potential challenge before the European courts based on unilateral effects.

In none of the analysed coordinated effects cases did the EC demand commitments. Both *TomTom*[1459] and *Nokia*[1460] were cleared, even though the upstream market for navigable digital map databases was duopolistic[1461] and despite the fact that in *Nokia* the only remaining competitor that was not vertically integrated, planned to vertically integrate, all that

[1458] In almost all cases, the DoJ was concerned about the foreclosure effects of the transaction. See US *v. Ticketmaster Entertainment, Inc. and Live Nation, Inc.*, Competitive Impact Statement, 25 January 2010, available at: http://www.justice.gov/atr/cases/f254500/254544.htm, last viewed: 23 April 2013; US *v. Comcast Corp., General Electric Co., NBC Universal Inc.*, Competitive Impact Statement, 18 January 2011, available at: http://www.justice.gov/atr/cases/f266100/266158.htm, last viewed: 23 April 2013; US *v. Google Inc., ITA Software Inc.*, Competitive Impact Statement, 8 April 2011, available at: http://www.justice.gov/atr/cases/f269600/269620.pdf, last viewed: 23 April 2013.
[1459] Case No. COMP/M.4854, *TomTom/Tele Atlas,* supra.
[1460] Case No. COMP/M.4942, *Nokia/Navteq*, supra.
[1461] *TomTom*, para. 80; *Nokia*, paras. 23-42.

while there was also a highly concentrated downstream market.[1462] Of course, *TomTom, Nokia* and *Philips*[1463] had specific characteristics that made coordinated effects unlikely. They had in common that the transaction took place in highly dynamic, technology-driven markets.[1464] Innovation has a strong destabilising effect on coordination. All three decisions were, therefore, very special and it is difficult to deduct from them the EC's general approach to vertical mergers' coordinated effects. Nevertheless, the fact that the EC's non-horizontal merger decisions in which coordinated effects were discussed were such in which the merger was cleared unconditionally fits in with the finding that the EC is reluctant to intervene on the basis of coordinated effects. Whenever it renders a decision that could later be challenged by the merging parties, the EC will prefer unilateral effects as the theory of harm over that of coordinated effects.

It is even more difficult to find coordinated effects discussions of the EC in conglomerate merger cases. The EC analysed the effect of multi-market contacts between GBI/ABF and Lesaffre on the likelihood of coordination in *ABF*.[1465] However, the conglomerate analysis in ABF was only a part of the general assessment and the merger at hand was primarily horizontal. The EC would probably not have demanded commitments if GBI/ABF and Lesaffre had not also been active in the same geographic markets. The case is, therefore, also not a good representation of the EC's general approach to conglomerate mergers' coordinated effects. Unfortunately, the EC has not undertaken any recent coordinated effects assessments of conglomerate mergers that could yield a deeper insight.

The US currently seems to be much more proactive when it comes to coordinated effects analysis in non-horizontal merger enforcement. Whereas the US approach to non-horizontal mergers had been marked by a fear of over-enforcement since the 1970s, it has livened up under the new Obama Administration. The hesitation to conduct in-depth reviews based on the alleged coordinated effects of vertical mergers was described well by Michael A. Salinger, former Director of the FTC's bureau of Economics, who commented on the limits of modelling in a speech dating from 2005: "[*t*]*he power of modelling comes from simplifying reality. […] Because the numbers are small, it is natural to consider game theoretic models, but vertical settings pose a particular challenge for how we model equilibrium.*"[1466] As FTC Commissioner Harbour admitted on the (related) issue of vertical restraints: "*[a]t the end of the day, I want to be able to say that the Federal Trade Commission had an effective program of vertical restraint enforcement during my tenure. I also want to be able to say, with*

[1462] *Nokia*, paras. 396, 94-140.
[1463] Case No. COMP/M.4300, *Philips/Intermagnetics*, supra.
[1464] See, for example, *Nokia*, para. 401; *Philips*, para. 65.
[1465] *ABF*, para. 204.
[1466] Salinger, *Is it Live or Is it Memorex?*, supra, p. 2.

a good deal of conviction that we did no harm in the process."[1467] The US' lack of enforcement was therefore based on the conviction that non-horizontal mergers only seldom posed a risk to competition and the fear of getting it wrong.

Non-horizontal merger enforcement was revived by the Obama Administration. Former Assistant Attorney General at the Antitrust Division of the DoJ, Christine Varney, from the start, vowed to reinvigorate vertical merger enforcement - even though she did not explicitly comment on reinvigorating the assessment of the coordinated effects of vertical mergers ("[*T]he Antitrust Division, drawing upon the significant expertise of my new leadership team, will have the opportunity to explore vertical theories and other new areas of civil enforcement […].*").[1468]

The Obama Administration, so far, has also lived up to these expectations in the area of coordinated effects analysis. Vertical merger enforcement based on coordinated effects has been significantly stepped up by the new Administration. For example, it conducted a detailed review of the acquisition of outstanding voting securities and shares in independent bottlers by PepsiCo[1469] and Coca-Cola,[1470] as well as of the acquisition of the majority stake in Seadrift by GrafTech.[1471] It also analysed possible coordinated effects resulting from the notified transaction in *Perdue*.[1472]

The DoJ and FTC's coordinated effects analysis in vertical merger cases is usually based on the theory of anti-competitive information exchange. In *Premdor*, the DoJ required Premdor to divest Towanda, Pennsylvania, one of its two door skin plants in the US, to a new entrant into the US market.[1473] The DoJ was concerned that the transaction eliminated Masonite, which was the most important competitive force in the upstream market. Only three major companies were active in the upstream market for moulded door skins.[1474] The downstream market for moulded doors was duopolistic.[1475] The DoJ was worried that Premdor would act as a conduit of information about the pricing and output behaviour of Masonite's upstream rivals.[1476] The decision is remarkable because the DoJ went beyond the 1984 Guidelines, which did not provide any guidance on the vertically integrated firm's ability to act as a conduit of information and the effects this could have on coordination, and explained why it believed that the remaining non-vertically integrated moulded door manufacturers would not

---

[1467] Harbour, *Vertical Restraints Federal and State Enforcement of Vertical Issues*, supra, p. 13.
[1468] Varney, *Vigorous Antitrust Enforcement in this Challenging Era,* supra, p. 16.
[1469] PepsiCo., supra.
[1470] Coca-Cola, supra.
[1471] GrafTech, supra.
[1472] DoJ, *Statement of the Department of Justice's Antitrust division on Its Decision to Close its Investigation of Perdue's Acquisition of Coleman Natural Foods*, supra.
[1473] Premdor, Final Judgment, IV. See also Riordan, *Competitive Effects of Vertical Integration*, supra, p. 168.
[1474] Premdor, Competitive Impact Statement, II.C.2. See also Stroux, US *and EC Oligopoly Control,* supra, p. 189.
[1475] Premdor, Competitive Impact Statement, II.C.2. See also Stroux, US *and EC Oligopoly Control,* supra, p. 189.
[1476] Premdor, Competitive Impact Statement, II.C.2.

be able to sufficiently expand their output to defeat coordination. The DoJ agreed to settle the complaint with a consent order that required Masonite to divest the Towanda plant (one of its two moulded door skin plants) to a suitable new entrant into the moulded door skin market.[1477]

The DoJ assessed the effects of (conglomerate) multi-market contacts on the likelihood of successful coordination in *Perdue*. Perdue Farms, Inc. and Coleman Natural Foods were both active in chicken processing, although in different geographic regions.[1478] The situation was, in that respect, similar to the situation in *ABF* (i.e., the merging parties were active in the same product market but in different geographic markets). The DoJ concluded that the transaction was unlikely to result in coordination. However, it emphasised that conglomerate mergers' coordinated effects were on its agenda, especially in agricultural markets. The DoJ was concerned about conglomerate effects because companies in the agricultural markets that the DoJ planned to focus on were characterized by interaction between competitors in numerous local markets.[1479] The DoJ has therefore at least expressed that it considers multi-market contacts and their effects on the likelihood of coordination a major issue that antitrust authorities have to tackle.

We therefore have the following general picture: while the EU has never been as hesitant as the US to scrutinise non-horizontal transactions and has by far the more modern set of Guidelines to do so and the CCE and his team to guide the assessment, it is reluctant to make use of coordinated effects theories in non-horizontal merger cases. As a result, most non-horizontal mergers that are investigated will be assessed on the basis of unilateral anti-competitive effects. Coordinated effects hardly ever play a role.

In the US, non-horizontal merger enforcement was almost dead for decades because antitrust authorities across almost the entire political spectrum believed that these transactions were either pro-competitive or competitively neutral. The US is traditionally more reluctant than the EU to subject non-horizontal mergers to an in-depth review. However, it is less reluctant than the EU to base its in-depth analysis on coordinated effects, even in a non-horizontal merger context, even though such decisions are also rare in the US. Coordinated effects analysis in non-horizontal merger cases has been increased by the new Obama Administration as part of its pledge to revive non-horizontal merger enforcement.

[1477] Premdor, District Court for the District of Columbia Circuit, Final Judgment, IV. See also Riordan, *Competitive Effects of Vertical Integration*, supra, Ch. 4, at 168.
[1478] DoJ, *Statement of the Department of Justice's Antitrust Division on Its Decision to Close Its Investigation of Perdue's Acquisition of Coleman Natural Foods*, supra.
[1479] DoJ, *Statement of the Department of Justice's Antitrust Division on Its Decision to Close Its Investigation of Perdue's Acquisition of Coleman Natural Foods*, supra.

Chapter 4: Conclusion

The purpose of this dissertation was to explain the role of coordinated effects in merger control in the EU and the US. Significant developments recent years. The most important change in the EU was the introduction of the 2004 Merger Regulation, which came with a commitment to a "*more economic approach*" to merger policy. In the US, the most important recent developments were the election of the Obama Administration and the 2010 Horizontal Merger Guidelines issued by the new Administration. All of these developments have had an impact on coordinated effects analysis in these jurisdictions. In the EU, coordinated effects analysis seems to have – at least for the time being – been pushed to the sidelines as the EC prefers to rely on unilateral effects analysis in situations in which the merged entity will not be dominant. That Article 2 of the 2004 Merger Regulation also allows for intervention on the basis of unilateral effects in the absence of dominance has been clarified in recital 25 of the Regulation. In the US, merger enforcement has generally experienced a reinvigoration, which also extends to the area of coordinated effects. The 2010 Merger Guidelines of the Obama Administration have broadened the scope for intervention based on coordinated effects. The DoJ and the FTC are more often prepared to base in-depth reviews of mergers on coordinated effects.

I have explained in this dissertation that the concept of coordinated effects was developed in the EU by its jurisprudence in the landmark decisions *Nestlé*,[1480] *Kali + Salz*,[1481] *Gencor*,[1482] *Airtours*[1483] and *Impala*.[1484] It was clear after these decisions had been rendered that the EC can issue prohibition decisions also on the basis of anti-competitive coordinated effects.[1485] Coordinated effects did not contribute to the perceived "*gap*" in the 1989 Merger Regulation and, merely for them, the introduction of the new SIEC-test would not have been necessary. This is notwithstanding the fact that the more flexible approach to merger analysis and the commitment to a "*more economic approach*" that went hand-in-hand with the introduction of the SIEC-test had a positive effect also on the analysis of coordinated effects. The 1989 Merger Regulation was unclear with regards to whether the EC could intervene in cases in which a proposed transaction threatened to result in ant-icompetitive unilateral effects without dominance, i.e. because the transaction created a non-dominant firm that could unilaterally raise prices because of the elimination of an important competitive constraint.[1486]

[1480] Case IV/M.190, *Nestlé/Perrier*, supra.
[1481] Case IV/M.308, *Kali&Salz*, supra.
[1482] Case IV/M.619, *Gencor/Lonrho*, supra.
[1483] Case IV/M.1524, *Airtours*, supra.
[1484] Case COMP/M.3333, *Sony/BMG*, supra.
[1485] See also Röller et al., *Ökonomische Analyse des Begriffs "significant impediment to effective competition"*, supra, para. 6.
[1486] See also Röller et al., *Ökonomische Analyse des Begriffs "significant impediment to effective competition"*, supra, para. 8; Bundeskartellamt, *Marktbeherrschungs- und SIEC-Test*, supra, p. 2.

The 2004 Merger Regulation clarified in its recital 25 that its Article 2 also applied to unilateral anti-competitive effects that did not create or strengthen a dominant position.

One of the major changes that came with the introduction of the 2004 Merger Regulation was the creation of the office of the CCE. Its introduction was the achievement of the then EU Commissioner Mario Monti who, during conferences held at that time, stressed the need for a more economic approach to competition policy.[1487] The EU had understood that, in order to investigate complex merger cases, it needed to apply a rigorous economic and econometric analysis.[1488] Unfortunately, the merging parties have no access to written documents produced by the CCE and his team. The merging parties will often not know whether the decision of the EC was in line with the advice given by the CCE or whether it diverged from it. Nor will they be able to assess the CCE's economic analysis and, as a consequence, will find it difficult to attack that analysis in court, not least because the European courts have ruled that the EC enjoys a margin of appreciation in its economic assessment. However, this margin of appreciation should be deemed to have been exceeded, where the EC diverges on purpose from the economic advice given by the CCE and his team and without providing an adequate reason why it has done so.

The EC has published highly detailed Guidelines on the treatment and the effects of horizontal and non-horizontal mergers. The Horizontal Merger Guidelines were published in 2004 and the Non-Horizontal Merger Guidelines were published, after much discussion, at the end of 2008. The Guidelines contain sections on coordinated effects that lay out the economic fundamentals that the EC will consider in its analysis and contain references to decisions of the EC and the European courts. Those Guidelines allow practitioners to assess *ex-ante* the likelihood of an in-depth review by the EC. Therefore, they contribute to greater legal certainty.

The US' DoJ and FTC have revised their Merger Guidelines. The revision was necessary as eighteen years had elapsed since the introduction of the 1992 Merger Guidelines (thirteen years if we consider the revision in 1997). The 1992 Merger Guidelines were, in some aspects, no longer in line with the predominant economic and political approach to horizontal mergers and the DoJ and the FTC had begun to depart from it.[1489]

The new 2010 Merger Guidelines have widened the gap between EU and US merger control. They extended the notion of coordinated effects by including "*parallel accommodating conduct not pursuant to a prior understanding*" (§ 7),[1490] have included further factors that

[1487] See Monti, cited in: Duso et al., *An empirical assessment of the 2004 EU merger policy reform*, supra, p. 1.
[1488] Monti, *EU Competition Policy,* supra.
[1489] Hovenkamp, *Harm to Competition Under the 2010 Horizontal Merger Guidelines*, supra, p. 4.
[1490] 2010 US Horizontal Merger Guidelines, §7.

indicate a likelihood of successful coordination, such as past failed attempts at collusion[1491], and no longer seem to rely on the *Stigler*-framework for coordinated effects analysis. They strengthen the position of the DoJ and the FTC in their assessment of coordinated effects. This are problematic because merger control often encounters political pressure. Softening the criteria for intervention leaves more room for political bias. The heads of the DoJ and its Antitrust Division are appointed by the Presidential Administration. They have a curriculum vitae that shows that they are in line with the President's ambitions for antitrust policy. The same is true in the EC: the Competition Commissioners have all been politicians and they brought their political agenda with them to DG Comp. This is why competition authorities' enforcement powers have to be based on transparent rules that clearly limit enforcement.

The expansion of the DoJ's and the FTC's enforcement powers by the 2010 Merger Guidelines has also been criticised by the EC's CCE Kai-Uwe Kühn at the GCR's 2nd Annual Law Leader's Conference in Miami, on 8 February 2013. The CCE expressed his doubts whether future decisions of the DoJ and the FTC will be based on sufficient evidence and that, as a result, the DoJ and/or the FTC might impose commitments or even stop some mergers that would not have resulted in the predicted anti-competitive effects.[1492]

The DoJ and the FTC have also stepped up merger enforcement based on coordinated effects. Before Barack Obama took office, he criticised the lax antitrust enforcement (meaning merger and antitrust enforcement) under the George W. Bush Administration and promised that his Administration was going to reinvigorate antitrust enforcement.[1493] In line with this, Christine Varney - who was appointed Assistant Attorney General of the DoJ's Antitrust Division - promised to engage in "*vigorous antitrust enforcement*".[1494]

The record of the Obama Administration indeed shows more enforcement activity, also in the area of coordinated effects. The DoJ successfully litigated its first merger challenge since 2004 in *H&R Blocks*, a merger to duopoly.[1495] The victory reinstated confidence that the DoJ had lost with its defeat in the litigation of Oracle's acquisition of PeopleSoft under the George W. Administration.[1496] The DoJ also successfully challenged the four-to-three merger between AT&T and T-Mobile. The DoJ's argument in that litigation went far beyond the structural presumption to show how the market characteristics favoured coordination.[1497]

[1491] 2010 US Horizontal Merger Guidelines, §7.2.
[1492] Knox, *EU official: Theories of coordination in US merger review may lack evidence*, supra.
[1493] Obama, *Statement for the American Antitrust Institute,* supra. See also Crane, *Has the Obama Justice Department Reinvigorated Antitrust Enforcement,* supra, p. 13.
[1494] Varney, *Vigorous Antitrust Enforcement in this Challenging Era,* supra.
[1495] *United States v. H&R Block, Inc.*, supra.
[1496] *United States and Plaintiff States v. Oracle Corporation,* supra.
[1497] *United States and Plaintiff States v. AT&T, Inc. et al.*, supra.

The DoJ also required commitments in exchange for the clearance of the acquisition of the De Pere and Waukesha Plants from Foremost Farms USA by Dean Foods Company.[1498] This decision is part of the Obama Administration's pledge to invigorate merger control in the agricultural sector, in which merger enforcement had been weak, because many acquisitions in the agricultural sector do not meet the compulsory notification thresholds.[1499] That was also the case in *Dean Foods*. The DoJ nevertheless subjected the transaction to an in-depth review.[1500] In the end, the transaction was cleared subject to the commitment that the Waukesha plant would be sold to a suitable buyer. It was sold to the investment company OpenGate Capital. The Waukesha plant then suddenly went bankrupt in January 2013. The DoJ was heavily criticised for having contributed to its failure by demanding that the plant be sold to a third party who turned out to have little to no experience in the dairy business.[1501] The case shows that government intervention (i.e. requiring commitments in exchange for merger clearance) can have unexpected and unwanted consequences that create the impression that the market might have been better off without intervention.

The FTC has also stepped up its merger litigation. It has challenged a four-to-three merger in the medical industry (in *Grifols*)[1502] as well as the merger between OSF Healthcare Systems and Rockford Health Systems, which would have reduced the number of acute-care inpatient hospital services in the Rockford region from three to two.[1503] Reinvigorating merger control in the health care sector has also been one of the commitments of the Obama Administration.[1504] Nevertheless, the effects of changes of the Administration are not as marked at the bipartisan FTC as they are at the DoJ, which is not independent and usually follows the Administration's antitrust policy.

If we look at the number of remaining competitors, we find a clear correlation between that number and the likelihood that the DoJ or the FTC's challenge will be successful in court. Six-to-five and five-to-four mergers are extremely difficult to win for the DoJ and the FTC. The DoJ and the FTC have lost every single six-to-five and five-to-four merger challenge that I have analysed. US courts will only grant an injunction in such cases, if the DoJ or the FTC show beyond the structural presumption why coordinated effects are the likely result of the proposed transaction. The structural presumption is much weaker in the case of six-to-five

[1498] *United States v. Dean Foods Company,* supra.
[1499] Balto, *Reinvigorating Antitrust Enforcement*, supra, pp. 11-12.
[1500] Balto, *Reinvigorating Antitrust Enforcement*, supra, pp. 11-12.
[1501] See Catan, *First Obama Antitrust Case Sours as Milk Plant is Shut*, supra. For some of the criticism, see Content, *Waukesha dairy plant Golden Guernsey suddenly closes,* supra; Ekvall, *Get out of the whey*, supra.
[1502] *Grifols, S.A. and Talecris Biotherapeutics Holding Corp.*, supra.
[1503] *FTC v. OSF Healthcare Systems and al.*, supra.
[1504] Balto, *Obama's Healthcare Trust Busting*, supra; Cantor et al., *A Watchful Antitrust Eye in Healthcare*, supra; FTC, *Antitrust Under the Obama Administration*, supra, p. 12; Kendall, *Regulators Seek to Cool Hospital-Deal Fever*, supra.

and five-to-four mergers than in three-to-two mergers. Defendants stand a real chance to rebut the government's *prima facie* case.

Six-to-five and five-to-six mergers are also the perfect battleground for economists. Expert testimonies play a significant role in merger litigation for these kinds of mergers in the US. This is less so in the EU, which is unfortunate. In *Kraft General Foods*[1505] in the District Court, the State of New York in its role of plaintiff and the defendant Kraft each had their own economics expert.[1506] US courts are prepared to enter into highly detailed economic assessments regarding the effects of the transaction in question on competition. The fact that the DoJ and the FTC have to apply for an injunction in court provides the merging parties with a real chance to contest the DoJ or the FTC's economic analysis.

This is a major difference between the EU's and the US' merger control system. The EC can itself render commitment decisions and can prohibit transactions. It will use this power during merger negotiations to obtain the commitments that will remove the competition concerns. The merging parties offer commitments to get the transaction cleared quickly, often regardless of whether they share the competition concerns. They will also seldom challenge the EC's commitment decision since on average five years would elapse until the General Court rendered a decision. The waiting paired with the uncertainty as to whether and in what form the merger will finally be approved would kill most deals.

When it comes to three-to-two mergers, the structural presumption, unsurprisingly, has greater weight. The DoJ and the FTC have won every single challenged merger-to-duopoly in recent years. However, even in three-to-two merger cases, the merging parties have a chance to rebut the government's *prima facie* case. Litigation in merger-to-duopoly cases therefore also tends to be highly complex. As this dissertation has shown, the merging parties, the DoJ and/or the FTC will submit numerous documents and expert testimonies in order to prove their argument. An example of such a large-scale litigation of a merger-to-duopoly that has been discussed in this dissertation is *Heinz*.[1507]

US merger enforcement based on coordinated effects has also increased with regard to non-horizontal mergers. The US' approach to non-horizontal mergers in general had been marked by a fear of over-enforcement. The Chicago School, which has advocated little government intervention, argued that vertical mergers were "*either pro-competitive or competitively neutral*".[1508] The recent general increase vertical merger enforcement is the result of the rise of new economic theories regarding the effects of certain non-horizontal

[1505] *Kraft General Foods*, supra.
[1506] Rubinfeld, *Market Definition with Differentiated Products,* supra, p. 165; Gotts et al., *Just the Facts*, supra, p. 1234; Cotterill, *Jawboning Cereal*, supra, p. 8.
[1507] *FTC v. H.J. Heinz Co. and Milnot Holding Corp.*, supra.
[1508] Posner, *The Chicago School of Antitrust Analysis*, supra, pp. 925, 933.

mergers. As far as these theories rely on the basic tenants of the Chicago School while adding new insights about situations in which these mergers may nevertheless have anti-competitive effects, they have been referred to as "*post Chicago theories*". That the new approach has been endorsed by the DoJ and the FTC is largely political: the Obama Administration has vowed to reinvigorate vertical merger enforcement and has appointed like-minded people to head the DoJ as well as Chairman of the FTC. The first Assistant Attorney General of the Antitrust Division of the DoJ under the Obama Administration, Christine Varney, promised to "*explore vertical theories*".[1509] Regarding the coordinated effects of vertical mergers, the DoJ has since then conducted a detailed review of the acquisition of outstanding voting securities and shares in independent bottlers by PepsiCo[1510] and Coca-Cola,[1511] as well as of the acquisition of the majority stake in Seadrift and GrafTech.[1512] The analysis of the DoJ and the FTC regarding coordinated effects resulting from vertical mergers primarily relies on anti-competitive information exchange theories. An example is *Premdor*,[1513] in which the DoJ required the divestiture of a moulded door skin plant to a new entrant into the market for moulded door skins.[1514] The downstream market for moulded doors was duopolistic and the DoJ was concerned that the remaining non-integrated moulded door manufacturers could not sufficiently expand their output to defeat coordination facilitated by Premdor acting as conduit of information about the pricing and output behaviour of Masonite's competitors.[1515]

Conglomerate merger decisions of the DoJ or the FTC that have been decided based on coordinated effects remain extremely rare. The only analysed recent case in which coordinated effects were discussed at length was *Perdue*.[1516] As in *ABF*, the merging parties were active in the same product markets (chicken processing) but different geographic markets. The DoJ reached the conclusion that the transaction was unlikely to lead to coordinated effects. However, the DoJ emphasised that the effects of conglomerate mergers on the likelihood of anti-competitive post-merger coordination between the remaining market participants were on its agenda, especially in the agricultural sector in which competitors interacted in numerous local markets.[1517] This at least raises the expectation that the Obama Administration's DoJ is willing to step up cooredinated effects analysis also in conglomerate merger cases.

[1509] Varney, *Vigorous Antitrust Enforcement in this Challenging Era*, supra, p. 16.
[1510] *PepsiCo., Inc.,* supra.
[1511] *The Coca-Cola Company*, supra.
[1512] US *v. GrafTech Int. Ltd. and Seadrift Coke L.P.*, supra.
[1513] US *v. Premdor Inc.*, supra.
[1514] *Premdor*, Final Judgment, IV.
[1515] *Premdor*, Final Judgment, IV.
[1516] DoJ, *Statement of the Department of Justice's Antitrust Division on Its Decision to Close Its Investigation of Perdue's Acquisition of Coleman Natural Foods*, supra.
[1517] DoJ, *Statement of the Department of Justice's Antitrust Division on Its Decision to Close Its Investigation of Perdue's Acquisition of Coleman Natural Foods*, supra.

The EU is also experiencing a period of strong merger enforcement under Commissioner Almunia. Commissioner Almunia has already blocked four mergers during his tenure, many more than his predecessor Neelie Kroes during her own. The mergers that have been blocked during Commissioner Almunia's time in office are that between Aegean Airlines and Olympic Air,[1518] Ryanair's third attempt to buy Aer Lingus,[1519] UPS' acquisition of TNT Express[1520] and the merger between Deutsche Boerse and NYSE Euronext.[1521] Four out of five prohibition decisions under the 2004 Merger Regulation were rendered during Commissioner Almunia's tenure.

While merger enforcement is generally increasing in the EU, the EC still avoids challenging mergers on the basis of coordinated effects. In my view, the hesitation to intervene on the basis of coordinated effects is the result of the General Court's criticism of the EC's coordinated effects analysis in *Airtours*[1522] and *Impala*[1523]. Both decisions made the EC reluctant to intervene based on coordinated effects because it was unsure that its decision would withstand judicial review if it was based on coordinated effects. The fact that the General Court sided with the EC in *Impala* did not restore the EC's confidence.[1524] Since the introduction of the new 2004 Merger Regulation, the EC has begun to base decisions in which coordinated effects could theoretically play a role (highly concentrated, oligopolistic markets with some degree of market transparency and homogeneity of the main competitor's structure and incentives) on unilateral effects.[1525] The EC therefore uses the clarification provided in recital 25 of the 2004 Merger Regulation, namely that its Article 2 also covers impediments to competition that result from anti-competitive unilateral effects without market dominance in merger cases in which it would otherwise have conducted a coordinated effects analysis (e.g., *Hutchison* and *UPS*). This raises the concern that the EC uses unilateral effects analysis to bypass the more burdensome analysis of the general market characteristics required by the General Court in *Airtours* for a finding of coordinated effects.[1526]

If coordinated effects are discussed in EC merger control decisions, the analysis falls short of what would be expected based on the EC's commitment to a "*more economic approach*" in merger control. Most notably, the sections on coordinated effects in EC merger decisions do not provide insight in the economic and/or econometric analysis that was applied (and

[1518] Case No. COMP/M.5830, *Olympic/Aegean Airlines*, supra.
[1519] Case No. COMP/M.6663, *Ryanair/Aer Lingus III*, supra.
[1520] Case No. COMP/M.6570, *UPS/TNT Express*, supra.
[1521] Case No. COMP/M.6166, *Deutsche Börse/NYSE Euronext*, supra.
[1522] Case No. IV/M.1524, *Airtours*, supra.
[1523] Case No. COMP/M.3333, *Sony/BMG*, supra.
[1524] Court of Justice, Case C-413/06 P, *Impala*, supra.
[1525] Examples are the EC's analysis in *Hutchison* and *UPS*. Case No. COMP/M. 6497, *Hutchison 3G Austria/Orange Austria*, supra; Case No. COMP/M.6570, *UPS/TNT Express*, supra.
[1526] Kühnert, *Widening the gap*, supra, p. 10.

whether such an analysis was, in fact, undertaken). Even the highly detailed analysis of the likelihood of coordinated effects in *ABF*[1527] resembled the ticking-off of a check-list of market characteristics, and provided no reference to the economic models that were used to test *how* coordination would work. In *ABF*, the EC instead relied on customer testimonies.[1528] This is surprising if we take into account that the EC has a highly-trained team of economists headed by the CCE for conducting economic and/or econometric analyses. As the assessments of the CCE and his team are not publicly available and even the notifying parties have no right to access these assessments,[1529] it is not always clear whether a detailed economic and/or econometric assessment has been undertaken or what the results of any such assessment are.

Different to the analysis of the US merger control cases, the analysis of the EC decision-making practices has not - at least to the same extent as the US analysis - yielded definite results regarding the correlation between the number of remaining competitors and the likelihood of a finding of coordinated effects. I have explained that the main reason for this is that the EC often leaves the question as to whether the transaction results in anti-competitive coordinated effects undecided. Of the analysed five-to-four mergers, the EC only decided whether the merger was likely to result in coordinated effects in *Blackstone*.[1530] In this case, the EC held that the transaction was not likely to lead to coordinated effects. In all other five-to-four merger cases, coordinated effects were mentioned but ultimately left undecided. This suggests that in five-to-four mergers, the EC prefers to demand commitments based on unilateral effects but may be prepared to clear a merger based on a coordinated effects assessment.

The analysis of the three-to-two mergers showed that the merging parties have a real chance of convincing the EC that the transaction will not result in anti-competitive coordinated effects even in these highly concentrated markets. Both in *Syniverse*[1531] and *KLM*,[1532] the EC decided that coordination between the remaining two competitors was unlikely after a detailed assessment of the market characteristics. *ABF*[1533] and *Antalis*[1534] are the only two of the analysed mergers-to-duopoly in which the EC demanded commitments based on coordinated effects. This indicates that the EC is prepared to require commitments in mergers to duopoly. Nevertheless, such cases will be the exception. Commitment decisions

[1527] Case No. COMP/M.4980, *ABF/GBI Business*, supra.
[1528] Amelio et al. stated that the decision showed a *"common sense approach"*, a statement which this dissertation does not agree with because it believes that the EC's analysis has to go beyond the "*ticking off*" of different factors and has to rely more strongly on economic modelling of the effects of the specific transaction. See Amelio et al., *ABF/GBI Business,* supra, p. 96.
[1529] Röller et al., *The Office of the Chief Competition Economist at the European Commission*, supra, pp. 7-9.
[1530] Case No. COMP/M.3625, *Blackstone/Acetex*, supra.
[1531] Case No. COMP/M.4662, *Syniverse/BSG*, supra.
[1532] Case No. COMP/M.5141, *KLM/Martinair*, supra.
[1533] Case No. COMP/M.4980, *ABF/GBI Business*, supra.
[1534] Case No. COMP/M.4753, *Antalis/MAP*, supra.

in merger cases in highly concentrated markets in which the transaction does not create a dominant firm will usually not be based on coordinated effects. More likely is that the EC will base the commitment decision on unilateral effects.

Merger control decisions that have been based on coordinated effects are even rarer in the context of non-horizontal mergers. In none of the analysed non-horizontal merger decisions did the EC demand commitments based on a likelihood of post-merger anti-competitive coordinated effects. In *TomTom*,[1535] *Nokia*[1536] and *Philips*,[1537] the EC decided that coordinated effects were unlikely to result from the transaction. Admittedly, all three mergers took place in highly dynamic, technology-driven markets.[1538] However, the lack of commitment decisions based on coordinated effects in the context of non-horizontal mergers shows that the EC does not feel comfortable intervening on the basis of coordinated effects in non-horizontal merger cases. Of course, in-depth reviews of non-horizontal mergers are generally rare because non-horizontal mergers are only seldom anti-competitive.

Conglomerate merger decisions with a detailed coordinated effects discussion are almost non-existent. *ABF*, which has been discussed in detail in this dissertation, was primarily a horizontal merger in which the conglomerate dimension was added by the fact that the competitors were active in different geographic markets. The EC's competition concerns were therefore primarily based on the merger's horizontal aspects. Conglomerate coordinated effects were discussed on the sidelines. A purely conglomerate merger decision in which the EC has based its competition concerns on coordinated effects, to my knowledge, does not exist.

The general finding regarding EU merger control is that coordinated effects only feature on the sidelines. The rise of unilateral effects analysis beyond market dominance has contributed to the fall of coordinated effects analysis, as cases that would have merited at least a discussion of coordinated effects are now based on unilateral effects theories. The EC is prepared to decide that coordinated effects between the remaining competitors are unlikely, but it is generally not prepared to intervene on the basis of coordinated effects. EU merger decisions furthermore lack a detailed discussion of the economic and/or econometric discussion undertaken by the CCE and his team. It would be helpful if the CCE's analysis was available, at least to the notifying parties, as this would provide the notifying parties with a real chance to attack the EC's economic analysis in court by providing their own economic experts. This would ensure a more level playing field between the EC and the merging parties.

[1535] Case No. COMP/M.4854, *TomTom/Tele Atlas*, supra.
[1536] Case No. COMP/M.4942, *Nokia/Navteq*, supra.
[1537] Case No. COMP/M.4300, *Philips/Intermagnetics*, supra.
[1538] For example, *Nokia*, para. 401; *Philips*, para. 65.

Regarding coordinated effects-based merger enforcement, US merger control system seems preferable with regard to the fact that the DoJ and the FTC have to go to court to obtain an injunction. This forces them to provide a detailed explanation how coordination will work between the remaining competitors. The testimonies of economic experts will be provided in complex cases during the litigation and will also be accessible to the merging parties, which can attack them by providing their own economic experts. The rights of the merging parties are therefore strengthened in a system like that of the US in which competition authorities have to go to court to obtain an injunction.

Merger control systems are never perfect. The EU and the US' merger control systems and their competition authorities' assessment of coordinated effects are highly sophisticated. Regarding the EU, this dissertation has analysed the *status quo* of coordinated effects analysis and has pointed out some ways to further improve it, to make it more transparent and to strengthen the parties' rights of defence. In the same way, the dissertation has analysed the status quo of coordinated effects analysis in the US. While the dissertation reaches the conclusion that coordinated effects analysis in complex merger cases is subject to a more rigorous and more transparent economic analysis in the US, it is nevertheless concerned about the changes to coordinated effects analysis in the 2010 Merger Guidelines and the tendency towards stronger public intervention there. At the end of the day, merger control is about "*getting it right*" and avoiding wrongful intervention, providing transparent rules based on which the merging parties can assess *ex-ante* whether their transaction will be likely to be subject to an in-depth review and providing speedy clearance to mergers if it turns out that the merger will be unlikely to harm competition.

Bibliography

Aigner, Gisela/*Budzinski*, Oliver/*Christiansen,* Arndt, The Analysis of Coordinated Effects in EU Merger Control: Where Do We Stand After Sony/BMG and Impala?, European Competition Journal, Vol. 2, Issue 2, 2006, p. 311

Albæk, Svend/*Møllgaard,* Peter/*Overgaard,* Per Baltzer, Transparency and Coordinated Effects in European Merger Control, Journal of Competition Law & Economics, Vol. 6, No. 4, 2010, pp. 839-851

Almunia, Joaquín, *Introductory remarks on UPS/TNT Express merger*, SPEECH/13/84, available at: http://europa.eu/rapid/press-release_SPEECH-13-84_en.htm, last viewed: 17 February 2013

Ambrogi, Katherine A., The Elephant in the Courtroom: Litigating the Premerger Fix in Arch Coal and Beyond, 47 Wm. & Mary L. Rev., 2006, pp. 1781-1811, available at: http://scholarship.law.wm.edu/wmlr/vol47/iss5/6, last viewed: 23 April 2013

Amelio, Andrea*/Asbo*, Pablo*/de la Mano*, Miguel*/Maximiano*, Ruben*/Porubsky*, Viktor*,* ABF/GBI Business: Coordinated effects baked again, Competition Policy Newsletter, No. 1, 2009, pp. 91-96, available at: http://ec.europa.eu/competition/publications/cpn/2009_1_22.pdf, last viewed: 23 April 2013

American Bar Association, Section on Antitrust Law, FTC Practice and Procedural Manual (2007)

Amstutz, Marc, Kollektive Marktbeherrschung im europäischen Wettbewerbsrecht: Eine evolutorische Perspektive, Tübingen, 1999

Arthur, Charles, Google responds to European Commission's antitrust chief, The Guardian, 31 January 2013, http://www.guardian.co.uk/technology/2013/jan/31/google-antitrust-chief, last viewed: 17 February 2013

Baker, Jonathan, Mavericks, Mergers, and Exclusion: Proving Coordinated Competitive Effects Under the Antitrust Laws, 77 N.Y.U.L. Rev., 2002, pp. 135-201

Baker, Jonathan B., Efficiencies and High Concentration: Heinz Proposes to Acquire Beech-Nut*,* in: John E. Kwoka/Lawrence J. White (eds.), The Antitrust Revolution: Economics, Competition, and Policy, pp. 150-169

Baker, Jonathan B./*Shapiro*, Carl, Reinvigorating Horizontal Merger Enforcement That Has Declined as a Result of Conservative Economic Analysis, in: Robert Pitofsky (ed.), How the Chicago School Overshot the Mark, The Effect of Conservative Economic Analysis on U.S. US Antitrust, Oxford University Press, 2008, pp. 235-288

Baker, Jonathan B./*Shapiro*, Carl, Response: Evaluating Merger Enforcement During the Obama Administration, 65 Stan. L. Rev. Online 28, 21 August 2012, available at: http://www.stanfordlawreview.org/sites/default/files/online/articles/Baker-Shapiro-65-SLRO-28.pdf, last viewed: 15 January 2013

Balto, David A., Reinvigorating Antitrust Enforcement – The Obama Administration's Progressive Direction on Competition Law and Policy in Challenging Economic Times, *Center for American Progress*, July 2011, available at: http://www.americanprogress.org/wp-content/uploads/issues/2011/07/pdf/antitrust_enforcement.pdf, last viewed: 15 January 2013

Balto, David A., Obama's Healthcare Trust Busting, US News online ed., 19 October 2012, available at: http://www.usnews.com/opinion/blogs/economic-intelligence/2012/10/19/obamas-healthcare-trust-busting, last viewed: 23 February 2013

Barker, Alex, Antitrust chief holds aces in Google case, Financial Times (online ed.) 10 January 2013, available at: http://www.ft.com/cms/s/0/42a827b2-5b24-11e2-8d06-00144feab49a.html#axzz2LAQJg8fD, last viewed: 17 February 2013

Barretts, Rick/*Richards*, Erin, Despite dairy closing, Milwaukee-area milk deliveries continue, Journal Sentinel online, 7 January 2013, available at: http://www.jsonline.com/news/wisconsin/despite-dairy-closing-milwaukeearea-milk-deliveries-continue-ua89cmi-185874921.html, last viewed: 11 January 2013

Barretts, Rick, Market forces spurred Golden Guernsey closure, attorney says, Journal Sentinel, 9 January 2013, available at: http://www.jsonline.com/business/market-forces-spurred-golden-guernsey-closure-attorney-says-1p8ajb2-186250041.html, last viewed: 11 January 2013

Basedow, Jürgen, The Modernization of European Competition Law: A Story of Unfinished Concepts, Texas International Law Review, Vol. 42, pp. 429-439

Baudenbacher, Carl, The CFI's Gencor Judgement – Some Remarks on its Global Implications, in: Baudenbacher/Gulmann/Lenaerts/Coulon/Barbier de la Serre (eds.), Liber Amicorum en l'honneur de/in honour of Bo Vesterdorf, Bruylant, 2007, pp. 543-568

Baudenbacher, Carl, The Legacy of Neelie Kroes, Journal of European Competition Law & Practice, Vol. 1, No. 3, 2010, p. 169

Bernheim, Douglas/*Whinston*, Michael, Multimarket Contact and Collusive Behavior, The RAND Journal of Economics, Vol. 21, No. 1, Spring 1990, pp. 1-26

Bishop, Simon/*Lofaro*, Andrea, A legal and economic consensus? The Theory and Practice of Coordinated Effects in EC Merger Control, The Antitrust Bulletin, Spring-Summer 2004, p. 198

Bishop, Simon/*Walker,* Mike, The Economics of EC Competition Law: Concepts, Application and Measurement, Sweet & Maxwell, 3rd ed., 2010

Bode, Karl, Leaked AT&T Letter Demolishes Case for T-Mobile Merger, Broadband DSL Reports, available at: http://www.dslreports.com/shownews/Leaked-ATT-Letter-Demolishes-Case-For-TMobile-Merger-115652, last viewed: 23 April 2013

Bonanno, Giacomo, Location Choice, Product Proliferation and Entry Deterrence, Review of Economic Studies, LIV, 1987, pp. 37-45

Breshnahan, Timothy/*Reiss,* Peter, Entry and Competition in Concentrated Markets, Journal of Political Economy, Vol. 99, No. 5, 1991, p. 1006

Brücker, Herbert, Privatization in Eastern Germany: A Neo-Institutional Analysis, FRANK CASS & CO. LTD., London, 1997

Bürger, Christian, Die erhebliche Verhinderung wirksamen Wettbewerbs in Art. 2 der Verordnung Nr. 4064/89 und in Art. 2 der Verordnung Nr. 139/2004, Juristische Reihe TENEA/www.jurawelt.com; Bd. 87

Bundeskartellamt, Marktbeherrschungs- und SIEC-Test, Eine Bestandsaufnahme, Tagung des Arbeitskreises Kartellrecht am 24 September 2009, available at:

http://www.bundeskartellamt.de/wDeutsch/download/pdf/Diskussionsbeitraege/09_Proftagungspapier.pdf, last viewed: 8 January 2013

Baron, Michael, Vorbemerkungen zur FKVO, in: Langen/Bunte, Kommentar zum Deutschen und Europäischen Kartellrecht, Band 2, Europäisches Kartellrecht, 11. Auflage, Carl Heymanns Verlag

Cantor, Matthew L./Koury, Marlene, A Watchful Antitrust Eye in Healthcare, Bloomberg Law, available at: http://about.bloomberglaw.com/practitioner-contributions/watchful-antitrust-eye-healthcare/, last viewed: 23 February 2013

Catan, Thomas, First Obama Antitrust Case Sours as Milk Plant is Shut, The Wall Street Journal, Online ed., 10 January 2013, available at: http://online.wsj.com/article/SB10001424127887324442304578234071475199876.html#, last viewed: 11 January 2013

Charles River Associates, Meet the Expert – Competition, January 2010, available at: http://www.crai.com/uploadedFiles/Publications/Meet_the_Expert_Hayes_0110.pdf, last viewed: 23 April 2013

Chen, Yongmin/*Riordan*, Michael, Vertical Integration, exclusive dealing and ex-post cartelization, The RAND Journal of Economics, Vol. 38, No. 1, Spring, 2007, p. 15

Chidmi, Benaissa/*Lopez,* Rigoberto A., *Cotterill,* Ronald W., Vertical Relationships in the Ready-to-Eat Breakfast Cereal Market: A Brand-Supermarket Level Analysis, Selected paper presented at the American Agricultural Economics Association Annual Meetings, Denver, 1-4 August 2004

Chidmi, Benaissa/*Lopez,* Rigoberto A., *Cotterill,* Ronald W., A Supermarket-Level Analysis of Demand for Breakfast Cereals: A Random Coefficients Approach, Selected Paper prepared for presentation at the American Agricultural Economics Association Annual Meeting, Providence, Rhode Island, 24-27 July 2005

Chidmi, Benaissa/*Lopez,* Rigoberto A., *Cotterill,* Ronald W., The Retail Services, The Market Power, and the Vertical Relationships in the Breakfast Cereal Industry, Contributed Paper prepared for presentation at the International Association of Agricultural Economics Conference, Beijing, China, 16-22 August 2009

Coate, Malcolm B., Alive and Kicking: Collusion Theories in Merger Analysis at the Federal Trade Commission, 1 January 2008, available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1030067, last viewed: 23 April 2013

Comanor, William, Vertical Mergers, Market Powers, and Antitrust Laws, The American Economic Review, Vol. 57, No. 2, Papers and Proceedings of the Seventy-Ninth Annual Meeting of the American Economic Association (1967), p. 262

Committee on the Development of the Third Edition of the Reference Manual on Scientific Evidence; Federal Judicial Center; National Research Council, *The Reference Manual on Scientific Evidence*, 3rd ed., National Academies Press (2011), available at: http://www.nap.edu/catalog.php?record_id=13163#toc, last viewed: 23 February 2013

Compte, Oliver/*Jenny,* Frédéric/*Rey,* Patrick, Capacity Constraints, Mergers and Collusion, European Economic Review, Vol. 46, 2002, p. 2

Content, Thomas, Waukesha dairy plant Golden Guernsey suddenly closes, Journal Sentinel, 5 January 2013, available at: http://www.jsonline.com/business/golden-guernsey-in-

waukesha-suddenly-closes-sources-say-i488vri-185759901.html, last viewed: 11 January 2013

Corruble, Philippe, Négocier avec la task force concentrations – les flexibilités d'une procedure réglementaire, Revue des Affaires Européennes / Law & European Affairs, No. 4, 1997, pp. 496-515

Corruble, Philippe, Le droit communautaire de la concurrence dans les relations Euro-Américaines, Défense Nationale, Vol. 59, No. 4, 2003, pp. 19-30

Cotterill, Ronald W./*Franklin,* Andrew W./*Haller,* Lawrence E., Harvesting and Tacit Collusion in the Breakfast Cereal Industry: A Case Study of Nabisco Shredded Wheat and Post Grape Nuts, Food Marketing Policy Issue Paper, No. 6, May 1994

Cotterill, Ronald W./*Haller,* Lawrence E., An Econometric Analysis of the Demand for RTE Cereal: Product Market Definition and Unilateral Market Power Effects, Food Marketing Policy Center, Research Report, No. 35, Sept. 1997

Cotterill, Ronald W., Jawboning Cereal: The Campaign to Lower Cereal Prices, Food Marketing Policy Center, University of Connecticut, No. 17, Oct. 1998

Cotterill, Ronald W., Antitrust Economic Analysis in Food Marketing Channels, Presented at the 27th International Association of Agricultural Economists Conference, Beijing, China, 18 August 2009

Crane, Daniel A., Rethinking Merger Efficiencies, Mich. L. Rev., Vol. 110, 2011, 347

Crane, Daniel A., Has the Obama Justice Department Reinvigorated Antitrust Enforcement= 65 Stan. L. Rev. Online (2012) 13-20, available at: http://www.stanfordlawreview.org/sites/default/files/online/articles/65_Stan._L._Rev._Online_13.pdf, last viewed: 14 January 2013

Crane, Daniel A., The Obama Justice Department's Merger Enforcement Record: A Reply to Baker and Shapiro, 65 Stan. L. Rev. Online (2012) 41, available at: http://www.stanfordlawreview.org/sites/default/files/online/articles/Crane-65-SLRO-41.pdf, last viewed: 15 January 2013

Christiansen, Arndt, The More Economic Approach in EU Merger Control – A Critical Assessment, 2006, Deutsche Bank Research, Working Paper Series, Research Notes 21, available at: http://www.dbresearch.de/PROD/DBR_INTERNET_DE-PROD/PROD0000000000195710/Der+%22more+economic+approach%22+in+der+EU-Fusionskontrolle+-+eine+kritische+W%C3%BCrdigung.pdf, last viewed: 22 April 2013

Christiansen, Arndt, Der "More Economic Approach" in der EU-Fusionskontrolle – Entwicklung, konzeptionelle Grundlagen und kritische Analyse, Frankfurt a.M., 2010

Church, Jeffrey, The Impact of Vertical and Conglomerate Mergers on Competition, Report for DG Competition, European Commission, 2005

Curran Jr., J. Joseph/*Cooper,* FTC v. H.J. Heinz Company et al., Brief of Thirty-Six Amici Curiae in Support of the Federal Trade Commission, 6 December 2000

Dagen, Richard/*Richards,* Dan, Merger Theory and Evidence: The Baby-Food Case Reconsidered, Working Paper, 2006

Dick, Andrew R., When Are Cartels Stable Contracts?, Journal of Law and Economics, Vol. 39, No. 1, 1996, pp. 241-283

Dick, Andrew R., If Cartels Were Legal, When Would Firms Fix Prices?, in: Grossmann, Peter Z., How Cartels Endure and How They Fail: Studies of Industrial Collusion, Elgar Publishing, 2004, Ch. 6, pp. 144-173

Dininio, Phyllis, The Political Economy of East German Privatization, Praeger Publishers, Westport, 1999

DoJ, Press Release, Justice Department Requires Divestitures in Merger Between General Electric and Honeywell, 2 May 2001, available at: http://www.justice.gov/atr/public/press_releases/2001/8140.pdf, last viewed: 8 January 2013

DoJ, Statement of the Department of Justice's Antitrust Division on Its Decision to Close Its Investigation of Perdue's Acquisition of Coleman Natural Foods, 2 May 2011, available at: http://www.justice.gov/atr/public/press_releases/2011/270591.pdf, last viewed: 29 January 2013

DoJ, Competition and Agriculture: Voices from the Workshops on Agriculture and Antitrust Enforcement in our 21st Century Economy and Thoughts on the Way forward, available at: http://www.justice.gov/atr/public/reports/283291.pdf, last viewed: 10 March 2013

DoJ, Ten Year Workload Statistics Report, available at: http://www.justice.gov/atr/public/workload-statistics.html, last viewed: 23 April 2013

Dresher, Melvin, Games of Strategy, Mathematics Magazine, Vol. 25, No. 2, Nov.-Dec., 1951, pp. 93-99

Dubrow, Jon B./*Barnes*, Shauna A., Post-Closing Challenges Illustrate Importance of Antitrust Review – Even for Small Transactions, Bloomberg Law Reports, Antitrust & Trade, available at: http://www.mwe.com/info/pubs/post_closing_challenges.pdf, last viewed: 11 November 2012

Duso, Tomaso/*Gugler*, Klaus /*Szücs*, Florian, An empirical assessment of the 2004 EU merger policy reform, DICE Discussion Paper, No. 58, 2012, available at: http://hdl.handle.net/10419/59505, last viewed: 8 January 2013

EC Communication, Single Market Act – Twelve levers to boost growth and strengthen confidence, April 2011, COM(2011) 206 final, available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0206:FIN:EN:PDF, last viewed: 22 April 2013

EC Communication, Single Market Act II – Together for new growth, October 2012, COM(2012) 573 final, available at: http://ec.europa.eu/internal_market/smact/docs/single-market-act2_en.pdf, last viewed: 22 April 2013

EC, Press Release, Commissioner Monti dismisses criticism of GE/Honeywell merger review and rejects politicization of the case, IP/01/855, available at: http://europa.eu/rapid/press-release_IP-01-855_en.htm, last viewed: 8 January 2013

EC, Press Release, Mergers: Commission clears acquisition of Austrian mobile phone operator Orange by H3G, subject to conditions, 12 December 2012, IP/12/1361, available at: http://europa.eu/rapid/press-release_IP-12-1361_en.htm, last viewed: 22 April 2013

Edwards, Colin D., Conglomerate Bigness as a Source of Power, in: National Bureau of Economic Research (NBER), Business Concentration and Price Policy, NBER Conference Report, Princeton: Princeton University Press, 1955, available at: www.nber.org/chapters/c0967.pdf, last viewed: 23 April 2013

Ekvall, Ryan, Get out of the whey: Federal regs kill Wisconsin dairy, 113 jobs, Wisconsin Reporter, 10 January 2013, available at: http://watchdog.org/65835/get-out-of-the-whey-federal-regs-kill-wisconsin-dairy-113-jobs/, last viewed: 11 January 2013

Elhauge, Einer/*Geradin,* Damien, Global Competition Law and Economics, Hart Publishing, 2007

Evans, William/*Kessides,* Ioannis, Living by the "Golden Rule" – Multimarket contact in the US Airline Industry, Quarterly Journal of Economics 109, pp. 341-366

Fackelmann, Christian, Dynamic Efficiency Considerations in EC Merger Control – An Intractable Subject or a Promising Chance for Innovation, The University of Oxford Centre for Competition Law and Policy, Working Paper (L) 09/06, available at: http://denning.law.ox.ac.uk/lawvle/users/ezrachia/CCLP%20S.%2009-06.pdf, last viewed: 22 April 2013

Farrell, Joseph/*Shapiro*, Carl, Horizontal Mergers: An Equilibrium Analysis, The American Economic Review, March 1990, pp. 108-126

Flood, Merrill, Some Experimental Games, Management Science, Vol. 5, No. 1, Oct. 1958, pp. 5-26

Fox, Eleanor, The Efficiency Paradox, in: Robert Pitofsky (ed.), How the Chicago School Overshot the Mark, Oxford University Press, 2008, pp. 77-88

Frenz, Walter, Handbuch Europarecht: Band 5: Wirkungen und Rechtsschutz (German Edition), Springer, 2010

FTC, Premerger Notification Office, Hart-Scott-Rodino Premerger Notification Program: Introductory Guide I: What is the Premerger Notification Program? An Overview, Revised: March 2009, available at: http://www.ftc.gov/bc/hsr/introguides/guide1.pdf, last viewed: 23 April 2013

FTC, Press Release, FTC Ends Administrative Litigation in Western Refining Case, 3 October 2007, available at http://www.ftc.gov, last viewed: 23 April 2013

FTC, Press Release, FTC Chairman Jon Leibowitz Appoints Senior Staff, Press Release, 14 April 2009, available at: http://www.ftc.gov/opa/2009/04/seniorstaff.shtm, last viewed: 11 January 2013

FTC, Press Release, Administrative Law Judge Rules That Polypore International's 2008 Acquisition of Rival Battery Separator Manufacturer Violated Antitrust Law, 8 March 2010, available at: http://www.ftc.gov/opa/2010/03/polypore.shtm, last viewed: 23 April 2013

FTC, Press Release, FTC Approves Final Order Settling Charges That Grifols, S.A.'s Acquisition of Talecris Biotherapeutics Holding Corp. Was Anti-competitive, 22 July 2011, available at: http://www.ftc.gov/opa/2011/07/grifols.shtm, last viewed: 30 January 2013

FTC, Press Release, OSF Healthcare System Abandons Plan to Buy Rockford in Light of FTC Lawsuit; FTC Dismisses its Complaint Seeking to Block the Transaction, 13 April 2012, available at: http://www.ftc.gov/opa/2012/04/rockford2.shtm, last viewed: 23 April 2013

FTC, Press Release, Howard Shelanski Named Director of FTC's Bureau of Economics, Press Release, 14 May 2012, available at: http://www.ftc.gov/opa/2012/05/shelanski.shtm, last viewed: 11 January 2013

FTC, Press Release, Antitrust Under the Obama Administration – An FTC Perspective, 12 September 2012, available at: http://www.kslaw.com/library/publication/HH092412_AntitrustSlides.pdf, last viewed: 23 February 2013, p. 12

FTC, Statement of the FTC In the Matter of Google Inc., FTC File No. 111-0163, 3 January 2013, available at: http://www.ftc.gov/os/2013/01/130103googlesearchstmtofcomm.pdf, last viewed: 17 February 2013

Fu, Wayne, Multimarket Contact of US Newspaper Chains: Circulation Competition and Market Coordination, Information Economics and Policy 15, 2003, p. 501

Gates, Sean, Obama's Antitrust Enforcers: What Can We Expect?, theantitrustsource, April 2009, available at: http://www.americanbar.org/content/dam/aba/publishing/antitrust_source/Apr09_Gates4_28f.authcheckdam.pdf, last viewed: 23 April 2013

Gayle, Wayne-Roy/*Marshall,* Robert C./*Marx,* Leslie M./*Richard*, Jean-Francois, Coordinated Effects in the 2010 Horizontal Merger Guidelines, Rev Ind Organ 39, 2011, pp. 39-56

General Court, Statistics concerning the judicial activity of the General Court, available at: http://curia.europa.eu/jcms/upload/docs/application/pdf/2012-06/ra2011_statistiques_tribunal_en.pdf, last viewed: 22 April 2013

Gill, Kathy, US Attorney Generals, About.com, available at: http://uspolitics.about.com/od/usgovernment/tp/AG_1980_2007.htm, last viewed: 23 April 2013

Gots, Ilene Knable/*Hemli*, Daniel E., Just the facts: The role of customer and Economic Evidence in M&A Analysis, Geo. Mason L. Rev., Vol. 13, No. 6, 2006, pp. 1217-1245

Greene, Hillary, Guidelines Institutionalization: The Role of Merger Guidelines in Antitrust Discourse, University of Connecticut School of Law Articles and Working Papers, Paper 76, 2006, available at: http://lsr.nellco.org/cgi/viewcontent.cgi?article=1075&context=uconn_wps, last viewed: 22 April 2013

Greenfield, Leon B./*Ayer,* Jeffrey, Vertical Mergers in the United States, available at: http://www.wilmerhale.com/files/Publication/c911f2f2-b8d8-4683-83fb-f2cd3108c260/Presentation/PublicationAttachment/ba43d8dd-b019-46e2-a5c2-fdaf9f8cd8b6/Vertical%20Mergers%20in%20USA%20Paper_IBA%20Conference.pdf, last viewed: 23 April 2013

Hakala, Justin, The Case for Different Preliminary Injunction Standards in Merger Challenges, E-Newsletter, available at: http://www.michbar.org/antitrust/newsletter/march09.pdf, last viewed: 23 April 2013, pp. 6-9

Harbour, Pamela Jones, FTC Commissioner, Vertical Restraints Federal and State Enforcement of Vertical Issues, ALI-ABA Course of Study Product Distribution and Marketing, 17-19 March 2005, available at: http://www.ftc.gov/speeches/harbour/070308vertical.pdf, last viewed: 23 April 2013

Harty, Ronan P., Federal Antitrust Enforcement Priorities Under the Obama Administration, Journal of European Competition Law & Practice, 2010, Vol. 1, No. 1, available at: http://jeclap.oxfordjournals.org/content/1/1/52.full.pdf+html, last viewed: 14 January 2013, pp. 52-61

Health Protection Agency, Acetic Acid – General information, available at: http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1287147437792, last viewed: 23 April 2013

Horner, Neil, Unilateral Effects and the EC Merger Regulation – How The Commission Had its Cake and Ate it Too, HanseLR, Vol. 2, No. 1, 2006, pp. 23-43

Hovenkamp, Herbert, Harm to Competition Under the 2010 Horizontal Merger Guidelines, Rev Ind Organ, Vol. 39, 2011, pp. 3-18

Hovenkamp, Herbert, The Antitrust Enterprise – Principle and Execution, Harvard University Press, 2008

Immenga, Ulrich/*Mestmäcker*, Ernst-Joachim, EU-Wettbewerbsrecht, 5. Auflage, C.H. Beck, 2012

Italianer, Alexander, Competition Policy in support of the EU 2020 policy objectives, Vienna Competition Conference 2010 “Industry vs. Competition?”, available at: http://ec.europa.eu/competition/speeches/text/sp2010_05_en.pdf, last viewed: 22 April 2013

Jacoby, Marc, Bill Bear Nominated to Lead Antitrust Division, Main Justice, 4 February 2012, available at: http://www.mainjustice.com/2012/02/04/bill-baer-nominated-to-lead-antitrust-division/, last viewed: 23 April 2013

James, Charles A., Assistant Attorney General, DoJ, International Antitrust Enforcement in the Bush Administration, 21 September 2001, available at: http://www.justice.gov/atr/public/speeches/9100.htm, last viewed: 23 April 2013

Jungermann, Frank, Kollektive Marktbeherrschung durch interpendentes Parallelverhalten und deren Missbrauch, FIW-Schriftenreihe, Heft 210, Carl Heymanns Verlag, 2007

Kaplow, Louis/*Shavell,* Steven, Any Non-Welfarist Method of Policy Assessment Violates the Pareto Principle, Journal of Political Economy, Vol. 109, No. 2, Apr., 2001, p. 282

Kendall, Brent, Regulators Seek to Cool Hospital-Deal Fever, WSJ online ed., 18 March 2012, available at: http://online.wsj.com/article/SB10001424052702303863404577286071837740832.html#, last viewed: 23 February 2013

Keyte, James A., United States v. H&R Block: The DoJ Invokes Brown Shoe to Shed the Oracle Albatross, Antitrust, Vol. 26, No. 2, Spring 2012, available at: http://www.americanbar.org/content/dam/aba/publications/antitrust_magazine/spring_2012_keyte.authcheckdam.pdf, last viewed: 2 November 2012, pp. 32-40

Khan, Abdullah Rachid/*Davies*, Gareth, Merger Control and the Rule of Law, Erasmus Law Review, Vol. 2, Issue 1, 2009, pp. 25-57

Killick, James/*Schulz*, Axel, Horizontal and Vertical Mergers – Horizontal and Vertical Mergers in the Reformed EC Merger Control, in: Amato, Giuliano/Ehlermann, Claus-Dieter (eds.), EC Competition Law, 2007, Hart Publishing, Ch. 11, p. 435

Knox, Ron, EU official: Theories of coordination in US merger review may lack evidence, Global Competition Review, 8 February 2013, available at: http://www.globalcompetitionreview.com/news/article/33034/eu-official-theories-coordination-us-merger-review-may-lack-evidence/, last viewed: 9 February 2013

Kolasky, William J., Conglomerate Mergers and Range Effects: It's a long way from Chicago to Brussels, Address before the George Mason University Symposium, 9 November 2001, available at: http://www.justice.gov/atr/public/speeches/9536.htm, last viewed: 8 January 2013

Kolasky, William J., Lessons from Baby Food: The Role of Efficiencies in Merger Review, 16 Antitrust (2001-2002) 82

Kolasky, William J., GE/Honeywell: Continuing the transatlantic dialog, U. Pa. J. Int'l Econ. L., 23:3 (2002) 513-537, available at: https://www.law.upenn.edu/journals/jil/articles/volume23/issue3/Kolasky23U.Pa.J.Int'lEcon.L.513(2002).pdf, last viewed: 8 January 2013

Kolasky, William J., Coordinated Effects in Merger Review: From Dead Frenchmen to Beautiful Minds and Mavericks, Address before the ABA Section of Antitrust Law Spring Meeting, 24 April 2002, available at: http://www.justice.gov/atr/public/speeches/11050.htm, last viewed: 31 January 2013

Kolasky, William J., Effectively Advocating Efficiencies in Merger Reviews, Antitrust Report, Spring 2003, p. 3, available at. . http://www.ftc.gov/bc/mergerenforce/presentations/040219kolasky02.Pdf, last viewed: 23 April 2013

Kovacic, William E./*Marshall*, Robert C./*Marx*, Leslie M./*Schulenberg*, Steven P., Quantitative Analysis of Coordinated Effects, Antitrust L.J., Vol. 76, No. 2, 2009, pp. 397-430

Kühn, Kai-Uwe, Closing Pandora's Box? Joint Dominance After the Airtours Judgment, in: Konkurrensverket Swedish Competition Authority (ed.), The Pros and Cons of Merger Control [2002], Ch. 3, p. 46

Kühnert, Heinrich, Widening the gap – The Impact of the T-Mobile / tele.ring decision, Competition Law Insight, 16 January 2007, pp. 9-10

Kwoka, John Jr., The Private Profitability of Horizontal Mergers with Non-Cournot and Maverick Behavior, Int. J. Ind. Org., Vol. 7, 1987, p. 403

Lamadrid, Alfonso, Where's the Law? (or Google and the European Commission) (2013), Chillin'Competition, available at: http://chillingcompetition.com/2013/01/19/wheres-the-law-or-google-and-the-european-commission/, last viewed: 17 February 2013

Langenfeld, James, Non-Horizontal Merger Guidelines in the United States and the European Commission: Time for the United States to Catch Up? Geo. Mason L. Rev., Vol. 16, p. 851

Lattman, Peter, New Acting Antitrust Chief at Justice Dept. is Named, The New York Times, Online edition, 5 April 2012, available at: http://dealbook.nytimes.com/2012/04/05/new-acting-antitrust-chief-at-justice-dept-is-named/, last viewed: 23 April 2013

Levenstein, Margaret/*Suslow,* Valerie, What Determines Cartel Success? Journal of Economic Literature, Vol. 44, March 2006, p. 46

Litvack, Sanford M./*Stock*, Eric J., *Porta*, Jason J., Antitrust Enforcement Under the Obama Administration: Change? Really?, Sedona Conf. J., Vol. 12, 2011, 227

Luebking, Johannes, T-Mobile Austria/tele.ring: Remedying the loss of a maverick, Competition Policy Newsletter, Number 2, Summer 2006, pp. 46-50, available at:

http://ec.europa.eu/competition/publications/cpn/2006_2_46.pdf, last viewed: 9 December 2012

Majmudar, Kaushal B., Daubert v. Merrell Dow, A Flexible Approach to the Admissibility of Novel Scientific Evidence, Vol. 7, No. 1, 1993, pp. 187-205

Matsushima, Hitoshi, Multimarket Contact, Imperfect Monitoring, and Implicit Collusion, Journal of Economic Theory, Vol. 98, p. 159

Mayer, David L. /*Hartman,* Joshua A., Merger Enforcement Two Years Later – What Clues does the Obama Administration's Record Hold for the Years Ahead?, The Threshold, Vol. 11, No. 2, Spring 2011, available at: http://www.mofo.com/files/Uploads/Images/110400-Merger-Enforcement.pdf, last viewed: 11 January 2013

Mayer, Heinz/*Stöger*, Karl, Kommentar EUV, AEUV, 144. Lieferung, Art. 17 EUV, Manzsche Verlags- und Universitätsbuchhandlung, Wien 2012

McPherson, William, An Elementary Study of Chemistry: Introductory College Course, Library of Alexandria, 1924

Monti, Giorgio, Merger Defences – Efficiencies, Failing Firms and Industrial Policy, in: Giuliano Amato/Claus-Dieter Ehlermann (eds.), EC Competition Law – A Critical Assessment, Hart Publishing, 2007, Ch. 13, p. 525

Monti, Mario, EU Competition Policy, Speech at the Fordham Annual Conference on International Antitrust Law and Policy, 31 October 2002, available at: http://europa.eu/rapid/press-release_SPEECH-02-533_en.htm, last viewed: 9 January 2013

Monti, Mario, EU competition policy after May 2004, Speech at the Fordham Annual Conference on International Antitrust Law and Policy, 24 October 2003, available at: http://europa.eu/rapid/press-release_SPEECH-03-489_en.htm, last viewed: 9 January 2013

Monti, Mario, A reformed competition policy: achievements and challenges for the future, Speech at the Center for European Reform, 28 October 2004, available at: http://europa.eu/rapid/press-release_SPEECH-04-477_en.htm, last viewed: 23 April 2013

Muris, Timothy J., Understanding Mergers: Strategy and Planning, Implementation, and Outcomes, Opening Remarks, 9 December 2002, available at: http://www.ftc.gov/speeches/muris/mergers021209.shtm, last viewed: 23 April 2013

Nash, John, Non-Cooperative Games, Annals of Mathematics, Vol. 54, No. 2, Sep., 1951, p. 286

Neate, Rupert, Ryanair expects EU to block Aer Lingus takeover bid, guardian.co.uk, 12 February 2013, available at: http://www.guardian.co.uk/business/2013/feb/12/ryanair-eu-block-aer-lingus-takeover, last viewed: 17 February 2013

Nitsche, Rainer, Wettbewerbsökonomische Analyse der Auswirkungen von Fusionen, in: Jürgen Schwarze, Recht und Ökonomie im Europäischen Wettbewerbsrecht, Nomos, 2006

Nocke, Volker/*White*, Lucy, Do Vertical Mergers Facilitate Upstream Collusion?, The American Economic Review, September 2007, p. 1322

Nocke, Volker/*White*, Lucy, Vertical merger, collusion, and disruptive buyers, International Journal of Industrial Organization, Vol. 28, 2010, p. 350

Obama, Barack, Statement for the American Antitrust Institute, 27 September 2007, available at: http://www.antitrustinstitute.org/files/aai-%20Presidential%20campaign%20-%20Obama%209-07_092720071759.pdf, last viewed: 14 January 2013

Olczak, Matthew, Unilateral versus Coordinated Effects: Comparing the Impact on Consumer Welfare of Alternative Merger Outcomes (2009) ESRC Centre for Competition Policy Working Paper 10-3, available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1543750, last viewed: 31 January 2013

Parker, Philip/*Röller,* Lars-Hendrik, Collusive Conduct in Duopolies: Multimarket Contact and Cross-Ownership in the Mobile Telephone Industry, The RAND Journal of Economics, Vol. 28, No. 2, Summer 1997, p. 304

Patterson, Donna E./*Shapiro,* Carl, Transatlantic Divergence in *GE/Honeywell*: Causes and Lessons, Roundtable Commentary, Antitrust, Fall 2001, available at: http://faculty.haas.berkeley.edu/shapiro/divergence.pdf, last viewed: 8 January 2013

Pellmann, Moritz, Significant Impediment to Effective Competition, Marktbeherrschung und erhebliche Behinderung wirksamen Wettbewerbs (SIEC-Test) in der Europäischen Fusionskontrolle, Nomos, 2006

Pitofsky, Robert, Vertical Restraints and Vertical Aspects of Mergers – A US Perspective, Fordham Corporate Law Institute, 24th Annual Conference on International Antitrust Law and Policy, 16-17 October 1997, available at: http://www.ftc.gov/speeches/pitofsky/fordham7.shtm, last viewed: 4 January 2013

Pitofsky, Robert, Past, Present and Future of Antitrust Enforcement at the Federal Trade Commission, The University of Chicago Law Review, Vol. 72, No. 1, Symposium: Antitrust (Winter, 2005), pp. 209-227

Pitofsky, Robert (ed.), How the Chicago School Overshot the Mark – The Effect of Conservative Economic Analysis on US Antitrust, Oxford University Press, 2008

Platt Majoras, Debora, Deputy Assistant Attorney General, G.E. Honeywell, The US decision, Before the Antitrust Law Section, State Bar of Georgia, 29 November 2001, available at: http://www.justice.gov/atr/public/speeches/9893.htm, last viewed: 8 January 2013

Polverino, Fabio, Assessment of Coordinated Effects in Merger Control: between Presumption and Analysis (2006), available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=901688, last viewed: 9 February 2013

Posner, Richard A., The Chicago School of Antitrust Analysis, University of Pennsylvania Law Review, Vol. 127, No. 4, Apr. 1979, pp. 925-948

Posner, Richard A., A Failure of Capitalism – The Crisis of ’08 and the Descent into Depression, Harvard University Press, 2011

Poundstone, William, Prisoner’s Dilemma, Anchor Books, 1993

Rapoport, Anatol/*Chammah,* Albert, The Prisoner Dilemma: A Study in Conflict and Cooperation, University of Michigan Press, 1965

Rawls, John, A Theory of Justice, Harvard University Press, 2005

Reeves, Amanda P./*Stucke*, Maurice E., Behavioural Antitrust, Ind. L.J., Vol. 86, 2011, p. 1527

Reuters, Grifols to pay $3.4 billion for plasma group Talecris, 7 June 2010, available at: http://www.reuters.com/article/2010/06/07/us-talecris-grifols-idUSTRE6560SU20100607, last viewed: 30 January 2013

Reynolds, Michael J, A Discussion with Professor Mario Monti, Competition Law International, April 2010, available at: http://www.ibanet.org/Article/Detail.aspx?ArticleUid=D445EF78-2889-4280-983C-75AFCA33EC7D#10, last viewed: 8 January 2013, pp. 67-77

Riordan, Michael/*Salop*, Stephen, Evaluating Vertical Mergers: A Post-Chicago Approach, Antitrust L.J., Vol. 63, 1994-1995, p. 517

Riordan, Michael, Competitive Effects of Vertical Integration, in: Paolo Buccirossi (ed.), Handbook of Antitrust Economics, MIT Press, 2008, Ch. 4, p. 160

Röller, Lars-Hendrik/*Stennek,* Johan/*Verboven,* Frank, Efficiency Gains from Mergers, 20 December 2000, The Research Institute of Industrial Economics, Working Paper No. 543, 2000, available at: http://econpapers.repec.org/paper/wzbwzebiv/fsiv00-09.htm, last viewed: 23 April 2013

Röller, Lars-Hendrik/*Strohm*, A. Ökonomische Analyse des Begriffs "significant impediment to effective competition", available at: http://ec.europa.eu/dgs/competition/economist/muenchner_kommentar.pdf, last viewed: 8 January 2013

Röller, Lars-Hendrik, *Economic Analysis and Competition Policy Enforcement in Europe*, in: Peter A.G. van Bergeijk/Erik Kloosterhuis, Modelling European Mergers: Theory, Competition Policy and Case Studies, 2005, Edward Elgar Publishing, p. 11, article available at: http://www.google.de/search?q=economic+analysis+and+competition+policy+enforcement+in+europe&aq=f&oq=economic+analysis+and+competition+policy+enforcement+in+europe&sugexp=chrome,mod=10&sourceid=chrome&ie=UTF-8, last viewed: 9 January 2013

Röller, Lars-Hendrik/*Buigues*, Pierre A., The Office of the Chief Competition Economist at the European Commission, May 2005, available at: http://ec.europa.eu/dgs/competition/economist/officechiefecon_ec.pdf, last viewed: 23 April 2013

Rosch, J. Thomas, Terra Incognita: Vertical and Conglomerate Merger and Interlocking Directorate Law Enforcement *in the United States,* 11 September 2009, available at: http://www.ftc.gov/speeches/rosch/090911roschspeechunivhongkong.pdf, last viewed: 23 April 2013

Ross, Thomas W./*Winter,* Ralph A., The Efficiency Defense in Merger Law: Economic Foundations and Recent Canadian Developments, Antitrust L.J., Vol. 72, 2004-2005, p. 478

RTT News, Justice Department Announced New leadership Team for Antitrust Division, 22 April 2009, available at: http://www.rttnews.com/920223/justice-department-announced-new-leadership-team-for-antitrust-division.aspx, last viewed: 11 January 2013

Rubinfeld, Daniel L., Market Definition with Differentiated Products: The Post/Nabisco Cereal Merger, Antitrust L.J., Vol. 68, 2000, p. 163

Rucinski, Tracy, Grifols to pay $3.4 billion for plasma group Talecris, Reuters, 7 June 2010, available at: http://www.reuters.com/article/2010/06/07/us-talecris-grifols-idUSTRE6560SU20100607, last viewed: 30 January 2013

Salinger, Michael A., Director Bureau of Economics, FTC, *I*s it Live or Is it Memorex? Models of Vertical Mergers and Antitrust Enforcement, Association of Competition Economics Seminar on Non-Horizontal mergers, 7/8 September 2005, available at: http://www.ftc.gov/speeches/salinger/050927isitlive.pdf, last viewed: 23 April 2013

Salinger, Michael A., The 2010 Revised Merger Guidelines and Modern Industrial Economics, Rev Ind Organ, Vol. 39, 2011, pp. 159-168

Schlossberg, Robert S., Mergers and Acquisitions, Understanding the Antitrust Issues, 3rd ed.,

Schoenberg, Toni/*Forden*, Sara, H&R Block Antitrust Loss is Win for US Ahead of AT&T Trial, Bloomberg, 15 November 2011, available at: http://www.businessweek.com/news/2011-11-16/h-r-block-antitrust-loss-is-win-for-u-s-ahead-of-at-t-trial.html, last viewed: 23 April 2013

Schuhmacher, Florian, Effizienz und Wettbewerb, Ein Modell zur Einbeziehung ökonomischer Ansätze in das Kartellrecht, Nomos 2011

Schwalbe, Ulrich/*Zimmer,* Daniel, Kartellrecht und Ökonomie – Moderne ökonomische Ansätze in der europäischen und deutschen Zusammenschlusskontrolle, Mainz, 2006

Schwalbe, Ulrich/*Zimmer,* Daniel, Law and Economics in European Merger Control, Oxford University Press, 2009

Seeking Alpha, Talecris Infusion Could Save or Sink Grifols, 8 June 2010, available at: http://seekingalpha.com/article/208946-talecris-infusion-could-save-or-sink-grifols, last viewed: 30 January 2013

Shapiro, Carl, The 2010 Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years, Antitrust Law Journal, Vol. 77, pp. 701-759

Sidak, Gregory, Expert Testimony Before the Federal Communications Commission in Washington D.C. in the Matter of EchoStar Communications Corporation, CS Dkt. No. 01-348

Smith, W. Stephen/*Thayamballi*, Fabien M., New Merger Guidelines and Enforcement Trends, Antitrust Counseling & Compliance (2011), Corporate Law and Practice Course Handbook Series, 1900 PLI/Corp 279

Sokol, D. Daniel, Change and Continuity in International Antitrust Under an Obama Administration, GCP, Jan. 2009, No. 2, available at: https://www.competitionpolicyinternational.com/file/view/5784, last viewed: 14 January 2013

Sorenson, Timothy, Credible Collusion in Multimarket Oligopoly, Manag. Decis. Econ., Vol. 28, 2007, p. 115

Spagnolo, Giancarlo, On Interdependent Supergames: Multimarket contact, Concavity, and Collusion, Journal of Economic Theory, Vol. 89, 1999, p. 128

Steiner, Robert L., Marketing Productivity in Consumer Goods Industries – A Vertical Perspective, 42 J. Market, Vol. 60, 1978, pp. 61-62

Steiner, Robert L., A Dual Stage View of the Consumer Goods Economy, J. Econ., Vol. 35, Iss. 27, 2001

Stigler, George, A Theory of Oligopoly, The Journal of Political Economy, Vol. 72, No. 1, 1964, p. 54

Stroux, Sigrid, US and EC Oligopoly Control, Aspen Publishers, 2004

theantitrustsource, *Coordinated Effects Analysis: The Arch Coal Decision,* ABA Section of Antitrust Brown Bag Program, 27 October 2004, published online in March 2005, available at: http://www.crai.com/uploadedFiles/RELATING_MATERIALS/Publications/Consultant_publications/Dick/files/Coordinated%20Effects%20Analysis%20-%20The%20Arch%20Coal%20Decision.pdf, last viewed: 23 April 2013

theantitrustsource, Interview with Dr. Alexander Italiener, Director general for Competition, European Commission, April 2011, available at: www.antitrustsource.com, last viewed: 9 January 2013

The Economist, Prosecutor, judge and jury, 18 February 2010, available at: http://www.economist.com/node/15545914, last viewed: 9 January 2013

The Economist, Alfred Kahn, 20 January 2011, available at: http://www.economist.com/node/17956457, last viewed: 23 April 2013

The New York Times, Online Edition, The 44th President, The New Team, 18 December 2012, available at: http://projects.nytimes.com/44th_president/new_team/show/eric-holder, last viewed: 23 April 2013

Tucker, Darren S., Potential Competition Analysis under the 2010 Merger Guidelines, Sedona Conf. J., Vol. 12, 2011, p. 273

Van Bael, Ivo/*Bellis*, Jean-François, Competition Law of the European Community, Kluiwer Law International, 2005

Various, ABA Section of Antitrust Law (eds.), FTC Practice and Procedure Manual, 2007 ed.

Varney, Christine A., Vigorous Antitrust Enforcement in this Challenging Era, 11 May 2009, Remarks as Prepared for the Center of American Progress, available at: http://www.justice.gov/atr/public/speeches/245711.pdf, last viewed: 23 April 2013

Vasconcelos, Helder, Tacit collusion, cost asymmetries, and mergers, The RAND Journal of Economics, Vol. 36, No. 1, Spring 2005, p. 39

Verboven, Frank, Corporate Restructuring in a Collusive Oligopoly, Int. J. Ind. Organ., Vol. 13, 1995, pp. 337

Wei, Dan, China's Anti-Monopoly Law and its Merger Enforcement: Convergence and Flexibility, J. Int'l Econ. L., Vol. 14, 2011, p. 807

Weissermel, Klaus / *Arpe,* Hans-Jürgen, Industrial Organic Chemistry, John Wiley & Sons, 2008

White, Aoife, European Union antitrust chief turns tough on mergers, therecord, 15 January 2013, available at: http://www.guelphmercury.com/news/business/article/870141--european-union-antitrust-chief-turns-tough-on-mergers, last viewed: 17 February 2013

Williamson, Oliver E., Economies as an Antitrust Defense: The Welfare Tradeoffs, The American Economic Review, Vol. 58, No. 1, Mar., 1968, pp. 18-36

Williamson, Oliver E., Economies as an Antitrust Defense Revisited, University of Pennsylvania Law Review, Vol. 125, No. 4, Apr., 1977, pp. 699-736

Wrase, Silvelyn, Europäische Fusionskontrolle, Der Oligopoltatbestand unter besonderer Berücksichtigung der unilateralen Effekte, Tübingen, 2007

Lebenslauf

Persönliche Daten

Name, Vorname	Wolf-Posch, Anna Katharina
Geburtdatum	03. November 1980
Geburtsort	Bonn, Deutschland
Nationalität	Deutsch

Ausbildung

Aug. 2008 – Feb. 2014	Universität St. Gallen (HSG), Schweiz Doktoratsstudium in Rechtswissenschaften
Aug. 2008 – Mai 2009	LL.M-Studium an der Columbia University, New York, USA; Mitglied des Columbia Journals of European Law
November 2008	Zweite Juristische Staatsprüfung des Landes Baden-Württemberg, Deutschland
Sommer 2008	Columbia Summer Program, Universität Leiden, Niederlande
März 2005	Erste Juristische Staatsprüfung des Landes Baden-Württemberg, Deutschland
Juli 2002 – Sept. 2002	Praktikum im Bereich Geistiges Eigentum, Gesellschaftsrecht bei der Anwaltskanzlei Stikeman-Elliott in Montreal, Kanada
Okt. 2001 – Juni 2002	Erasmus-Studium an der Universität Clermont-Ferrand I, Clermont-Ferrand, Frankreich; Erwerb der Licence en Droit
Aug. 2001 – Sept. 2001	Praktikum im Bereich Litigation bei der Anwaltskanzlei Clifford Chance in Düsseldorf, Deutschland
Okt. 1999 – Juli 2005	Studium der Rechtswissenschaften an der Universität Konstanz, Deutschland
Sept. 1995 – Juni 1999	Schulausbildung und Abitur an der St. Leonard's-Mayfield School, Großbritannien

Berufstätigkeit

April 2012 – heute	Rechtsanwältin bei Freshfields Bruckhaus Deringer in Wien, Österreich
April 2010 – April 2012	Rechtsanwältin bei Freshfields Bruckhaus Deringer in Düsseldorf, Deutschland
Aug. 2008 – Mai 2009	Research Assistant bei Univ.-Prof. Mavroidis, Edwin B. Parker Professor of Foreign and Comparative Law, Columbia Law School, New York, USA
Aug. 2005 – Mai 2007	Korrektur- und Lehrtätitgkeit für das Juristische Repetitorium Hemmer (u.a. EU-Recht und Internationales Privatrecht)
Okt. 2005 – Nov. 2007	Rechtsreferendariat, Sprengel: Landgericht Konstanz
Juli 2007 – Sept. 2007	Wahlstation im Kabinett des deutschen Richters am EuGH, Prof. Dr. iur. Dr. h.c. von Danwitz, Luxemburg
Feb. 2007 – Juni 2007	Anwaltsstation II bei der Anwaltskanzlei Krähe & Lindner, Konstanz, Deutschland
Okt. 2006 – Feb. 2007	Verwaltungsstation am Verwaltungsgerichtshof Baden-Württemberg, Mannheim, Deutschland
Juni 2006 – Okt. 2006	Anwaltsstation I bei der Anwaltskanzlei Krähe & Lindner, Konstanz, Deutschland
März 2006 – Juni 2006	Strafrechtliche Station beim Amtsgericht Konstanz, Deutschland
Okt. 2005 – März 2006	Zivilrechtliche Station beim Landgericht Konstanz, Deutschland
Jan. 2000 – Sept. 2006	Wissenschaftliche Mitarbeiterin von Prof. Dr. Fezer, Lehrstuhl für Bürgerliches Recht, Recht der Wirtschaftsordnung und Recht der internationalen Wirtschaftsbeziehungen Universität Konstanz, Deutschland