Kluwer Law International

The Reform of EC Competition Law

New Challenges

Edited by

Ioannis Lianos

Ioannis Kokkoris

Wolters Kluwer
Law & Business

AUSTIN BOSTON CHICAGO NEW YORK THE NETHERLANDS

Published by:
Kluwer Law International
PO Box 316
2400 AH Alphen aan den Rijn
The Netherlands
Website: www.kluwerlaw.com

Sold and distributed in North, Central and South America by:
Aspen Publishers, Inc.
7201 McKinney Circle
Frederick, MD 21704
United States of America
Email: customer.service@aspenpublishers.com

Sold and distributed in all other countries by:
Turpin Distribution Services Ltd.
Stratton Business Park
Pegasus Drive, Biggleswade
Bedfordshire SG18 8TQ
United Kingdom
Email: kluwerlaw@turpin-distribution.com

Printed on acid-free paper.

ISBN 978-90-411-2692-4

© 2010 Kluwer Law International BV, The Netherlands

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission from the publisher.

Permission to use this content must be obtained from the copyright owner. Please apply to: Permissions Department, Wolters Kluwer Legal, 76 Ninth Avenue, 7th Floor, New York, NY 10011-5201, USA. Email: permissions@kluwerlaw.com.

Printed in Great Britain.

Summary of Contents

Foreword
The Reform of EC Competition Law: The Challenge of an Optimal Enforcement System xxiii
Valentine Korah

Preface xxix

List of Abbreviations xxxix

Part I
Institutional Aspects 1

Section A
The Design of an Optimal Competition Law Enforcement Regime 3

Chapter 1
Welfare-Based Optimal Legal Standards: A Brief Review of Theory and Applications 5
Yannis S. Katsoulacos & David Ulph

Chapter 2
Private Enforcement: Current Situation and Methods of Improvement 17
Denis Waelbroeck

Chapter 3
An EU Competition Court: The Continuing Debate 33
Christopher Bellamy

Section B
Concurrent Proceedings in National and EC Competition Law **53**

Chapter 4
Case Allocation in Antitrust and Collaboration between the National Competition Authorities and the European Commission **55**
Alexandra Mikroulea

Chapter 5
The Role of Arbitration in Competition Disputes **75**
Laurence Idot

Chapter 6
Modernization and the Role of National Courts: Institutional Choices, Power Relations, and Substantive Implications **95**
Kosmas Boskovits

Section C
Optimal Sanctions and Their Limitations **119**

Chapter 7
Optimal Antitrust Enforcement: From Theory to Policy Options **121**
Frederic Jenny

Chapter 8
Tools for an Optimal Enforcement of European Antitrust Law: Examples of Guidelines on the Method of Setting Fines and on Commitment Proceedings. Is the European Commission Right? **139**
Eric David

Chapter 9
Protecting Human Rights in the Context of European Antitrust Criminalization **161**
Peter Whelan

Part II
The Challenges of Economic Evidence **183**

Chapter 10
'Judging' Economists: Economic Expertise in Competition Law Litigation **185**
A European View

Ioannis Lianos

Part III
Vertical Aspects **323**

Section A
Competition Law Policy in Markets with Non-conventional Price-Formation Mechanisms **325**

Chapter 11
Antitrust Issues in Dynamic Markets **327**
Federico Etro

Chapter 12
Antitrust Issues in Network Industries **343**
Nicholas Economides

Chapter 13
EC Competition Law and Parallel Trade in Pharmaceutical Products **377**
Assimakis Komninos & Anthony Dawes

Section B
Abuse of a Dominant Position **409**

Chapter 14
Exclusionary Abuses and the Justice of 'Competition on the Merits' **411**
Philip Marsden

Chapter 15
The Implementation of an Effects-Based Approach under Article 82: Principles and Application **419**
Penelope Papandropoulos

Section C
Mergers **435**

Chapter 16
Critical Analysis of the ECMR Reform **437**
Ioannis Kokkoris & Krisztian Katona

Chapter 17
On the Economics of Non-horizontal Mergers **477**
Nikolaos Vettas & Frago Kourandi

Section D
Cartels **495**

Chapter 18
An Optimal Enforcement System against Cartels **497**
María Luisa Tierno Centella

Chapter 19
The ECN and the Model Leniency Programme **505**
Kris Dekeyser & Fabio Polverino

Section E
State Action and EC Competition Law **519**

Chapter 20
The Community State Aid Action Plan and the Challenge of Developing an Optimal Enforcement System **521**
Alena Zemplinerova

Chapter 21
EU Competition Policy for Rescuing and Restructuring Companies **537**
Nikolaos E. Farantouris

Chapter 22
State Aid Law Claims in Merger Control **559**
Alexandros Stratakis & Luca Crocco

List of Contributors **577**

Table of Contents

Foreword
The Reform of EC Competition Law: The Challenge of an Optimal Enforcement System **xxiii**
Valentine Korah

Preface **xxix**

List of Abbreviations **xxxix**

Part I
Institutional Aspects **1**

Section A
The Design of an Optimal Competition Law Enforcement Regime **3**

Chapter 1
Welfare-Based Optimal Legal Standards: A Brief Review of Theory and Applications **5**
Yannis S. Katsoulacos & David Ulph

I Introduction 5
A Decision Errors of Legal Rules 7
B Indirect (Deterrence) Effects of Legal Rules 7
C Procedural Effects of Decision Rules 8
II Choosing Legal Standards: Some Limitations of Existing Analyses 8
III Choosing Legal Standards: A Welfare-Based Approach 9
IV An Application to Refusals to License IPs and *Microsoft* 11
V Concluding Remarks 14

Chapter 2
Private Enforcement: Current Situation and Methods of Improvement **17**
Denis Waelbroeck

I Introduction 17
II The Basis for Damages Actions in EC Law 18
III The Situation in the Member States 20
IV Determining the *forum* 20
V Establishing the Claim 22
A Discovery 23
B Making Prior Decisions Binding 24
VI Fault 24
VII Damages 25
A Punitive Damages 26
B The Passing-on Defence 26
VIII Collective Actions 28
IX Costs 30
X Conclusion 31

Chapter 3
An EU Competition Court: The Continuing Debate **33**
Christopher Bellamy

I The Last Twenty Years: How We Got Here 34
A Setting up of the CFI 34
B The Increasing Workload 36
C Changes to the Rules of Procedure 37
D Structural Reform: Judicial Panels and the European CST 39
E The House of Lords Report 2007 40
II Where Are We Now? 41
III Where Should We Go from Here? 47
A The House of Lords Report 47
B Specialized Chambers? 48
IV The Wider Picture 49
A Increasing Workload, Delay, Dilution? 49
B Judicial Review and Fundamental Rights 49
C Modernization: No Coherent Appellate Structure 50
V Looking Ahead: A Tentative Conclusion 51

Section B
Concurrent Proceedings in National and EC Competition Law **53**

Chapter 4
Case Allocation in Antitrust and Collaboration between the National Competition Authorities and the European Commission **55**
Alexandra Mikroulea

I Introduction 55
II Case Allocation within the Network 57
A Lack of Binding Allocation Rules 58
1 Centre of Gravity 58
2 Best-Placed v. Well-Placed Authority 59
B Initial Allocation Period 60
C Exchange of Information 61
III Conflicts of Jurisdiction under the Allocation System 62
A Positive and Negative Conflicts 62
B Unpredictability of Penalties 64
IV Procedural Rights of the Parties 64
A The Right to a Fair Hearing 65
B The Right to a Fair Administrative Procedure 66
C The Right to a Fair Trial 67
1 Review of Article 11, Paragraph 6 Decisions 67
2 Review of Article 13 Decisions 68
3 Review of Other Decisions 68
D Access to the File 69
E Legal Representation and the Protection of the Confidentiality of Lawyer-Client Communications 69
F The Protection Against Self-Incrimination 71
G The Principle of *'ne bis in idem'* 72
V Conclusion 72

Chapter 5
The Role of Arbitration in Competition Disputes **75**
Laurence Idot

I Introduction 75
II Competition between the Arbitrator and the National Judge 78
A Evolution in Law 78
1 Stability of the Conditions Required by National Arbitration Law 78
2 Amendment of the Limits Imposed by Competition Law 79

B Evolution in Practice 81
1 Limitation of Specialized Authorities' Intervention 81
2 The Contracting Parties' Wariness Towards Ordinary National Courts 83
III The Organization of Relationships between the Arbitrator and Other 'Competition Authorities' 84
A Cooperation Relationships 85
1 Autonomous Proceedings 85
2 Successive and Parallel Proceedings 87
B Scrutiny Relationships 88
1 Ignorance of Competition Law 89
2 Erroneous Application of Competition Law 91
IV Conclusions 94

Chapter 6
Modernization and the Role of National Courts: Institutional Choices, Power Relations, and Substantive Implications **95**
Kosmas Boskovits

I Introduction 95
II Decentralization Versus Uniform Application: A Delicate Trade-off 96
A The Shift to a Decentralized System and Its Counterbalances 97
B The Impact on Institutional and Procedural Autonomy 102
III The Relationship between Competition Authorities and National Courts: The Mixing of Roles 106
IV The Substantive Impact: The Standards of Application of Article 81 EC 112
V Conclusion 116

Section C
Optimal Sanctions and Their Limitations **119**

Chapter 7
Optimal Antitrust Enforcement: From Theory to Policy Options **121**
Frederic Jenny

I Introduction 121
II The Economic Model of Law Enforcement 123
III Limitations of the Model 127
IV Insights from the Model 128
V Conclusion 136

Chapter 8
Tools for an Optimal Enforcement of European Antitrust Law: Examples of Guidelines on the Method of Setting Fines and on Commitment Proceedings. Is the European Commission Right? **139**
Eric David

I Introduction 139
II Guidelines on the Method of Setting Fines Imposed Pursuant to Article 23(2)(a) of Regulation No. 1/2003 142
A The Need for Transparency Countered by the Retention of Wide Discretion 142
1 The Need for Transparency 142
2 The Commission's Intention to Strengthen Its Discretion 143
3 The CFI and The ECJ's Position: Discretion v. Consistent Policy 144
B Uncertainties Resulting from the 2006 Guidelines 148
1 Methodology to Set the Fines 148
2 The Uncertainties Surrounding the Methodology of the 2006 Guidelines and Its Application 149
a Uncertainty Regarding Whether Application of the Methodology of the 2006 Guidelines is Appropriate 149
b Uncertainties Surrounding the Methodology Set Down by the 2006 Guidelines 150
III The Commission's Commitment Proceedings Policy 154
A The Commitment Proceedings Before the Commission: Theoretical Aspects 154
1 The Commitment Proceedings within the System of Community Proceedings 154
2 The Inherent Risks in the Commitment Proceedings 155
B The Commission's Jurisprudence 157
IV Conclusion 159

Chapter 9
Protecting Human Rights in the Context of European Antitrust Criminalization **161**
Peter Whelan

I Introduction 161
A Background 161
B Aims and Layout 162
II The Normative Position of Human Rights in the Context of European Antitrust Criminalization 163
A Accommodating Human Rights within a Theoretical Model of Antitrust Criminalization 163

B Deterrence as an Objective of Criminalization 164
C Acknowledging a 'Plurality' of Values 164
D A Compromise Model 165
III The Principle of Legality and its Effect on the Substance of Criminal Antitrust Laws 166
A The Concept of Legality 166
B 'Sleeping giants' and Legality 167
C Legal Certainty in Definition 168
IV Due Process and European Antitrust Criminalization 170
A Due Process as a European Right 170
B Strengthening of Procedural Rights 171
1 Standard of Proof 171
2 Right against Self-incrimination 172
3 Consequences of Strengthening Rights 173
C Division of Functions 175
D Exchange of Information 177
E Ne Bis in Idem 179
V Conclusion 180

Part II
The Challenges of Economic Evidence **183**

Chapter 10
'Judging' Economists: Economic Expertise in Competition Law Litigation **185**
A European View

Ioannis Lianos

I Introduction 185
II Expert Evidence in the Courtroom: Origins and Problems 190
A The Origins of Expertise: Informational Asymmetry and Epistemic Competence 191
B Science, Objectivity, and the Specific Nature of Economic Expertise 200
1 The Evolution of Acceptable Methods of Observation as a Limit to the Demarcation Criterion of Empiricism 203
2 The Possibility of Deductive Science as a Criticism to the Demarcation Criterion of Induction 206
3 The Elusive Demarcation Criterion of Facts-Based Reasoning Versus Theory/Abstract Reasoning 212
4 Scientific Practice as a Limit to the Demarcation Criterion of Scientific Consensus 217
5 Pragmatism as a Limit to the Demarcation Criterion of Objectivity 224

C The Development of an Economic Science for Litigation: Implications for the Evolution of Research in Antitrust Economics 227
III Economic Expertise in Competition Law: Scope and Implications 234
A The Legal Relevance of Economic Expertise in EC Competition Law 234
B The Many Faces of Economic Evidence in Competition Law 237
1 Economic 'Facts' 238
2 Economic Transplants 239
3 Economic Authority 243
4 Economic 'Laws' 246
IV Points of Entry of Economic Expertise in the Courtroom: A Comparative Institutional Analysis 247
A Expert Witnesses 248
B Court-Appointed Experts 254
C Hybrid Options 261
1 Assessors and Special Juries 261
2 Amicus curiae or Advice from the Competition Authorities 262
3 Internal Economic Expertise (Clerks, Research, and Documentation Units in Courts Formed by Economists) 262
4 Specialized or Trans-Disciplinary Courts 263
V Substantive Assessment of Economic Expertise 263
A Admissibility of Economic Expertise: The Exclusionary Ethos 265
1 The Emergence of the Gatekeeping Role of the Judge 265
2 The Application of the *Daubert* Rules in Competition Law Litigation 271
3 A Critical Assessment of the *Daubert* Test 274
B Assessment and Sufficiency of Economic Expertise: The Discursive Ethos 287
1 Attaching Weight to Economic Evidence as a Filter for a More Extensive Competition Law Assessment 288
a The Development of Procedures Requiring the Weighing of Economic Evidence: Summary Judgments and the Expansion of the Plausible Economics Inquiry 288
b How to Determine the Evidential Weight of Economic Evidence? 293
2 The Determination of the Standard of Proof 304
a A Probabilistic Account of Standards of Proof (Persuasion) for Economic Evidence 305
b Relative Plausibility Theory and Standards of Proof (Persuasion) 315
VI Conclusion 319

Part III
Vertical Aspects **323**

Section A
Competition Law Policy in Markets with Non-conventional Price-Formation Mechanisms **325**

Chapter 11
Antitrust Issues in Dynamic Markets **327**
Federico Etro

I Introduction 327
II Endogenous Market Structures and Competition Policy 328
III Toward a Reform of Antitrust Policy for Dynamic Markets 331
IV Predatory Pricing 332
V Intellectual Property Rights Policy 334
VI An Application: The Dynamic Market for Online Advertising 337
VII Conclusions 341

Chapter 12
Antitrust Issues in Network Industries **343**
Nicholas Economides

I Introduction 343
II The Logic of Competition Law in the United States and the European Union 344
III Markets with Network Effects 345
A Sources of Network Effects and the Reversal of the Law of Demand 345
B Critical Mass 351
IV Features of Markets with Network Effects 351
A Ability to Charge Prices on Both Sides of a Network 351
B Network Effects may or may not be Internalized 352
C Fast Network Expansion 353
D Perfect Competition is Inefficient 353
E Incompatibility as a Strategic Weapon 354
F Inequality of Market Shares and Profits 357
G Monopoly may Maximize Total Surplus 361
H In Networks, Market Inequality can Exist without Anti-competitive Acts 361
I In Network Industries, Free Entry Does Not Lead to Perfect Competition 362
J Imposing an Egalitarian Market Structure Is Likely to be Counterproductive 362
K Nature of Competition is Different in Network Industries 363
L Path-Dependence 363

V Competition Policy Issues in Network Industries 364
A Interconnection Issues in One-Sided Bottlenecks 364
B Interconnection Issues in Two-Sided Bottlenecks 367
C Market Power Creation Specific to Networks: The Importance of Technical Standards 369
D Vertical Integration and Vertical Control Issues in Network Industries 371
E Dynamic Efficiency Issues 372
F Innovation Issues 372
G Criteria to Be Used for Antitrust Intervention in Network Industries 372
H Criteria to Be Used for Remedies 373
VI Concluding Remarks 375

Chapter 13
EC Competition Law and Parallel Trade in Pharmaceutical Products 377
Assimakis Komninos & Anthony Dawes

I Introduction 377
II The Factual Background: The Greek Example 381
III The Specific Legal and Economic Context of the Pharmaceutical Sector Sets it Apart from Other Industries 383
A State Regulation and Public Service Obligations 383
B The Benefits of Parallel Trade cannot be Presumed to Accrue to Customers and End Consumers 386
IV The *GSK* Cases 389
A Article 81 EC 389
B Article 82 EC 393
V Comment 398
A Article 81 EC 398
B Article 82 EC 403
1 The Definition of the Relevant Market and Dominance 403
2 Abuse 404
VI Conclusion 408

Section B
Abuse of a Dominant Position 409

Chapter 14
Exclusionary Abuses and the Justice of 'Competition on the Merits' 411
Philip Marsden

I Introduction 411
II The Exquisite Problem 412
III The Different Enforcement Approaches 414
IV Some Suggestions Based on Merit and Justice 416

Chapter 15
The Implementation of an Effects-Based Approach under Article 82: Principles and Application **419**
Penelope Papandropoulos

I Introduction 419
II Different Approaches to Designing Rules for the Analysis of Exclusionary Conduct 420
III An Effects-Based Approach to Analyse Unilateral Conduct by Dominant Firms 424
IV Predation: The American Airlines Case 426
V Input Foreclosure 429
VI Rebates 430
VII Conclusion 433

Section C
Mergers **435**

Chapter 16
Critical Analysis of the ECMR Reform **437**
Ioannis Kokkoris & Krisztian Katona

I Introduction 437
II Jurisdictional Reform 438
A Member State Referrals to the Commission 439
B Referrals to Member States 440
C Article 9 ECMR, Post-Notification Referrals upon Request by Member States 441
D Pre-Notification Referrals upon Request by the Merging Parties 442
E Company Requests for Pre-Notification Referral to the Commission 443
III Procedural Reform 445
A Pre-Notification Consultations 445
B State of Play and Triangular Meetings 446
C Discussion of Remedies 447
D Other Procedural Innovations 448
IV Substantive Reform 448
V Case Law Analysis 452
A *Oracle/PeopleSoft* 452
1 Analysis of the Case 452
2 A Gap Case? 457
B *Sony/BMG* 463
1 Analysis of the Case 463
2 A Gap Case? 467

VI Market Structure Conducive to 'Gap' Cases 472
VII Conclusion 474
Annex 1 475

Chapter 17
On the Economics of Non-horizontal Mergers **477**
Nikolaos Vettas & Frago Kourandi

I Introduction 477
II Vertically-Related Firms and Markets 480
A Vertical Chains 480
B Pre- and Post-Chicago Views 481
III Main Economic Effects in Vertical Structures 482
A Double Marginalization: The Basic Vertical Externality and Solutions 482
B Equilibrium Pricing Incentives with Strategic Pricing 484
C Quality and Specific Investments 487
D Dynamics 489
E General Lessons from the Theoretical and Empirical Analyses 490
IV Non-horizontal and Non-vertical Cases 491
V Economic Analysis Behind Non-horizontal Merger Guidelines 491
VI The Possible Roles of the Non-horizontal Merger Guidelines 493
VII Conclusion 494

Section D
Cartels **495**

Chapter 18
An Optimal Enforcement System against Cartels **497**
María Luisa Tierno Centella

I What is Special About Cartels? 497
II What is Special About the Enforcement of Cartel Rules? 498
III Detecting and Proving Secret Cartels 499
IV Timely Punishment: Sanctions 502
V Is There Such a Thing as an Optimal System to Enforce the Cartel Prohibition? 503

Chapter 19
The ECN and the Model Leniency Programme **505**
Kris Dekeyser & Fabio Polverino

I Introduction: Antitrust Enforcement in the Pre-modernization Era 505
II The European Competition Network and Its Functioning 506
A An Integrated and Flexible Enforcement System 507
B Exchange of Information 508

C Work Sharing 509
D Coherent Application of Antitrust Rules 510
E Achievements of the ECN Network 511
III The Model Leniency Programme 512
A The Implications of ECN Cooperation for National Leniency Programs 512
B Remedies Adopted in the Network Notice 513
C The Adoption of the Model Leniency Programme 514
D The Principles of Leniency Harmonization 515
E The Summary Application System 515
F The Results of the MLP 516
IV Conclusion 517

Section E
State Action and EC Competition Law **519**

Chapter 20
The Community State Aid Action Plan and the Challenge of Developing an Optimal Enforcement System **521**
Alena Zemplinerova

I Introduction 521
II Enforcement of EU State Aid Control 523
A Less and Better Targeted State Aid 523
B Effective Procedures, Better Enforcement, Higher Predictability and Transparency 525
C Shared Responsibility between the Commission and the Member States 526
D Greater Emphasis on Economic Analysis 527
III State Aid Under the EU Treaty 528
A Transfer of State Resources 528
B Economic Advantage 529
C Selectivity 530
D Effects on Trade Between Member States 530
IV Assessment of State Aid Compatibility with the EU Market 531
A Negative Effects of State Aid 532
B Positive Effects of State Aid 533
V Concluding Remarks 535

Chapter 21
EU Competition Policy for Rescuing and Restructuring Companies **537**
Nikolaos E. Farantouris

I Introduction 537
II Meaning of ‘a Firm in Difficulty’ 540
III Rescue or Restructuring? 542

IV Compatibility with the Common Market 544
A Application of Article 87(3) EC 544
B Rescue Aid 546
C Restructuring Aid 549
1 Restoration of Long-term Viability 550
2 Avoidance of Undue Distortions of Competition 551
3 Real Contribution of the Aid Beneficiary 552
4 Full Implementation of Restructuring Plan 553
D The 'One Time, Last Time' Principle 554
V Final Remarks 555

Chapter 22
State Aid Law Claims in Merger Control 559
Alexandros Stratakis & Luca Crocco

I Introduction 559
II EC Case-Law 560
A The Matra Doctrine: Origins and Recent Developments 560
B The *RJB Mining* Case: The Matra Doctrine in a Merger Control Context 563
C The *BaByliss* Judgment: A Step Back from *RJB Mining*? 566
III Commission Practice Post-*RJB Mining* 568
A RAG II 568
B The Hellenic Shipyard Cases 569
C *Metronet/Infraco* 570
D *Deutsche Post/DHL(II)* and *Deutsche Post/Exel* 571
E *Iberdrola/Scottish Power* 573
F *ENEL/EMS* 573
IV Concluding Remarks 574

List of Contributors 577

Chapter 17

On the Economics of Non-horizontal Mergers*

*Nikolaos Vettas*** & Frago Kourandi****

I INTRODUCTION

In this short article we discuss some of the fundamental economic issues related to non-horizontal merger control. By 'merger', by a slight abuse of terminology and for the sake of brevity, we will refer to any concentration in the legal sense, whether this is being achieved via an actual merger or an acquisition. The term 'non-horizontal' merger ('NHM') refers to two distinct categories: vertical mergers (where the parties in the pre-merger stage operate as supplier and buyer) and 'diagonal' or conglomerate mergers (where the parties operate in separate markets). That is, this discussion excludes horizontal mergers in which the parties (pre-merger) belong to the same relative market and the treatment of mergers from a policy viewpoint, is now generally at a more mature stage.

---

* An earlier version of this work was presented at the 'Modernization of EU Competition Law', Conference, Athens, June 2007

** N. Vettas: Professor, Department of Economics, Athens University of Economics and Business, 76 Patission Str. Athens 10434, Greece, Email: <nvettas@aueb.gr>; Research Fellow, *Centre for Economic Policy Research*, UK; and Member of the *Economic Advisory Group in Competition Policy*, European Commission, DG-Competition.

*** F. Kourandi: Doctoral candidate, Department of Economics, Athens University of Economics and Business, Email: kourandi@aueb.gr.

Ioannis Lianos and Ioannis Kokkoris (eds), *The Reform of EC Competition Law: New Challenges*, pp. 477–494.
© 2010 Kluwer Law International BV, The Netherlands.

The context in which we place the present note is the initiative of the Directorate General of the European Commission in the last two–three years to proceed to formal guidelines for the control of NHM, the associated public consultation and finally the publication of these formal guidelines. On 13 February 2007, the Commission launched a formal public consultation on the draft guidelines.[1] By May 2007 the Commission had received thirty-two responses by various parties,[2] and in November 2007 the formal NHM guidelines were issued.[3] The formal NHM guidelines play a role complementary to that of the 'Horizontal Merger Guidelines' that are in place and seem to have operated reasonably well over the last few years.[4]

As a background for the guidelines on vertical and conglomerate mergers, a number of studies had been prepared, including Bishop et al. (2005) and Church (2004).[5] In addition, a more general discussion about the appropriate treatment of vertical relations and vertical mergers has been taking place the last few years, both in Europe and in the US.[6]

---

1. European Commission, 'Draft Commission Notice: Guidelines on the Assessment of Non-horizontal Mergers under the Council Regulation on the Control of Concentrations between Undertakings (Draft – for the purpose of public consultation)', February 2007, <http://ec.europa.eu/competition/mergers/legislation/draft_nonhorizontal_mergers.pdf>
2. Information and the responses received by the Commission can be found at <www.ec.europa.eu/comm/competition/mergers/legislation/non_horizontal_consultation.html>, 9 Apr. 2009.
3. EC document (November 2007), 'Commission Notice: Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings'
4. Revised EC Horizontal Merger Guidelines were published (Notice, 2004) along with the revised text for the EC Merger Regulation. See B. Lyons, 'An Economic Assessment of EC Merger Control: 1957–2007', *CCP Working Paper 08–17* (2008), for a general assessment of merger control policies in the EU. Also see D. Neven, 'Competition Economics and Antitrust in Europe', *Economic Policy* (2006): 741–791 and D. Neven, & S. Albæk, 'Economics at DG Competition 2006–2007', *Review of Industrial Organization* 31, no. 2 (2007): 139–153, for the more general context of economic analysis in DG-Competition.
5. S. Bishop, A. Lofaro, F. Rosati & J. Young, 'The Efficiency-Enhancing Effects of Non-Horizontal Mergers', *A report by RBB Economics for the Enterprise and Industry Directorate-General* (1995), available at: <www.rbbecon.com>; J. Church, 'The Impact of Vertical and Conglomerate Mergers on Competition', *Report for the Directorate General for Competition* (2004), available at DG comp's website.
6. See, e.g., I. M. Stelzer & R. Schmalensee, 'Vertical Integration: Should the AT&T Doctrine be Extended? Potential Costs and Benefits of Vertical Integration', *Antitrust Law Journal* 52 (1983): 249; M. H. Riordan & S. C. Salop, 'Evaluating Vertical Mergers: a Post-Chicago Approach', *Antitrust Law Journal* 63 (1995): 513–568; M. Ivaldi, B. Jullien, P. Rey, P. Seabright & J. Tirole, 'The Economics of Unilateral Effects', *Report for DG Competition, European Commission* (2003), <http://ec.europa.eu/competition/mergers/studies_reports/the_economics_of_unilateral_effects_en.pdf>; R. Epstein & D. Rubinfeld, 'Effects of Mergers Involving Differentiated Products', *Technical Report COMP/B1/2003/07* (2004); J. Cooper, L. Froeb, D. O'Brien & M. Vita, 'Vertical Antitrust Policy as a Problem of Inference', Working Paper, Federal Trade Commission, Washington DC (2004); J. Cooper, L. Froeb, D. O'Brien & M. Vita, 'A Critique of Professor Church's Report on the Impact of Vertical and Conglomerate Mergers on Competition', *Journal of Competition Law and Economics* 1, no. 4 (2005): 785–795; J. Church, 'The Church Report's Analysis of Vertical and Conglomerate Mergers: A Reply to Cooper, Froeb, O'Brien and Vita', *Journal of Competition Law and Economics* 1, no. 4 (2005): 797–802; M. Motta, 'Vertical Restraints and Vertical Mergers', in *Competition Policy*,

The Economic Advisory Group for Competition Policy (EAGCP) at DG-Competition was also asked by the DG-Competition and the Chief Economist[7] Team to submit an independent opinion as to whether the Commission should proceed to NHM guidelines and, if so, what should be their nature and basic content. Accordingly, a subgroup of the EAGCP was formed for this purpose. Access to early drafts of the proposed guidelines[8] and to parts of the DG-Competition internal discussions was also given for the purpose of seeking independent input at an early stage. As part of this process, a note was submitted to DG-Competition and published in August of 2006, entitled 'Non-Horizontal Merger Guidelines: Ten Principles', by Professors Marc Ivaldi (Toulouse), Bruce Lyons (East Anglia), Monica Schnitzer (Munich), John Van Reenen (LSE), Frank Verboven (Leuven), Nikolaos Vettas (Athens), and Xavier Vives (IESE Barcelona).[9] Although the first author of the present note was one of the co-authors of the EAGCP note and here we elaborate and build on some of the points that have emerged in that note, the two documents clearly should be viewed as completely separate in every respect. The present note also draws on a presentation on NHM issues by the first author at the European Competition Network (ECN) annual meeting in Stockholm, September 2006.

Guidelines have the goal of reducing legal uncertainty for the parties by making the treatment of a case more predictable, increasing the consistency among decisions in different cases and also leading to better coordination among decisions of the national Competition Authorities of the various Member States. At the same time, any set of guidelines for competition policy has to be taking an approach that is both general enough to allow for the fact that each case may be quite different from the next one, and specific enough to be useful.[10] According to the logic of the Commission behind this initiative, the Guidelines will provide guidance to companies as to how the Commission will analyse the impact of such mergers on competition.

In this note we wish to stress that, while NHMs and horizontal mergers formally both belong to the category of mergers, economically these are very different phenomena and, thus, their treatment should be quite different. Horizontal mergers take place among (direct) competitors and thus have as a direct implication the

---

Ch. 6 (Cambridge University Press, 2004), 302–410; P. Rey & T. Verge, 'The Economics of Vertical Contracts', University of Toulouse and University of Southampton, (2005); P. Rey & J. Tirole, 'A Primer on Foreclosure', *Handbook of Industrial Organization*, vol. III (North Holland: Elsevier, 2008).

7. Chief Competition Economist for 2004–2006 was Lars-Hendrik Röller (the first to serve in this position at DG-Competition).
8. Proposed draft guidelines by the Directorate General – Competition, April 2006 version.
9. See <http://ec.europa.eu/competition/mergers/legislation/non_horizontal_guidelines.pdf>
10. It is worth noting that the US does not have in place separate guidelines for vertical mergers. A brief reference to such mergers is made in the general merger guidelines but is very general and effectively not in use. See F. Warren-Boulton, 'The Contribution of the Merger Guidelines to the Analysis of Non-Horizontal Mergers', *US Antitrust Division of Justice* (2002), <www.usdoj.gov/atr/hmerger/11709.htm>, for a study of US merger control policy.

direct elimination of a rival firm, thus it is reasonable to start the analysis from the *presumption* that competition will be likely harmed, at least on impact. NHMs do not take place among competitors in the same market, and thus there cannot be a presumption that competition will be harmed except under specific sets of circumstances.

II VERTICALLY-RELATED FIRMS AND MARKETS

A Vertical Chains

As products and services typically go through a number of production and distribution stages before reaching the final consumer, the larger part of trade transactions in an economy is at the wholesale rather than at the retail level, that is, it involves trade between firms rather than trade between firms and the final consumer. It is thus crucial to understand (and to appropriately control when that is required) trade that involves firms at various stages of such a vertically-related chain, that is, transactions where firms assume the positions of a buyer and seller. Of particular interest is, of course, how transactions at higher stages of such a vertical chain ultimately determine prices and welfare for the final consumers.

Along a vertical (supply) chain we can refer to linked firms as the producer and the retailer, or the buyer and the seller, or more abstractly as the 'upstream' and the 'downstream' firm. Vertical chains may differ with respect to whether there are only two stages or more before the final consumer, whether firms are vertically separated (independent) or vertically integrated (effectively one firm that operates both upstream and downstream, with the goal of maximizing its joint profit), and whether trade is exclusive in some direction (with an exclusive supplier or exclusive buyer or both) or supply can originate or be directed to more than one firm. For simplicity we refer here to chains with only two stages – one upstream and one downstream – before we reach the final consumer.

Over the last decade, vertical relations have received increasingly in Europe the attention of academic research and of policy makers alike. Part of the reason for this is that economic phenomena in vertically-related markets can be more complicated and more diverse than those that emerge when markets are only viewed as horizontal. However, the main part of the reason for this increased attention is that in practice we have been witnessing both more complicated vertical contracts, which may fall under Article 82 (abuse of dominance) when either the upstream or the downstream firms (or both) have a dominant position, and moves for vertical integration. In many important markets, studying such phenomena becomes additionally important as they are accompanied by market structure changes that exhibit increased concentration in the distribution and retail stage (such as the food sector,[11] also the services sector, travel) leading to markets that operate

11. See, e.g., R. Clarke, S. Davies, P. Dobson & M. Waterson, *Buyer Power and Competition in European Food Retailing* (Cheltenham UK and Northampton, MA, USA: Edward Elgar, 2002).

like bilateral oligopolies, in other words markets where there are both powerful sellers and powerful buyers, and trade between them is determined by their relative bargaining power.[12]

B Pre- and Post-Chicago Views

Early key decisions in the development of the US antitrust case law assumed the rather simplistic view that restraints of all types reduced independence and foreclosed seller access to customers or seller access to key inputs, and thus should not be allowed. Resale price maintenance ('RPM'), the imposition of minimum retail prices by an upstream firm, was viewed as almost the same as horizontal price fixing (a view that has not been formally overturned in the US case law until recently). In response to such practices, the Chicago school approach originated a line of reasoning that applies neoclassical theory to vertical restraints.[13] This intervention was particularly useful because it brought some economic discipline to the overall analysis. As competition is determined within markets and not across markets, only horizontal restraints (and not vertical ones) can reduce it. Likewise, monopoly profit can be taken 'only once', when one of the stages is nearly perfectly competitive. Further, when vertical restraints reduce the choices facing the manufacturer imposing them – for example, by eliminating competition in price, quality, or location among retailers – the benefits from countervailing efficiencies must exceed the costs from this reduced competition. Otherwise the manufacturer would not have accepted such a set of restraints. Specific efficiencies that may emerge as a result of vertical constraints refer primarily to internalizing externalities (e.g., double marginalization, see below for details) and to moral hazard problems between manufacturers and retailers. In the US, antitrust practice came to recognize the benefits of vertical non-price restraints in the *Sylvania* case, invoking the 'rule of reason' standard.

Still, vertical practices such as RPM remained the focus of debate and the subject of criticism by many policy makers. A 'post-Chicago' view was built in parallel to the emergence of game theory as the main tool of analysis in industrial

12. Bargaining in oligopoly vertical chains is studied, among other articles, in H. Horn & A. Wolinsky, 'Bilateral Monopolies and Incentives for Merger', *Rand Journal of Economics* 19, no. 3 (1988): 408–419; and more recently in P. Dobson & M. Waterson, 'Countervailing Power and Consumer Prices', *Economic Journal* 107 (1997): 1461–1477; R. Inderst & C. Wey, 'Bargaining, Mergers, and Technology Choice in Bilaterally Oligopolistic Industries', *Rand Journal of Economics* 34, no. 1 (2003): 1–19; and C. Milliou, E. Petrakis & N. Vettas, '(In)efficient Trading Forms in Competing Vertical Chains', *CEPR* discussion paper No. 3976, July 2003, London, UK.
13. See, e.g., L. Telser, 'Why Should Manufacturers Want Fair Trade?', *Journal of Law and Economics* 3 (1960): 86–105; US Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines*, Issued: April 1992, Revised: April 1997; <www.usdoj.gov/atr/public/guidelines/horiz_book/hmg1.html>; R. Bork, *The Antitrust Paradox: A Policy at War with Itself* (New York: Basic Books, 1978).

organization in the mid-1980s. A number of influential models were presented to show that vertical integration or contractual restraints can lead anti-competitive outcomes by changing the commitment power and the strategic sets of the players, leading the foreclosure or affecting the information flows, especially when there is some differentiation among products. Thus, having passed through an early stage where academic research and legal analysis were both viewing vertical restraints as harmful, and then another stage where they were viewed as not harmful, the more recent move has been towards a more explicitly balanced approach that takes into account how a particular vertical restraint or merger is expected to affect competition and the final consumer.[14]

Regarding merger control in particular, vertical integration is generally viewed by competition policy (at least in recent years) much more favourably than horizontal concentrations. As we explain below, this is both because the implied adverse effect on competition is indirect (and when there is such it is much weaker or inexistent), and because expected technological and distributional efficiencies are more significant than under horizontal concentrations.[15] Vertical mergers can only be viewed as anti-competitive in an indirect way, and under specific scenarios and sets of circumstances. In practice, of particular significance are also the cases of proposed vertical mergers when there is sector regulation (with respect to prices or otherwise) at some stage of the vertical mergers (such as in the energy or telecom markets); the interplay between regulation and competition policy should then be considered and a firm should not be allowed to 'escape' the regulation via such a merger when this is expected to hurt consumers.

III MAIN ECONOMIC EFFECTS IN VERTICAL STRUCTURES

A Double Marginalization: The Basic Vertical Externality and Solutions

Under vertical separation and linear pricing (a constant per unit price), a larger number of stages in the vertical chain leads to higher final product prices than those

14. See, e.g., M. H. Riordan, & S. C. Salop, 'Evaluating Vertical Mergers: a Post-Chicago Approach', *Antitrust Law Journal* 63 (1995): 513–568.
15. In vertically-related markets, the terms of trade between the upstream and the downstream stage may be affected not only by vertical mergers but also by *horizontal* mergers either at the downstream level (leading to fewer and larger buyers) or at the upstream level (leading to fewer and larger sellers). The theoretical analysis and the empirical evidence is mixed in such cases (see, e.g., M. Motta, 'Vertical Restraints and Vertical Mergers', in *Competition Policy*, Ch.6 (Cambridge University Press, (2004): 302–410): increased concentration at one stage of the market tends to change the relative upstream-downstream *bargaining* power and, thus, the implied prices in ways that could either benefit or hurt the final consumers.

we would have under vertical integration. To understand this argument, and the conditions under which it holds, let us consider a simple vertical market structure with one upstream firm ('U') and one downstream firm ('D'), like that in Figure 1. For simplicity, we assume here that there are only two stages. Firm U's product is sold to firm D, which in turn sells to the final consumers (possibly after some packaging or other processing).

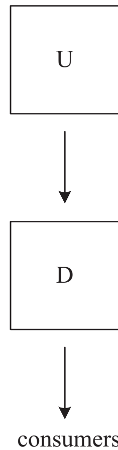

Figure 1.

The main *double marginalization* argument can be understood by the following simple model. Demand in the final market is taken as given (and can be formally represented by any strictly decreasing function of the final price). Suppose that pricing can be only 'linear', that is, we have a constant per unit pricing. The U firm sets a price, P_w (the wholesale linear price), and then the D firm makes its purchasing decisions from the U firm and decides the price that it sets for the final consumers, P_R (retail price). Each firm is independent from the other, in the sense that it seeks to maximize its own profit. The fundamental result that one obtains in the equilibrium of this model, a relatively well-known result since Spengler (1950), is that this process of double marginalization leads to prices for the final consumers that *exceed* the prices they would face under a vertically integrated ('VI') monopoly. Since the monopoly profit is by definition the maximum profit possible in a market, we also find that, under vertical separation, the aggregate profits (for D and U combined) will be *below* the profit for the VI case. It follows that in this case, vertical separation with linear pricing tends to hurt both the consumers and each of the two firms, while vertical integration will strictly *benefit* both the consumers and the firms. The underlying logic is that the firms fail to internalize the vertical externality that exists in their pricing (in particular, the U firm ignores part of the effect that an increase in its own price will have on the final price).

From the above discussion, it follows that one 'solution' to the double marginalization problem is vertical integration. This would take the market structure to a simple monopoly that covers both stages of the market. However, it should be stressed that this problem can *also* be solved if different pricing schemes can be used instead of linear pricing, like two-part tariff arrangements. Under such an arrangement, if the marginal price is set at the competitive level (cost) and the fixed fee is set 'just below' the total monopoly profit, then we can recover the exact monopoly solution (without having formally a vertical integration arrangement).

Note that if there are additional stages in the vertical market (i.e., not only two stages as assumed above, but more), the problem under linear pricing becomes even worse. In fact, the more stages there are, the more severe the 'multiple marginalization' problem becomes and the higher the final prices for the consumers will be. One interpretation of this result is that a larger number of 'intermediaries' would imply a higher final price. Also note that the situation changes if we allow the D firm to have the price setting (or bargaining) power against both the final consumers and also the U firm. In such a setting, only one profit margin can be applied and there is no additional distortion. Likewise bargaining between the U and the D firm would modify the argument.

B Equilibrium Pricing Incentives with Strategic Pricing

Based on the above analysis, one can proceed to an analysis of pricing in richer vertical structures. One of the important cases in practice is when, in addition to the basic vertical externality discussed above, we also have a horizontal externality that takes the form of 'inter-brand' oligopolistic competition. This may correspond to the case of one producer that trades with two (or more) retailers. In such cases, there is market power not only in the vertical sense but also in the horizontal: not only strategic interaction between producers and retailers matters, but also among retailers. Let us first discuss a case like that of Figure 2, with one firm upstream and two downstream. The U firm understands that given the duopoly competition downstream, prices in the final market will tend to be too low relative to the prices that U firm would like to have set (i.e., the monopoly price). A two-part tariff would be sufficient so that the U firm can 'soften' competition in the D market and lead to monopoly prices in the final market, and then capture the total monopoly profit via a fixed fee. Note that two instruments are required here, one instrument needed to control the horizontal externality (competition between the D firms) and the second to then transfer the profit (or part of it) upstream. In this case, the U wholesale price (as part of the two-part tariff) has to be set at a level higher than cost, exactly to make the two D firms not behave aggressively against each other.

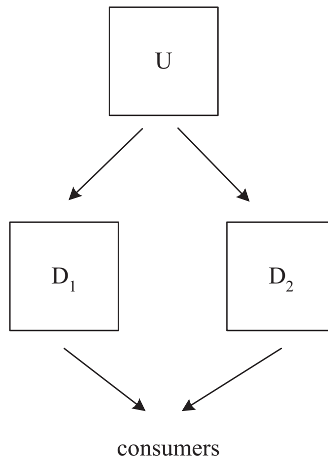

Figure 2.

The situation described just above would not be very different if, instead of having only two D firms, we had several firms (see Figure 3). Again, the marginal price charged downstream can make them passive enough against each other and then the fee can transfer the profit upstream. This is the case in reality when we have one large producer (or one large wholesaler) and many small retailers.

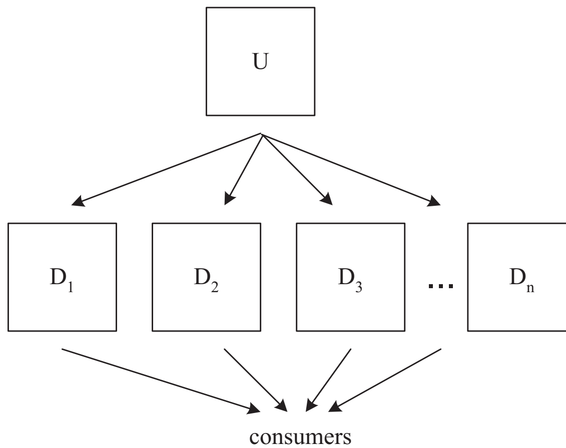

Figure 3.

The picture from a competition viewpoint becomes very different when there is both 'inter-brand' and 'intra-brand' competition at the same time. Suppose, for example, that there are two upstream firms, one trading exclusively with

n downstream firms and the other with *m* downstream firms (the assumption of exclusive dealing for each upstream-downstream pair is made for simplicity but is not without some loss of generality). Then, the dominant effect may be that each vertical chain may like its own retailers to have more aggressive marginal incentives in the market vis-à-vis rival retailers.[16] The equilibrium wholesale prices will tend to depend on the number of retailers that each upstream firm is associated with.[17] Of course, important for the exact results is also the form of downstream competition, for example, whether firms complete in quantities or in prices. With quantity competition (Cournot) assumed downstream, each chain would like to assist its own downstream firms to commit to more aggressive behaviour and to seek a larger market share. With price competition (Bertrand) assumed downstream, if each chain encourages its own downstream firms to have more passive behaviour the outcome may be higher profits, which are desirable for all parties.

Also important is the case with two upstream firms that may have to go through a single downstream firm (say a retailer or a wholesale firm). In such a case, the D firm is a 'bottleneck' and typically can use its bargaining power to obtain high profits (each of the U firms has no outside option in the bargaining, while the D firm can play one U firm's incentives against the other). The exact details may depend on how bargaining takes place (see Figure 4).[18]

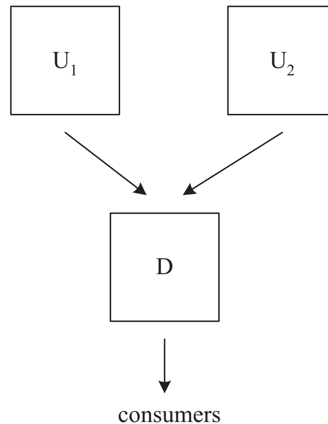

Figure 4.

16. See, e.g., J. Vickers, 'Delegation and the Theory of the Firm', *Economic Journal* 95 (1985) 138–147; C. Fershtman & K. Judd, 'Equilibrium Incentives in Oligopoly', *American Economic Review* 77 (1987): 927–940.
17. See K. Saggi & N. Vettas, 'On Intrabrand and Interbrand Competition: The Strategic Role of Fees and Royalties', *European Economic Review* 46, no. 1 (2002): 189–200.
18. See, e.g., P. Rey & J. Tirole, 'A Primer on Foreclosure', *Handbook of Industrial Organization*, vol. III (North Holland: Elsevier, 2008), and P. Rey & T. Verge, 'The Economics of Vertical Contracts', University of Toulouse and University of Southampton (2005). Also on entry deterrence see R. Innes, 'Entry Deterrence by Non-horizontal Merger', *Journal of Industrial Economics* LIV, 3 (2006): 369–395.

Of course, cases of vertically-related markets can be quite complex, even with only a small number of firms. See for example, Figure 5, where we assume there are two large upstream and two large downstream firms. How is trade going to take place and how will the final consumer prices be determined? The answer will depend on a number of factors such as if the product is homogeneous or differentiated, and the bargaining power of each party. As Figure 5 shows, one of the chains can be exclusive and the other may allow trade of both products.[19]

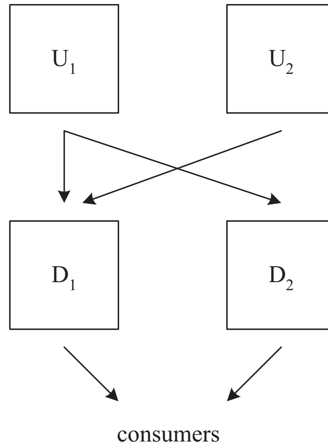

Figure 5.

C Quality and Specific Investments

In addition to prices, consumers also care about the availability of high quality and/or of enough variety for products; sometimes even more than about prices. The horizontal and vertical features of the market structure also affect these dimensions of the products provision. Quality and availability to variety for the final consumer typically depends on actions taken by all involved parties along the vertical chain, and assuring a particular quality or level or variety may require the collaboration of these various parties. If this collaboration cannot be assured, then product quality will be below the optimal level not only from the viewpoint of the final consumers but also of the entire vertical chain. For instance, suppose that there is one upstream producer that attempts to establish a reputation for his product (possibly using a specific brand name) as having high and/or consistent quality. Suppose that to reach the final consumer, the producer supplies various retailers (who in turn sell to the final consumers, possibly in markets that communicate only through

19. On the incentives for forming excusive relationships with large buyers, see, e.g. R. Innes & R. J. Sexton, 'Strategic Buyers and Exclusionary Contracts', *American Economic Review* 84 (1994): 566–584.

information exchange and reputation building). If the assurance of a specific product quality is costly but also important, and if quality depends on actions by all parties (from the producer until reaching the final consumer), the incentives for the final retailers to provide high quality may be weaker than optimal. The reason is because of 'spillovers' or informational externalities: a retailer that does not provide high enough quality hurts not only his own sales but also the reputation of the product and, thus, the profitability of the other retailers. As this cost is not fully internalized by each independent retailer the market will tend to provide suboptimal quality.[20] It follows that appropriate measures will have to be taken to solve the problem, like specifying particular details in contracts when this is possible, profit sharing schemes along the chain so that the relevant incentives are aligned, or exclusive dealing. When these measures fail then a vertical integration solutions may have to be used.[21]

When analyzing vertically linked markets the exact form that vertical organization takes is critical, as one moves from the producers to the distributors and retailers. Such vertical structures may vary greatly between the two extreme structures, that of full vertical integration (the formation of a single firm that covers all vertically linked stages and internalizes the corresponding vertical transactions) and that where all trade takes place through the markets. Many intermediate forms exist involving longer or shorter contracts and exclusive or non-exclusive dealing. To understand the market forces that may push the organization towards one or the other extreme, the fundamental guiding conditions have to be traced back to the celebrated work of Coase: the boundaries of the firm, he explained, depend mainly on the nature of transaction costs.[22] To the extent that markets exist and operate efficiently, internalizing the corresponding transactions only increases the overall cost for the parties involved. So if there are competitive markets that one can rely upon either upstream or downstream, there is little or no benefit from a vertical integration decision. This tends to be the case when the products are homogeneous and there are a large number of (potential) buyers and sellers. If, for instance, there are many possible producers able to provide the desired quality and quantity at the desired time, then a retailer would not wish to integrate backwards; supply is assured and competition would drive the supply price close to cost. Similarly, if there are many possible retailers able to absorb the desired quality and quantity at the desired time and offer access to the final consumers, then a producer would not need to integrate forward; demand is assured and competition between retailers would drive the purchasing price close to what final demand would dictate. Uncertainty in the market would be representing only aggregate (demand or supply) shocks, not firm-specific or idiosyncratic shocks. There is no efficiency or

20. See, e.g., R. D. Blair & F. Lafontaine, *The Economics of Franchising* (Cambridge University Press, 2005) for a general analysis and possible solutions to the problem in the context of franchizing.
21. Vertical integration typically will not be an appropriate solution if the downstream firms are multi-product, trading with several upstream suppliers in various relative markets.
22. R. Coase, 'The Theory of the Firm', *Economica* 4 (1937): 386–405.

risk-reduction rationale for an integration strategy, while there is also no incentive for incorporating profits, as these are kept roughly at the normal level. Contrary to such cases, if there are products that are differentiated and specialized and/or the number of buyers and sellers is small, there may be both a transaction cost rationale and a profit rationale for a vertical integration decision.

Related to the issue of product characteristics is that of specific assets and investments.[23] To the extent that the supply of products or their retail processing requires investments that are specific to the particular pair of transacting buyer and seller, there may be a dynamic rationale for vertical integration when market forces and contracts may not be sufficient for the investments needed. Assuring an appropriate quality and production level for the product would typically require significant investments that become sunk once undertaken, in particular, because they can involve specific assets (they do not have value, or only have a small value for other potential buyers). As a result, the markets become 'thin' and the parties may require assurances that the other parties will not behave opportunistically and 'hold them up' after they have committed themselves by making specific choices and investments. In other words, given that a specific investment is required to take place before supply is provided, and that by its specific nature this investment would be losing much of its value outside the particular transaction, the party that has invested may find itself in a weak bargaining position and as a result the other party may extract a large part of the trade surplus. Rationally anticipating such behaviour, parties that consider undertaking specific investments may simply not invest at all or else invest at an inefficient level. Building on the seminal insights of Coase[24] and depending on the details of the case, the problem of underinvestment in specific assets either can be solved employing (short-term or long-term) contracts, or may be solved only via vertical integration.

D DYNAMICS

In addition to specific investments, there are also other dynamic issues that should be taken into account when considering vertical mergers or other vertical restraints. We can single out here two issues. First is how a given vertical merger may affect other vertical mergers: under certain conditions when a vertical merger takes place between one U and one D firm, other vertically linked firms may wish to also vertically integrate, thus forming a 'merger wave'. This can be either for strategic reasons or for efficiency reasons. Such implications should be taken into account to the extent possible when a given vertical merger is being evaluated. Second, learning-by-doing technologies at the production stage may be important in vertically linked markets.[25] The idea here is that over time the unit cost of production

23. See, e.g., S. Grossman & O. Hart, 'The Cost and Benefits of Ownership: a Theory of Lateral and Vertical Integration', *Journal of Political Economy* 94 (1986): 691–719.
24. R. Coase, *supra* n. 21.
25. See F. Kourandi & N. Vettas, 'Dynamic Vertical Contracting with Learning-by-Doing', Working paper, Athens University of Economics and Business (2007).

may decrease as the producer gains experience, that is, may be a decreasing function of accumulated production. In such cases, under some conditions, exclusive contracts or vertical integration may lead to greater efficiency for the markets and higher consumer welfare. Specifically, a trade-off may emerge between lower prices and increased variety that policy makers should be taking into account.

E General Lessons from the Theoretical and Empirical Analyses

Although vertical restraints and vertical mergers have been the subject of several important recent theoretical studies, there appears to be no general conclusion about their competitive effects. We do expect further theoretical progress in the field, but its current state is due in large part to the nature of the problem: there are many forms of vertical mergers and vertical restraints, so there is a large number of ways in which different competitive and anti-competitive effects may occur. As a result, there is no generally agreed small set of 'canonical models' of competitive harm to provide guidance for non-horizontal mergers; whereas there are now such models generally accepted for horizontal mergers, for example, the Bertrand model for pricing with differentiated products, the Cournot model for capacity-constrained homogeneous products, and repeated game approaches for coordinated effects. Likewise, the empirical evidence about vertical mergers and other restraints is relatively thin and inconclusive. There is a scarcity of empirical evidence on anti-competitive effects in relation to non-horizontal mergers, and although there are cases where it has been documented empirically that a non-horizontal merger has significantly affected competition in a market in a negative way, there is no evidence that this may happen as a rule.

As mentioned in the previous section, there are canonical models of 'no harm', or even competitive benefit, collectively known as the 'Chicago school' or Chicago approach. Importantly, these state the precise conditions under which there is no loss of competition due to a non-horizontal merger. In particular, this approach suggests that monopoly profits 'can be taken only once' along a vertically linked chain, that vertical integration can reduce distortions by eliminating 'double marginalization' and that there may be significant production and organization efficiencies as a result of integration. This approach can be viewed as pointing out that, if markets upstream or downstream are perfectly competitive or monopolistic, vertical mergers are not problematic and typically will be good for the final consumers. By implication, attention can be focused on cases where markets are oligopolistic at least at one of the stages involved and where strategic behaviour is important or changes in the information structure and the relative bargaining powers are expected. The implication here is that the appropriate theory of 'competitive harm' in NHM control must be tuned particularly carefully to the merger in question, specifying the precise mechanism through which such harm is likely to occur.

IV NON-HORIZONTAL AND NON-VERTICAL CASES

A number of merger cases do not fall under either the 'horizontal' or the 'vertical' categorization, that is do not involve firms that neither are direct rivals in the same relative market (suppliers of the same product or service) nor are linked vertically in the same chain as supplier and buyer. In practice such cases occur in 'diagonal' cases or 'conglomerate' mergers where firms produce products that are complementary or when strengthening the dominant position in one relative market via a merger may somehow adversely affect competition in another related relative market.

An important recent case in the EC that has attracted high importance and caused significant controversy is that of the proposed merger between General Electric and Honeywell. While that was a proposal for a 'conglomerate' merger that would affect a number of different relative markets, the more novel and at the same time controversial part of the Commission decision against the merger was based on a theory of 'portfolio effects' about how the merger may affect competition involving complementary products. The treatment of that case by the Commission received strong criticism by competition agents on the other side of the Atlantic.

Such cases are important and deserve separate treatment in competition policy and in guidelines in particular. However, as the basic general principles are at work as with vertical mergers (that is, they do not involve mergers between rivals and any anti-competitive effects they may have are indirect and may emerge only under specific sets of circumstances), we do not provide in this brief note a separate discussion of the matter.

V ECONOMIC ANALYSIS BEHIND NON-HORIZONTAL MERGER GUIDELINES[26]

Based on the above analysis we can summarize here the main economic features of NHM in comparison to horizontal mergers. These have a significant impact on how non-horizontal mergers should be treated by any competition authority.

It cannot be stressed enough that the competitive impact of non-horizontal mergers is fundamentally different from that of horizontal mergers. In the case of horizontal mergers, the parties pre-merger are likely to offer some pricing constraints on each other, if they have a significant share of the relevant market. A horizontal merger will have as a direct impact effect an increase in market concentration. It is, therefore, natural that a horizontal merger is likely to lead directly to increased market power for the combined parties, and further it is likely that this could be translated to higher equilibrium prices, at least as a first-order or impact effect. This is not the clear presumption for a non-horizontal merger: a non-horizontal merger does not have as an impact effect a change in concentration in

26. Some parts of the analysis here parallel parts of the EAGCP 'Non-Horizontal Merger Guidelines: Ten Principles' note, <http://ec.europa.eu/dgs/competition/economist/eagcp.html>, (2006).

any given market and both economic theory and empirical work suggest that the competitive effects of non-horizontal mergers will depend on characteristics of the situation examined.

Continuing with the above argument, since competitive harm in NHM cannot be direct but only indirect, the sources through which such harm may occur typically require a change in the strategies of the involved parties, the merged parties, and other competing firms. The competitive harm from a horizontal merger can typically be characterized by its direct impact on the incentive to raise price. In contrast, potential competitive harm in non-horizontal mergers may arise through a change in supply or buyer strategies or availability of products. These can indirectly affect the cost or demand of rival firms, and by implication their pricing, ultimately having an impact on consumers. Such indirect effects can certainly impede effective competition, but they do require a particularly careful analysis in order to justify a likelihood of harm. In particular, the implication here is that *equilibrium* analysis in oligopoly markets has to be conducted with scenarios both pre- and post-merger.

Of course, whereas we have stated above that the exact implications may depend on the details of each case, there are scenarios where we can conclude that no harm is likely to occur. In particular, market power in one of the markets is an essential pre-requisite for competitive harm from foreclosure. This is well-established by economic theory and should act as a filter to eliminate cases where no harm may occur, thus pointing out same 'safe harbours'. Clearly, market power in some market by one of the parties is a necessary condition, and certainly not a sufficient one for competitive harm. Even in the presence of market power, merging firms need not have the incentive to take actions that would reduce the market available to rivals, and even if this is a likely consequence, it need not result in consumer harm. According to the Commission, the formal guidelines indicate levels of market share and concentration below which it is unlikely competition concerns can be identified. That is, 'safe harbours' are established.

It should also be pointed out that there are stronger *efficiency arguments* for non-horizontal mergers than for horizontal mergers. Though efficiencies are by no means guaranteed in *any* merger, horizontal or not – and empirical research points out that most mergers ultimately do not achieve the efficiency gains expected – such efficiencies are more likely to occur in vertical cases and not in horizontal. As pointed out in section III above, vertical mergers can be an appropriate way of achieving an efficiency-enhancing change and may among other effects assure the optimal provision of specific investments and the internalization of pricing and other externalities. It follows that the downside of a decision error that wrongly prohibits NHMs is likely to be much greater than for horizontal mergers, and thus also for this reason NHMs should be viewed *ex ante* more favourably than horizontal mergers.

Finally, it should be noted that when assessing a proposed NHM and the resulting change in competitive conditions the appropriate pre-merger benchmark should be used. Non-horizontal merging parties often have some previous contractual relationship that could limit buyer or supplier competition and switching;

as a result there may be no competitive change following a merger. In other words, in a non-horizontal merger, typically a firm merges with one of its suppliers or customers (in a vertical merger) or with a firm in some other (possibly related) market in the case of a conglomerate merger. In the case of a vertical merger in particular, pre-merger the firms may be involved with one another in various types of short-term or long-term contracts.[27]

All the above points should be taken into account when assessing NHM and, as a result, their treatment should be in general more favourable than for horizontal mergers, but also require a more careful (detailed but robust) equilibrium analysis by the competition authorities.

VI THE POSSIBLE ROLES OF THE NON-HORIZONTAL MERGER GUIDELINES

The main goal of any set of guidelines in competition policy is to enhance the accuracy and predictability of decisions. In the case of a NHM, as has been explained above, there are various scenarios through which a competitive or an anti-competitive effect may occur. Exactly for this reason it seems that issuing the recent NHM guidelines was a positive development by the EC. While the analysis is typically more difficult than for horizontal cases and such a set of guidelines should be written with extreme care, exactly for this reason providing guidelines for NHM (to accompany the horizontal merger guidelines) is desirable. Having a suitable set of guidelines is important, as it can contribute towards predictability and consistency of decisions, both features very important for businesses and their planning in markets. In addition, these non-horizontal guidelines will also prove helpful for Competition Authorities beyond DG-Competition (and, of course, in particular to those of the Member States).

However, as should be clear from the preceding analysis, there are significant difficulties inherent in writing detailed NHM guidelines by any Competition Authority, due to the very nature of such mergers as economic phenomena and to the various forms that their competitive or anti-competitive effects may take. Guidelines that would try to achieve 'too much', in the sense of not recognizing that each case may have important idiosyncratic elements, would fail and may do more bad than good. It is not an accident that other authorities, including the US, do not currently rely on such guidelines for non-horizontal cases, as opposed to horizontal cases.[28] Thus, it is important to comment here on some of the key features of the guidelines and the general logic under which these should be used.

---

27. Such contracts can be clearly legal or they may fall under a 'grey area' where the application of Art. 82 (abuse of dominance) is appropriate. Thus, vertical merger analysis in this respect may be neighbouring to Art. 82 applications in that same market. See the EAGCP (2005) note on the economics of Art. 82.
28. U.S. Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines*, (1992, 1997).

First, the NHM guidelines have a focus on competitive effects resulting in consumer benefit or harm and *not* on harm to competitors. Hopefully, it is by now generally understood that competition policy is not about protecting competitors, but competition. This becomes very obvious and important when dealing with NHM cases because such mergers can create efficiencies, which lead to competitors losing market share as the merging parties reduce price or offer more attractive products to consumers. Such a development would be good for consumers but may be bad for competitors who, as they expect to lose market share and profits, would have strong incentives to 'complain' about the proposed merger.

Second, it is important that the NHM guidelines indicate the general approach for the analysis to indicate the possible harm resulting from a proposed merger. A distinction here should be made between (a) the *ability* and (b) the *incentive* for merging firms to act under the new regime in a way that would ultimately harm consumers; both factors are required (cumulatively) for harm to occur.

Finally, a distinction has to be made between 'more likely' and 'less likely' competitive harms when this is possible, and the scale of likelihood should be tied appropriately with the required standard of proof for the merger under examination to be blocked. Hopefully, the set of guidelines that have been issued by the Commission, along with an understanding of the main economic principles at work, like the ones presented in this note, will become a useful tool for policy makers and for businesses.

VII CONCLUSION

It is important to be made clear that vertical mergers are fundamentally different economic phenomena from horizontal mergers and should be treated as such by the law. This holds true with respect to the treatment of individual cases by the Competition Authorities. Vertical mergers are expected to have anti-competitive effects only under specific sets of circumstances (such as resulting in customer or input foreclosure), since they are not mergers between directly rival firms (as are the horizontal mergers), but mergers between suppliers and buyers. In the case of vertical mergers, we also expect that they would typically result in greater efficiency in the market than horizontal mergers, partly through the elimination of double marginalization. Finally, if a merger does *not* take place, vertically-related firms will typically trade among them by employing a variety of non-linear pricing schemes or other contracts. This means that the comparison point for possibly blocking a merger should be carefully assessed and also that the overall analysis may have to be naturally linked to that of the possible abuse of dominance by an upstream or downstream firm.

List of Contributors

Sir Christopher Bellamy: Senior Consultant, Linklaters LLP, London
Kosmas Boskovits: Legal Service of the Greek Ministry of Foreign Affairs, Athens
Maria Luisa Tierno Centella: Deputy Head of Unit in the Cartels Directorate of Directorate General for Competition, European Commission, Brussels
Luca Crocco: Associate, Latham & Watkins LLP, Brussels
Eric David: Associate, Orrick Rambaud Martel LLP, Paris
Anthony Dawes: Associate, White & Case LLP, Brussels
Kris Dekeyser: Head of the ECN unit of Directorate General for Competition, European Commission, Brussels
Nicholas Economides: Professor, Stern School of Business, New York University, USA; Executive Director, NET Institute
Federico Etro: Associate Professor, Department of Economics, University of Milan, Bicocca, Italy; President, Intertic
Nikolaos E. Farantouris: Assistant Professor, Department of International & European Studies, University of Piraeus, Greece
Laurence Idot: Professeur à l'Université Panthéon Assas, Paris II, France; Member of the Board, Autorité de la Concurrence, France
Frédéric Jenny: Professor of economics and co-director of the European Center for Law and Economics, ESSEC, France; Judge, Cour de cassation, France; Non-executive Board Director, Office of Fair Trading, UK
Krisztian Katona: Counsel for International Antitrust, United States Federal Trade Commission
Yannis S. Katsoulacos: Professor, Department of Economics, Athens University of Economics and Business, Greece
Ioannis Kokkoris: Principal Case Officer/Economic Advisor of the Office of Fair Trading; Visiting Lecturer, City University, UK and Visiting Fellow, Durham University, UK

Assimakis Komninos: Senior Associate, White & Case LLP, Brussels; Visiting Lecturer, IREA – University Paul Cézanne Aix – Marseille III, France; Visiting fellow, CLGE, University College London, UK

Valentine Korah: Professor Emeritus of Competition Law at University College London, UK

Frago Kourandi: Department of Economics, Athens University of Economics and Business, Greece

Ioannis Lianos: City Solicitors' Educational Trust Lecturer in European Union Law, Faculty of Laws, University College London (UCL), UK; Emile Noel Fellow, New York University School of Law, USA; Visiting Professor, Centre for International Intellectual Property Studies (CEIPI), University of Strasbourg, France

Philip Marsden: Director, The Competition Law Forum and Senior Research Fellow British Institute of International and Comparative Law

Alexandra Mikroulea: Associate Professor, Department of Law, University of Athens, Greece

Penelope Papandropoulos: Economist, Chief Economist Office, Directorate General for Competition, European Commission, Brussels

Fabio Polverino: Member of the ECN unit of Directorate General for Competition, European Commission, Brussels

Alexandros Stratakis: Associate, Baker & McKenzie LLP, London

David Ulph: Professor, Department of Economics, University of St. Andrews, UK

Nikos Vettas: Professor, Department of Economics, Athens University of Economics and Business, Greece

Denis Waelbroeck: Partner, Ashurst LLP, Brussels; Professor, Department of Law, Free University of Brussels, ULB, Belgium

Peter Whelan: Research Fellow in Competition Law, British Institute of International and Comparative Law; PhD Candidate, St John's College, Cambridge, UK

Alena Zemplinerova: Professor, Prague School of Economics; Senior Researcher, Center for Economic Research and Graduate Education – Economics Institute, Prague, Czech Republic