A CRITICAL APPROACH TOWARDS THE SUBSTANTIVE APPRAISAL OF JOINT VENTURES UNDER THE EU MERGER CONTROL REGIME

By

Kadir Baş

A Thesis Submitted for the Degree of Doctor of Philosophy,

School of Law, Queen Mary, University of London

2013

DECLARATION

I declare that the work presented in this thesis is the result of my own research, undertaken at Queen Mary, University of London.

Kadir Bas

September 2013

ABSTRACT

Joint ventures are a widely used form of interfirm collaboration, which possess some characteristics of both mergers, in which two or more firms come permanently under common control and cease to be distinct, and agreements, which impact the competitive behaviour of firms that remain independent of each other. Due to their hybrid economic nature, it has always been controversial what types of joint ventures should be regarded as mergers under competition law, and how the fact that the parent firms remain independent outside the cooperation should be incorporated into traditional merger analysis. In the EU, only full-function joint ventures are treated as mergers under the Merger Regulation. However, unlike amalgamations and acquisitions, these joint ventures are subject to an additional analysis under Article 101 TFEU to the extent that they lead to the coordination of the competitive behaviour of the parents.

This thesis aims to critically analyse this approach to the substantive appraisal of joint ventures under the EU merger control regime, based on its consistency with the general rules of EU competition law and with relevant economic theories, in a comparative perspective with the US competition law regime. In this regard, the thesis shows that (i) the full-functionality criterion assuming that full-function joint ventures are autonomous from an operational viewpoint has some negative implications for the competition analysis of joint ventures; and (ii) the fact that the parent firms retain activities in the joint venture's market, or in other markets, does not seem to be properly incorporated into the analysis under the Merger Regulation. This thesis seeks to propose some alternatives and solutions with respect to these problematic issues and, thereby, contribute to the body of knowledge and debate about joint ventures which have been, and will be, one of the most intricate and controversial topics of competition law.

ACKNOWLEDGEMENTS

The completion of a PhD thesis is generally perceived as an exclusive work of the person whose name is displayed on the cover page. This is not entirely true. Many people and institutions play their role, in one way or another, in helping the thesis to come to life. Therefore, I am very happy to have this acknowledgements part to reveal all the actors of this thesis, who remain behind the curtain.

First of all, I am hugely indebted to my supervisor, Prof. Maher Dabbah, for all of his invaluable guidance and support throughout the PhD process. His feedbacks helped me a lot to shape my thoughts, knowledge and understanding of competition law, and of doing research in general. He always encouraged me to be critical and not to abstain from putting forward to my original ideas. It was really a great pleasure and privilege for me to work with him.

Secondly, I should thank a lot to Ass. Prof. Kerem Cem Sanli who introduced competition law to me during my LLM study in Istanbul Bilgi University, and who is one important reason why I decided to dedicate my years to specialising in this field of law. I am very grateful to him for his continuous support and inspiration before and during this research.

I am also very grateful to the Turkish Ministry for National Education for funding this research. Without this support, it would be very difficult for me to start my PhD journey in the first place.

I should also thank to all of my friends who made the monotonous PhD life bearable. I am particularly grateful to my friends, Dr. Latif Tas, Dr. Nusret Cetin and Dr. Omer Faruk Direk for making the IALS library an enjoyable social environment for me, to which I happily went every day. I should also thank to my friend, Mehmet Bedii Kaya, who also shares the same experience as me in University of Nottingham, for all of his friendship and support from the beginning of my PhD to its end. I should also thank to my friend, Andriani, for helping me in making the last touches on my

thesis. I am also grateful to all of other special friends who made my PhD years in London unforgettable.

Finally, my biggest thanks go to my family whom I always felt their support in my heart. If there is a success, this principally belongs to them.

This thesis is dedicated to the memories of my grandparents, Hasan Bas and Dilsah Bas.

TABLE OF CONTENTS

ABBREVIATIONS

ABA	:	American Bar Association
Commission	:	European Commission
Council	:	European Council
DOJ	:	The Antitrust Division of the US Department of Justice
EC	:	European Community
ECJ	:	The Court of Justice of the European Union
ECR	:	European Court Reports
ed/eds	:	Editor/editors
Edn	:	Edition
EEC	:	European Economic Community
EU	:	European Union
Fed Reg	:	The Federal Register, the United States
fn/fns	:	Footnote/footnotes (external to the thesis)
FPC	:	The Federal Power Commission
FTC	:	The Federal Trade Commission
General Court	:	The General Court of the European Union
HHI	:	Herfindahl-Hirschman Index
n	:	Footnote (internal to the thesis)
no	:	Number
OECD	:	The Organisation for Economic Co-operation and Development
OJ	:	Official Journal of the European Union
para/paras	:	Paragraph/paragraphs
R&D	:	Research and development
sec/secs	:	Section/sections
SIEC	:	Significant Impediment to Effective Competition
SLC	:	Substantial Lessening of Competition
SSNIP	:	Small but significant non-transitory increase in price

TFEU	:	The Treaty on the Functioning of the European Union
UPP	:	Upward Pricing Pressure
US	:	United States
vol	:	Volume
WL	:	WestLaw

TABLE OF CASES

European Union

ECJ

Akzo v Commission (C-62/86) [1991] ECR I-3359

BAT and Reynolds v Commission (142 and 156/84) [1987] ECR 4487

BMG and Sony v Impala (C-413/06P) [2008] ECR I-4951

Bodson v Pompes Funèbres (C-30/87) [1988] ECR 2479

Centrafarm BV v Sterling Drug Inc (C-15/74) [1974] ECR 1147

Consten and Grundig v Commission (C-56 and 58/64) [1966] ECR 299

Continental Can v Commission (6/72) [1973] ECR 215

CRAM and Rheinzink v Commission (29 and 30/83) [1984] ECR 1679

ETA v DK Investment (31/85) [1985] ECR 3933

France and others v Commission (C-68/94 and 30/95) [1998] ECR I-1375

General Motors v Commission (C-551/03P) [2006] ECR I-1373

GlaxoSmithKline Services Unlimited and others v Commission and others (C-501, 513,515 and 519/06P) [2009] ECR I-9291

ICI v Commission (C-48/69) [1972] ECR 619

John Deere Ltd v Commission (C-7/95P) [1998] ECR I-3111

Remia BV and others v Commission (42/84) [1985] ECR 2545

Société Technique Minière v Maschinenbau Ulm (C-56/65) [1966] ECR 235

Verband der Sachversicherer v Commission (45/85) [1987] ECR 405

Viho Europe BV v Commission (C-73/95P) [1996] ECR I-5457

Völk v Vervaecke (5/69) [1969] ECR 295

General Court

Air France v Commission (T-2/93) [1994] ECR II-323

Airtours v Commission (T-342/99) [2002] ECR II-2585

Akzo Nobel NV and others v Commission (T-112/05) [2007] ECR II-5049

ARD v Commission (T-158/00) [2003] ECR II-3825

Atlantic Container Line and others v Commission (T-191, 212 and 214/98) [2003] ECR II-3275

Cementbouw v Commission (T-282/02) [2006] ECR II-319

Dow Chemical v Commission (T-77/08) [2012] ECR II-0000

easyJet v Commission (T-177/04) [2006] ECR II-1931

EDP v Commission (T-87/05) [2005] ECR II-3745

EI du Pont v Commission (T-76/08) [2012] ECR II-0000

Endemol v Commission (T-221/95) [1999] ECR II-1299

European Night Services and others v Commission (T-374/94, T-375/94, T-384/94 and T-388/94) [1998] ECR II-3141

Gencor v Commission (T-102/96) [1999] ECR II-753

General Electric v Commission (T-210/01) [2005] ECR II-5575

Generali and Unicredito v Commission (T-87-96) [1999] ECR II-203.

Impala v Commission (T-464/04) [2006] ECR II-2289

Matra Hachette SA v Commission (T-17/93) ECR II-595

Métropole Télévision (M6) and others v Commission (T-112/99) [2001] ECR II-2459

NVV and others v Commission (T-151/05) [2009] ECR II-1219

Ryanair v Commission (T-342/07) [2010] ECR II-3457

Schneider Electric v Commission (T-310/01) [2002] ECRII-4071

Commission

Accor/Hilton/Six Continents (COMP/M.3101) [2003]

Agfa Gevaert/DuPont (IV/M.986) Commission Decision 98/475/EC [1998] OJ L211/22

AgrEVO/Marubeni (IV/M.788) [1996]

Air France-KLM/Royal Air Maroc (IV/M.5380) [2009]

Akzo/Nobel Industrier (IV/M.390) [1994]

Alcan/Alusuisse (COMP/M.1663) [2000]

Alstom UK/Balfour Beatty (COMP/M.4508) [2007]

Amadeus/GGL (COMP/M.2794) [2002]

Amadeus/Sabre (COMP/M.4760) [2007]

American Express/Fortis/Alpha Card (COMP/M.5241) [2008]

Angelini/Phoenix (COMP/M.2432) [2001]

Areva/Urenco/ETC (COMP/M.3099) [2004]

ARM/Giesecke & Devrient/Gemalto (COMP/M.6564) [2012]

Asahi/Saint-Gobain (IV/33.863) Commission Decision 94/896/EC [1994] OJ L354/87

Aster 2/Flint Ink (COMP/M.3886) [2005]

AuA/LH (COMP/37.730) Commission Decision 2002/746/EC [2002] OJ L242/25.

Azoty Tarnow/Zaklady Azotowe Pulawy (COMP/M.6695) [2013]

BASF/CIBA (COMP/M.5355) [2009]

Bayer/Gist-Brocades (IV/27.073) Commission Decision 76/172/EEC [1976] OJ L30/13

BayWa/Cefetra (COMP/M.6740) [2012]

Berkshire Hathaway/Munich Re/GAUM (COMP/M.5010) [2008]

Bertelsmann/Mondadori/Bol Italia (IV/M.0051) [2000]

Bertelsmann/Planeta/Circulo (COMP/M.5838) [2010]

Bertelsmann/Springer (COMP/M.3178) [2005]

Boeing/Lockheed Martin/United Launch Alliance (COMP/M.3856) [2005]

Boeing/McDonnell Douglas (IV/M.877) Commission Decision 97/816/EC [1997] OJ L336/16

BP/Chevron/ENI/Sonangol/Total (COMP/M.6477) [2012]

BP/E.ON (COMP/M.2533) [2001]

BP/Nova Chemicals (COMP/M.3578) [2005]

British Airways/American Airlines/Iberia (COMP/39.596) Commission Decision 2010/C58/07 [2010] OJ C58/20

British Airways/TAT (IV/M.259) [1992]

British Gas Trading Ltd/Group 4 Utility Services Ltd (IV/M.791) [1996]

British Interactive Broadcasting/Open (IV/36.539) Commission Decision 1999/781/EC [1999] OJ L312/1

British Midland Ltd/Deutsche Lufthansa AG/Scandinavian Airlines System SAS (COMP/38.712) Commission Decision 2001/C 83/03 [2001] OJ C83/6

BT/Airtel (IV/M.3) [1998]

BT/AT&T (IV/JV.15) [1999]

BVI Television/SPE Euromovies/Europe Movieco (COMP/JV.30)

Cargill/Vandemoortele (IV/M.1227) [1998]

Cegetel/Canal +/AOL/Bertelsmann (IV/M.5) [1998]

Cekacan (IV/32.681) Commission Decision 90/535/EEC [1990] OJ L299/64

Celanese/Degussa (COMP/M.3506) Commission Decision 2004/105/EC [2004] OJ L38/47

Cementbouw/ENCI (COMP/M.3141) [2003]

Chloroprene Rubber (COMP/38.629) [2008]

CVC/Lenzing (COMP/M.2187) [2001]

De Laval/Stork (IV/27.093) Commission Decision 88/110/EEC [1977] OJ L59/32

Delta Selections/Arla Foods Hellas (COMP/M.2011) [2000]

Deutsche Bahn Cargo/Contship Italia (COMP/M.2859) [2002]

Dow/DuPont (IV/M.663) [1996]

Dupont/Hitachi (IV/M.994) [1997]

ECT/PONL/Euromax (COMP/M.3576) [2004]

EDF/AEM/Edison (COMP/M.3729) [2005]

EdF/British Energy (COMP/M.5224) [2008]

EDS/Lufthansa (IV/M.560) [1995]

Electrabel/Energia Italiana/Interpower (COMP/M.3003) [2002]

Electrabel/TotalFinaElf/Photovoltech (COMP/M.2712) [2002]

Elf/Texaco/Antifreeze (IV/M.1135) [1998]

Elopak/Metal Box-Odin (IV/32.009) Commission Decision 90/410/EEC [1990] OJ L209/15

Enel/FT/DT (IV/JV.2) [1998]

ENW/Eastern (IV/M.1315) [1998]

Epson/Sanyo (COMP/M.3459) [2004]

Ericsson/Nokia/Psion (IV/M.6) [1998]

Ericsson/STM (COMP/M.5332) [2008]

European Rail Shuttle (COMP/D-2/38.086) [2002] OJ C13/5

Exxon/Mobil (IV/M.1383) [1999]

Exxon/Shell (IV/33.640) Commission Decision 94/322/EC [1994] OJ L144/20

First/Keolis/TPE (COMP/M.3273) [2003]

Flachglas/Vegla (IV/M.168) [1992]

Floral (IV/29.672) Commission Decision 80/182/EEC [1980] OJ L39/51.

Ford/Volkswagen (IV/33.814) Commission Decision 93/49/EEC [1993] OJ L20/14

Fortis/BCP (COMP/M.3556) [2005]

Fujitsu/Siemens (IV/JV.22) [1999]

Gazprom/A2A (COMP/M.5740) [2010]

GE/Honeywell (COMP/M.2220) [2001]

GE/Smiths Aerospace (COMP/M.4561) [2007]

GEC/Weir Sodium Circulators (IV/29.428) Commission Decision 77/781/EEC OJ L327/26

Gencor/Lonrho (IV/M.619) Commission Decision 97/26/EC [1997] OJ L11/30

Generali/Unicredito (IV/M.711) [1996]

GFEL/LH/BA/AF/GF-X (COMP/M.2830) [2002]

Goldman Sachs/KKR/QMH (COMP/M.6738) [2012]

Gosme/Martell-DMP (IV/32186) Commission Decision 91/335/EEC [1991] OJ L185/23

HBO/Ziggo/HBO Nederland (COMP/M.6369) [2011]

Hitachi/STMicroelectronics/SuperH (COMP/M.2439) [2001]

Hochtief/Geosea/Beluga Hochtief Offshore (COMP/M.6315) [2011]

Home Benelux BV (IV/JV.11) [1998]

Hutchison/RCPM/ECT (COMP/JV.55) [2001]

Inco/Falconbridge (COMP/M.4000) [2006]

Intracom/Siemens/STI (COMP/M.2851) [2003]

John Deere Capital Corp/Lombard North Central plc (IV/M.823) [1996]

Kewa (IV/26.940/b) Commission Decision 76/249/EEC [1976] OJ L51/15

KLM/Alitalia (COMP/JV.19) [2000]

KLM Royal Dutch Airlines/Northwest Airlines Commission Notices [1997] OJ C117/8, [1998] OJ C177/10, [2002] OJ C181/6

KNP/CNPC/MMG (COMP/M.5513) [2009]

Korsnas/AD Cartonboard (COMP/M.4057) [2006]

KSB/Goulds/Lowara/ITT (IV/32.363) Commission Decision 91/38/EEC [1987] OJ L19/25

Lazard LLC/Intesa BCI (COMP/M.2982) [2003]

LBO France/Aviapartner (COMP/M.6671) [2012]

Lehman Brothers/SCG/Starwood/Le Meridien (COMP/M.3858) [2005]

LH/SAS (IV/35.545) Commission Decision 96/180/EC [1996] OJ L54/28

Lonza/Teva (COMP/M.5479) [2009]

Lotte Group/Artenius UK (COMP/M.5760) [2010]

LSG Lufthansa Service Holding/Gate Gourmet Switzerland (COMP/M.4170) [2006]

Lufthansa/SAS (IV/35.545) Commission Decision [1995] OJ C201/2

Lufthansa/SAS/United Airlines Commission Notices [1996] OJ C289/8, [1998] OJ C239/5

Mannesmann/Bell Atlantic/OPI (IV/M.17) [1999]

Metronet/Infraco (COMP/M.2694) [2002]

Microsoft/Yahoo! Search Business (COMP/M.5727) [2010]

Mitchell Cotts/Sofiltra (IV/31.340) Commission Decision 87/100/EEC [1987] OJ L41/31

Mitsui/CVRD/Caemi (COMP/M.2420) Commission Decision 2004/270/EC [2004] OJ L92/50

Mubadala/Rolls-Royce (COMP/M.5399) [2009]

NC/Canal +/CDPQ/Bank America (IV/M.1327) [1998]

Nestle/Perrier (IV/M.190) Commission Decision 92/553/EEC [1992] OJ L356/1

Night Services (IV/34.600) Commission Decision 94/663/EC [1994] OJ L259/20

Nokia/Autloliv (IV/M.686) [1996]

Nokia/Ericsson/Psion (IV/JV.6) [1998]

Nokia/Ericsson/Psion/Motorola (Symbian II) (IV/JV.12) [1998]

Nortel/Norweb (IV/M.1113) [1998]

NSR/VS/CMI/IGO Plus (IV/M.1504) [1999]

NYK/Lauritzen Cool/LauCool (COMP/M.3798) [2005]

OK Ekonomisk Forening/Kuwait Petroleum Sverige AB (IV/M.1256) [1998]

Panagora/DG Bank (IV/JV.14) [1998]

Pasteur Mérieux-Merck (IV/34.776) Commission Decision 94/770/EC [1994] OJ L309/1

Philips/Osram (IV/34.252) Commission Decision 94/986/EC [1994] OJ L378/37

Philips/Thomson/Sagem (IV/M.293) [1993]

PPC/Wind (Case COMP/M.2565) [2001]

Repsol Butano/Shell Gas (COMP/M.3664) [2005]

Rockwell/Iveco (IV/30.437) Commission Decision 83/390/EEC [1983] OJ L224/19

RSB/Tenex/Fuel Logistics (IV/M.904) [1997]

RTL/Veronica/Endemol (IV/M.553) [1995]

Rubber chemicals (COMP/F/38.443) [2005]

Ruukki/Capman/Fortaco (COMP/M.6737) [2012]

RVI/VBC/Heuliez (IV/M.092) [1991]

RWE Gas/Lattice International (COMP/M.2744) [2002]

Ryanair/Aer Lingus (COMP/M.4439) [2007]

Sabena Technics/TNT Airways (IV/M.5506) [2009]

Saudi Aramco/MOH (IV/M.574) [1995]

Serco/NedRailways/Northern Rail (COMP/M.3554) [2004]

Ses Astra/Eutelsat (COMP/M.4477) [2007]

SHV/Chevron (IV/26.872) Commission Decision 75/95/EEC [1975] OJ L38/14

Siemens Business Services/Lufthansa Systems/Synavion (COMP/M.1936) [2000]

Siemens/Drägerwerk (COMP/M.2861) [2003]

Siemens/Italtel (IV/M.468) Commission Decision 95/255/EC [1995] OJ L161/27

Skandia/Storebrand/Pohjola (IV/JV.21) [1999]

SNPE/MBDA (COMP/M.2938) [2002]

Sonae Industria/Tarkett (COMP/M.4048) [2006]

Sony/BMG (COMP/M.3333) [2007]

Sony/NEC (COMP/M.4139) [2006]

Sony Pictures/Disney/ODG (COMP/M.3542) [2004]

Sony/Philips/Intertrust (COMP/M.3042) [2002]

Statoil/BP/Sonatrach/In Salah (COMP/M.3230) [2003]

StatoilHydro/ConocoPhillips (COMP/M.4919) [2008]

STM/Intel (COMP/M.4751) [2007]

Strategic Value Partners/Kloeckner Holdings (COMP/M.6681) [2013]

Sydkraft/HEW/Hansa Energy Trading (COMP/JV.28) [1999]

Telefonica/Portugal Telecom/Medi Telecom (IV/JV.23) [1999]

Telenor/Ergogroup/DNB/Accenture (IV/M.2374) [2001]

Telia/Sonera/Motorola/Omnitel (IV/JV.9) [1998]

Telia/Telenor/Schibsted (IV/JV.1) [1998]

Teneo/Merrill Lynch/Bankers Trust (IV/M.722) [1996]

The Airline Group/NATS (COMP/M.2315) [2001]

The Coca-Cola Company/NestlÃ© (COMP/M.2276) [2001]

Thompson/Pilkington (IV/M.86) [1991]

Thomson-CSF/Racal Electronics (IV/M.1413) [1999]

Thomson/Deutsche Aerospace AG (IV/M.527) [1995]

TKS/ITW Signode/Titan (IV/M.970) Commission Decision 98/666/EC [1998] OJ L316/33

T-Mobile Austria/Tele.ring (COMP/M.3916) [2006]

T-Mobile/Orange (COMP/M.5650) [2010]

TNT/Canada Post DBP Postdienst, La Poste, PTT Post & Sweden Post (IV/M.102) [1991]

Total Holdings Europe SAS/ERG SPA (COMP/M.5781) [2010]

TPM/Wood Group (IV/M.1224) [1998]

TPS (IV/36.237) Commission Decision 1999/242/EC [1999] OJ L90/6

TXU Europe/EDF (IV/M.36) [2000]

Unicredit/Banca IMI/EuroTLX SIM (COMP/M.5495) [2009]

Union Carbide/Enichem (IV/M.550) [1995]

Universal Studio Network/NTL/Studio Channel (COMP/M.2211) [2000]

UPM-Kymmene/April (IV/M.1006) [1998]

UPM Rus/Brist (COMP/M.5150) [2008]

Vacuum Interrupters Ltd (IV/27.442) Commission Decision 77/160/EEC [1977] OJ L48/32

Vanden Bergh Foods (IV/34.073, IV/34.395 and IV/35.436) Commission Decision 98/531/EC [1998] OJ L246/1

Vattenfall/Elsam and E2 Assets (COMP/M.3867) [2005]

VIAG/Orange UK (IV/JV.4) [1998]

VNU/WPP (COMP/M.3512) [2004]

Vodafone Airtouch/Mannesmann (COMP/M.1795) [2000]

Vodafone/Vivendi (COMP/JV.48) [2000]

Voest Alpine Industrieanlagenbau GmbH/Davy International Ltd (IV/M.585) [1995]

Volvo/Atlas (IV/M.152) [1992]

Volvo/Renault (COMP/M.1980) [2000]

Votorantim/Fischer (COMP/M.5907) [2011]

Wacker/Air Products (IV/M.1097) [1998]

Wartsila Technology/Hyundai Heavy Industries (COMP/M.4596) [2007]

Wegener/PCM (COMP/M.3817) [2005]

Whirlpool/Privileg Rights (COMP/M.5859) [2010]

Woco/Michelin (COMP/M.1907) [2000]

Yara/Praxair (Comp/M/4823) [2007]

Zeiss/EQT/Sola (COMP/M.3670) [2005]

United States

Supreme Court

American Needle, Inc v NFL, 130 S Ct 2201 (2010)

Arizona v Maricopa County Med Society, 457 US 332 (1982)

Board of Regents v NCAA, 468 US 85 (1984)

Broadcast Music, Inc v CBS, Inc, 441 US 1 (1979)

Brown Shoe Co v United States, 370 US 294 (1962)

California Dental Association v FTC, 526 US 756 (1999)

Chicago Board of Trade v United States, 246 US 231 (1918)

Citizen Publishing Company v United States, 394 US 131 (1969)

Continental TV, Inc v GTE Sylvania, Inc, 433 US 36 (1977)

Copperweld Corp v Independence Tube Corp, 467 US 752 (1984)

FTC v Indiana Federation of Dentists, 479 US 447 (1986)

Maple Flooring Manufacturers' Association v United States, 268 US 563 (1925)

Northern Pacific R Co v United States, 356 US 1 (1958)

Northern Securities Co v United States, 193 US 197 (1904)

Northwest Whole Stationers Inc v Pacific Stationery and Printing Co, 472 US 284 (1985)

Standard Oil Co of New Jersey v United States, 221 US 1 (1911)

Texaco, Inc v Dagher, 547 US 1 (2006)

Timken Roller Bearing Co v United States, 341 US 593 (1951)

United States v American Tobacco Co, 221 US 106 (1911)

United States v E I du Pont, 351 US 377 (1956)

United States v E I du Pont, 366 US 316 (1961)

United States v First National Bank of Lexington, 376 US 665 (1964)

United States v Pan American World Airways, 371 US 296 (1963)

United States v Paramount Pictures, 334 US 131 (1948)

United States v Penn-Olin, 378 US 158 (1964)

United States v Philadelphia National Bank, 374 US 321 (1963)

United States v Yellow Cab Co, 332 US 218 (1947)

Lower Courts

American Needle, Inc v New Orleans La Saints, 496 F Supp 2d 941 (ND III 2007)

American Needle, Inc v NFL, 538 F 3d 736 (7th Cir 2008)

Consolidated Gas v Pennsylvania W & P Co, 194 F 2d 89 (4th Cir 1952)

Dagher v Saudi Refining, Inc, 369 F 3d 1108 (9th Cir 2004)

FTC v Harbour Group Investments, 1990 WL 198819 (DDC 1990)

FTC v Warner Communications, Inc, 742 F 2d 1156 (9th Cir 1984)

Intern Tel & Tel Corp v AT&T, 481 F Supp 399 (SDNY 1979)

McCaw Personal Communications, Inc v Pacific Telesis Group, 645 F Supp 1166 (NDCal 1986)

Northern Natural Gas Co v Federal Power Commission, 399 F 2d 953 (DC Cir 1968)

Phototron Corp v Eastman Kodak Co, 842 F 2d 95 (5th Cir 1988)

Rothery Storage & Van Co v Atlas Van Lines, Inc, 792 F 2d 210 (DC Cir 1986)

Sullivan v NFL, 34 F 3d 1091 (1st Cir 1994)

United States v Alcan Aluminium Limited, 605 F Supp 619 (WDKy 1985)

United States v Dairy Farmers, 426 F 3d 850 (6th Cir 2005)

United States v E I du Pont, 177 F Supp 1 (ND III 1959)

United States v Franklin Electric Co, 130 F Supp 2d 1025 (WDWis 2000)

United States v General Dyestuff Corp, 57 F Supp 642 (SDNY 1944)

United States v Imperial Chemical Industries, 100 F Supp 504 (SDNY 1951)

United States v Ivaco, Inc, 704 F Supp 1409 (WDMich 1989)

United States v Loew's Incorporated, 705 F Supp 878 (SDNY 1988)

United States v Minnesota Mining & Mfg Co, 92 F Supp 947 (D Mass 1950)

United States v National Lead, 63 F Supp 513 (SDNY 1945), modified and affirmed (1947)

United States v Penn-Olin, 217 F Supp 110, 116-17 (D Del 1963)

United States v Rockford Memorial Corp, 898 F 2d 1278 (7th Cir 1990)

Yamaha Motor Co v FTC, 657 F 2d 971 (8th Cir 1981)

US Enforcement Authorities

Air Canada, the Austrian Group, British Midland Airways Ltd, Continental Airlines, Inc., Deutsche Lufthansa AG, Polskie Linie Lotniecze Lot SA, Scandinavian Airlines System, Swiss International Air Lines Ltd, TAP Air Portugal and United Air Lines, Docket OST-2008-0234 (2009)

American Airlines, Inc, British Airways PLC, Iberia Lineas Aereas De Espana, SA Finnair OYJ, and Royal Jordanian Airlines, OST-2008-0252 (2009)

In re Alliant Techsystems, 119 FTC 440 (1995)

In re Continental Oil Company, 72 FTC 850 (1967)

In re Exxon Corporation, 126 FTC 631 (1998)

In re General Motors Corporation, 103 FTC 374 (1984)

In re Lockheed Corp, 119 FTC 440 (1995)

In re Martin Marietta Corp, 117 FTC 1039 (1994)

In re Monier Lifetitle LLC, 127 FTC 751 (1999)

In re Montedison SPA, 119 FTC 676 (1995)

In re Nippon Sheet Glass Company, 114 FTC 568 (1991)

In re Novartis AG, Docket No C-3979 (2000)

In re Phillips Petroleum Co., 70 FTC 456 (1966)

In re Shell Oil Company, 125 FTC 769 (1998)

In re TC Group LLC, File No 061 01 97, Docket No C-4183 (2007)

In re the Boeing Company, C-4188 File 051-0165 (2007)

Olympus America Inc, Business News Letter, 01-435, 2001 WL 1564271 (DOJ)

TRW Inc, 63 Fed Reg 1866 (1998)

United States v Alcan Aluminium Limited, 49 Fed Reg 40454 (1984)

United States v AT&T Corp, 65 Fed Reg 38,584 (2000)

United States v Clear Channel Commun, Inc, 66 Fed Reg 12,544 (2001)

United States v Lockheed Martin Corp, No 98-CV-00731 (1998)

United States v MCI Communications Corporation, 59 Fed Reg 33009 (1994)

United States v Northwest Airlines Corp, Civil A No 98-74611 (2000)

United States v SBC Communications Inc, 65 Fed Reg 56926-01 (2000)

United States v Sprint Corporation and Joint Venture Co, 60 Fed Reg 44049 (1996)

United States v. Univision Commun Inc, Civil A No 1:03CV00758 (2003)

United States v USAir Group, Inc., 58 Fed Reg 36996 (1993)

Westinghouse Electric Corp, 54 Fed Reg 8839 (1989)

TABLE OF LEGISLATION

European Union

Treaties and Regulations

Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty [2003] OJ L1/1

Commission Regulation (EU) No 1217/2010 of 14 December 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to certain categories of research and development agreements [2010] OJ L335/36

Commission Regulation (EU) No 1218/2010 of 14 December 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to certain categories of specialisation agreements [2010] OJ L335/43

Council Regulation (EC) No 1310/97 of 30 June 1997 amending Regulation (EEC) No 4064/89 on the control of concentrations between undertakings [1997] OJ L180/1

Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings [2004] OJ L24/1

Council Regulation (EEC) No 17/1962: First Regulation implementing Articles 85 and 86 of the Treaty [1962] OJ 13/204

Commission Regulation (EC) No 2658/2000 of 29 November 2000 on the application of Article 81(3) of the Treaty to categories of specialisation agreements [2000] OJ L304/3

Commission Regulation (EC) No 2659/2000 of 29 November 2000 on the application of Article 81(3) of the Treaty to categories of research and development agreements [2000] OJ L304/7

Commission Regulation (EC) No 3385/94 of 21 December 1994 on the form, content and other details of applications and notifications provided for in Council Regulation No 17 [1994] OJ L377/28

Council Regulation (EEC) No 4064/89 of 21 December 1989 on the control of concentrations between undertakings [1989] OJ L395/1, corrected version [1990] OJ L257/13.

Commission Regulation (EC) No 802/2004 of 7 April 2004 on implementing Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings [2004] OJ L133/1

Consolidated Version of the Treaty on the Functioning of the European Union [2010] OJ C83/47

Notices and Guidelines

Commission Guidelines on the application of **Article 81(3)** of the Treaty [2004] OJ C101/97

Commission Notice regarding the **concentrative and co-operative operations** under Council Regulation (EEC) No 4064/89 on the control of concentrations between undertakings [1990] OJ C203/10

Commission Notice concerning the assessment of **cooperative joint ventures** pursuant Article 85 of the EEC Treaty [1993] OJ C43/2

Commission Notice on the **definition of relevant market** for the purposes of Community competition law [1997] OJ C372/5

Commission Notice on the **distinction between concentrative and cooperative joint ventures** [1994] OJ C385/1

Commission Guidelines on the **effect on trade** concept contained in Articles 81 and 82 of the Treaty [2004] OJ C101/81

Commission Guidelines on the applicability of Article 81 of the EC Treaty to **horizontal cooperation agreements [2001]** OJ C3/2

Commission Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to **horizontal co-operation agreements [2010]** OJ C11/1

Commission Guidelines on the assessment of **horizontal mergers** under the Council Regulation on the control of concentrations between undertakings [2004] OJ C31/5

Commission Consolidated **Jurisdictional Notice** under Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings, [2008] OJ C95/1

Commission Notice on agreements of **minor importance** which do not appreciably restrict competition under Article 81(1) of the Treaty [2001] OJ C368/13

Commission Guidelines on the assessment of **non-horizontal mergers** under the Council Regulation on the control of concentrations between undertakings [2008] OJ C265/6

Commission Notice on **restrictions directly related and necessary to concentrations** [2001] OJ C188/5.

United States

Statutes

Clayton Act, 15 USC secs 12-27

FTC Act, 15 USC sec 45

Hart-Scott-Rodino Antitrust Improvements Act, 15 USC sec 18a

Sherman Act, 15 USC secs 1-2

Guidelines

DOJ and FTC, 'Antitrust Guidelines for Collaborations Among Competitors' 64 Fed Reg 54483 (1999) <http://www.ftc.gov/os/1999/10/jointventureguidelines.htm> accessed 05 April 2013

DOJ, Antitrust Guidelines for International Operations, 53 Fed. Reg. 21584 (June 8, 1988)

DOJ and FTC, 'Horizontal Merger Guidelines' (1992) <http://www.justice.gov/atr/public/guidelines/hmg.pdf> accessed 05 April 2013

DOJ and FTC, 'Horizontal Merger Guidelines' (2010) <http://www.justice.gov/atr/public/guidelines/hmg-2010.pdf> accessed 05 April 2013

DOJ and FTC, 'Non-Horizontal Merger Guidelines' (1984) <http://www.justice.gov/atr/public/guidelines/2614.htm> accessed 05 April 2013

CHAPTER 1
INTRODUCTION

I. Problem Review

Joint ventures have been a significant business phenomenon all over the world in the last half-century. With their increasing popularity as a form of interfirm collaboration, they have played a vital role in both global and regional economies by impacting the growth of many industries and the globalisation process. This role raises the importance of adopting a competition law approach to these collaborations, which will help to effectively address their anticompetitive effects without unduly hindering their formation or operation. Nevertheless, this is not a simple task due to the complicated economic nature of joint ventures that makes them one of the most intricate topics in competition law.[1]

Indeed, from a competition law point of view, collaborations among firms[2] are traditionally divided into two main categories. The first category consists of agreements, including cartels. In the context of a cartel agreement, there is no significant integration between the parties' activities, ie each party retains its separate operations in the market after the conclusion of the agreement. However, under the agreement, they undertake to behave in a specific way such as fixing prices or limiting outputs. Therefore, agreements are generally considered to affect the competitive behaviour of their parties that remain independent of each other.[3]

The second category of collaborations, on the other hand, encompasses mergers[4] including amalgamations[5] and acquisitions.[6] In the context of mergers, two or more

[1] Barry E Hawk, 'Joint Ventures under EEC Law' (1992) 15 *Fordham International Law Journal* 303, 303-04.
[2] For the purposes of this thesis, the terms 'firm' and 'undertaking' are used interchangeably unless the context indicates otherwise.
[3] Hawk (n 1) 305.
[4] For the purposes of this thesis, the terms 'merger' and 'concentration' are used interchangeably unless the context indicates otherwise.
[5] In this thesis, the term 'amalgamation' refers to the full-merger of two or more firms into one single entity.
[6] In this thesis, the term 'acquisition' generally refers to the acquisition of sole control over one or more firms by another firm unless the context indicates otherwise.

independent firms are brought permanently under common control and, thereby, form a single economic entity in terms of competition law. Hence, unlike agreements, mergers give rise to a lasting change in market structure by increasing market concentration, and/or by establishing some structural vertical or conglomerate links among firms from different markets.[7]

Joint ventures, however, do not completely fit into either of these two categories because they may have both structural and behavioural aspects at the same time.[8] They may have structural aspects as they lead to an efficiency enhancing integration of the parties. They are also considered to have behavioural aspects, because each party retains some independent activities either inside or outside the joint venture's market, into which the cooperation in the context of the joint venture may spill over.

The degree of the behavioural and structural aspects of a joint venture generally depends on the degree of integration it leads to, its allotted function and the competitive relationship between its parents. Accordingly, in various cases, the behavioural aspects of joint ventures prevail, while in other cases their structural aspects do. That said, it may be very difficult to distinguish these two aspects from each other due to their extensive interaction and overlap, particularly in the case that the joint venture leads to a significant integration of the parents.

This hybrid economic nature of joint ventures, in comparison with cartels and mergers, gives rise to two main problems in approaching this phenomenon under competition law. The first problem concerns which competition rules should apply to the formation of a joint venture. In most jurisdictions including the European Union (EU), mergers and agreements (cartels) are subject to different competition rules, which are specifically targeted at each of them. In the EU competition law regime,

---

[7] See Commission, 'The Problem of Industrial Concentration in the Common Market', Competition Series No 3 (1966) (1966 Memorandum), reprinted in Frank L Fine, *Mergers and Joint Ventures in Europe: The Law and Policy of the EEC* (2nd edn, Graham & Trotman/Martinus Nijhoff 1994) 691-713.

[8] Hawk (n 1) 305. Chang, Evans and Schmalensee classify competition issues arising from joint ventures as structural and operational. This classification seems the same as the structural-behavioural distinction. Howard H Chang, David S Evans and Richard Schmalensee, 'Some Economic Principles for Guiding Antitrust Policy towards Joint Ventures' (1998) 1998 *Columbia Business Law Review* 223, 251-62.

agreements are subject to an appraisal under Article 101 of the Treaty on the Functioning of the European Union (TFEU),[9] while mergers are analysed under the Merger Regulation.[10] This regime does not, however, include a specific rule that applies only to the formation of joint ventures. Therefore, the question herein concentrates on whether the creation of a joint venture should be treated as a merger or an agreement. Given the fact that there are significant differences between the substantive and procedural rules that apply to mergers and those applicable to agreements, how to answer this question is of great importance in the EU. Once this question is answered, a follow-up question would be how the fact that the joint venture is under the joint control of two or more firms that retain independent activities outside the cooperation should be taken into account, in a situation viewed as a merger.

The second problem, which is closely linked to the first, arises in determining which substantive test should apply in relation to the activities of legally established joint ventures. The first question in this regard is whether the conduct of a joint venture should be deemed as conduct by a single firm or as collusion between two or more independent firms. The second question, however, is whether a joint venture and its parent(s) should be viewed as forming a single economic unit under the relevant competition rules. The answers to these questions are also extremely important, because unilateral conduct is generally subject to a less strict test than that applied to collusion among firms, and also because they determine whether the parents can be held liable for an infringement by the joint venture. Nevertheless, due to the complexities inherent in the nature of joint ventures, it is very difficult to give an answer to these questions that would apply in all cases.

Bearing in mind all of the aforementioned problems in relation to the nature of joint ventures, this thesis focuses on how EU competition law currently approaches the first problem, ie the competition assessment of joint ventures that should be regarded as mergers, and examines to which extent this approach could be improved particularly as far as its compatibility with the economic nature of joint ventures is

[9] Consolidated Version of the Treaty on the Functioning of the European Union [2010] OJ C83/47.
[10] Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings [2004] OJ L24/1.

concerned, and also in terms of its consistency both in itself and with the general rules of EU competition law.

Currently, in the EU, only full-function joint ventures that are assumed to perform all the functions of an autonomous entity are treated as mergers and, like amalgamations and acquisitions, they are analysed under Article 2(3) of the Merger Regulation that prohibits mergers, which significantly impede effective competition. Nonetheless, it is recognised that special consideration must be given to the impact of these joint ventures on competition between the parent firms outside the joint venture, which is not an issue of concern in the case of amalgamations and acquisitions. Therefore, full-function joint ventures are also subject to appraisal under Article 101, in combination with Article 2(4) of the Merger Regulation, to the extent that they lead to the coordination of the competitive behaviour of the parent firms outside the joint venture. This approach to the substantive analysis of joint ventures under the Merger Regulation, however, leads to some inconsistencies and complications, which aggravate the problems inherent to the complicated economic nature of joint ventures.

Firstly, although the level of integration is the primary factor that shapes the structural aspects of joint ventures, which bring them closer to mergers, the EU regime utilises the full-functionality criterion that focuses on the autonomy of joint ventures, in order to make a distinction between joint ventures for merger control purposes. In this regard, this criterion particularly excludes partial function production joint ventures, which significantly integrate the economic activities of the parents and, therefore, have almost the same effects as mergers on the structure of the parties. Such an exclusion from the scope of the Merger Regulation has important substantive outcomes, given the fact that Article 101 allows for a stricter approach than that under Article 2(3) and that it can also be enforced by the national competition authorities and national courts of Member States. The application of such different substantive and procedural rules complicates adopting a unified substantive approach to operations with similar effects.

Secondly, assuming that full-function joint ventures are autonomous of their parents, in determining the scope of the Merger Regulation, appears to contradict the joint control requirement and the general approach taken with respect to the autonomy of these joint ventures under both the Merger Regulation and Article 101. This inconsistency gives rise to some complications and uncertainties regarding the substantive analysis of the formation and operation of full-function joint ventures, and makes it difficult for firms to predict and adopt the safest policy from a competition law perspective, in structuring, and dealing with, their joint ventures.

The current EU merger control policy also seems to be problematic regarding the assessment of the fact that the parents retain separate activities outside the joint venture. Considering that 'coordination' under Article 2(4) basically refers to the same economic situation as 'coordinated effect' under Article 2(3), the application of Article 101 to 'coordination' results in inconsistency, and unnecessarily complicates the analysis of joint ventures under the Merger Regulation. More importantly, the application of two different tests, Article 2(3) and Article 101, in relation to the joint venture's market implies a stricter approach to a partial integration of the parents in the market than to their full-integration.

These problems make it necessary to give a new and critical look to the substantive appraisal of joint ventures under the EU merger control regime. In this respect, this thesis intends to elaborate on these problems and suggest a more consistent and integrated legal framework for the analysis of joint ventures treated as mergers, which can eliminate such problems and, thus, can significantly improve the current situation in the EU.

II. Scope and Objectives of Research

A- Centre of Gravity of Research

As emphasised above, this thesis essentially aims to critically analyse the approach towards the substantive appraisal of joint ventures under the EU merger control regime. In this context, it seeks to answer two main questions. The first and

preliminary question is whether the full-functionality criterion is appropriate to identify joint ventures that should be treated as mergers from a substantive perspective. The primary intention herein is to explore the substantive implications of the assumption that full-function joint ventures are autonomous from an operational viewpoint, and of the exclusion of partial function joint ventures, particularly production joint ventures, from the Merger Regulation. Based on these implications, the thesis discusses possible alternative criteria which may be more suitable for drawing the boundaries of merger control as far as joint ventures are concerned, and which may be more compatible with the principles that should apply to the substantive analysis of these collaborations under the Merger Regulation.

The second question of this thesis, however, is how the formation of joint ventures should be appraised under the Merger Regulation, having regard to the current approach to full-function joint ventures. This question can be divided into four sub-questions: (i) whether and how the fact that joint ventures are controlled by two or more firms should be incorporated into the analysis under both Article 2(3) and 2(4) of the Merger Regulation; (ii) whether and how the fact that the parents retain some activities in the joint venture's market should be considered in analysing the impact of the joint venture on competition in that market under Article 2(3); (iii) whether Article 101 is the only and most effective test to address the risk of coordination among the parent firms, considering the possibility that Article 2(3) may also be applicable to those concerns; (iv) how the risk of coordination between the parent firms should be analysed in relation to markets other than those of the joint venture. In examining all these issues, the thesis mainly considers how they are currently addressed by the European Commission (Commission) and the EU courts, the Court of Justice of the European Union (ECJ) and the General Court of the European Union (General Court). However, in making recommendations on these issues, the possible reflections of any shift from the full-functionality criterion to an integration-based criterion are also taken into account as far as they are relevant in that context.

B- Ancillary Issues

1. Substantive Appraisal of Partial Function Joint Ventures

This thesis does not intend to answer the question of how joint ventures falling outside the Merger Regulation should be analysed under Article 101. Nevertheless, it aims to explore the competition assessment of partial function joint ventures according to Article 101, in order: (i) to show how this analysis is different from that of full-function joint ventures, in other words, to identify the outcomes of being subject to the Merger Regulation from a substantive point of view; (ii) to understand the rationale behind the distinction between full-function and partial function joint ventures; and (iii) to find out which partial function joint ventures, if any, should be included in the scope of the Merger Regulation. In this context, the thesis explains the practice and guidelines of the Commission and the EU case law that relate to the analysis of partial function joint ventures, but it does not make any recommendations in this regard.

This thesis does not discuss the assessment of partial function joint ventures under Article 102 which prohibits abuse of a dominant position. Nor does it discuss how these joint ventures are assessed by the national competition authorities and courts of the EU Member States.

2. Procedural Issues as to the Treatment of Joint Ventures in the EU

Given the focus of this thesis on substantive issues, it is beyond its scope to elaborately examine the procedural rules that apply to full-function joint ventures under the Merger Regulation and its procedural consequences, and to criticise the full-functionality criterion and propose alternatives from a procedural perspective.

That said, it should be remembered that in the EU, the applicable procedural rules also have some important outcomes that affect the substantive assessment of joint ventures. Firstly, because partial function joint ventures are not notifiable, the Commission’s practice gives much less guidance as to the competition analysis of

these joint ventures compared to that of full-function joint ventures. More importantly, the fact that, unlike full-function joint ventures, partial function joint ventures are also subject to the jurisdiction of the Member States may result in the application of different competition rules to them by the Commission, national competition authorities and national courts. These procedural rules, therefore, bring about uncertainties about the legality of partial function joint ventures. Furthermore, it should be noted that these procedural differences seem to form a central consideration in determining which joint ventures must be treated as mergers. Therefore, these differences should be borne in mind in assessing the suitability of the full-functionality criterion from a substantive viewpoint. For this purpose, this thesis gives a brief overview of these procedural rules, to the extent that it helps to comprehend the aforementioned issues.

3. Analysis of Joint Ventures under US Competition Law

This thesis explores United States (US) competition policy[11] on joint ventures in order to assess the EU regime from a comparative perspective. Indeed, the US regime is generally considered as one of the most influential regimes in the world, due to the long and phenomenal experience of the actors of this regime including courts, enforcement authorities, academics and practitioners.[12] In this context, how joint ventures are classified for the purpose of merger control and how they are analysed under US competition law may provide significant grounds to evaluate the EU approach and make recommendations in this respect.

In the US, courts and particularly enforcement authorities generally use the degree of integration among parent firms as a criterion to determine which joint ventures should be analysed in the same way as mergers, and how joint ventures outside this category should be approached. However, in comparing this policy with that of the EU, it should be borne in mind that: (i) in contrast to the full-functionality criterion

[11] In the US, competition law is generally known as antitrust law. However, in the EU, the term 'antitrust' is used to refer only to competition law issues falling within Article 101 and Article 102 TFEU, but not to merger control. Therefore, in this thesis, the term 'competition', instead of 'antitrust', is used to refer to all competition law issues in the EU and the US.

[12] Maher M Dabbah, *International and Comparative Competition Law* (Cambridge University Press 2010) 227.

in the EU, the integration-based criterion in the US is not statutory; (ii) this criterion does not necessarily determine which US competition statute will apply to the formation of a joint venture; and (iii) unlike under the EU regime, the procedural rules applicable to mergers and agreements do not differ significantly in the US.

This thesis only looks into the analysis of joint ventures under US federal competition law. It does not aim to research such analysis under state competition laws.

4. Treatment of the Conduct and Operation of Joint Ventures

The assessment of the conduct and operation of joint ventures is not a central issue for this thesis. Nevertheless, there is a strong interconnection between how the formation of a joint venture is analysed and how its conduct and operation is treated. Therefore, this thesis addresses the issues associated with the operation of joint ventures as an ancillary issue in order to show the consistency between these two stages of competition analysis, which is an important consideration in examining the suitability of the current approach under the EU merger control regime. In this regard, the thesis intends to explore how the Commission and the EU courts link the full-function character of a joint venture to the analysis of: (i) whether the conduct of a full-function joint venture falls under Article 101, and (ii) whether the joint venture and its parents form a single undertaking within the sense of Article 101. It also addresses these questions in relation to partial function joint ventures in order to completely comprehend the outcomes of being deemed full-function.

In order to produce a more coherent and integrated approach to joint ventures which are treated as mergers, this thesis also aims to make some suggestions on how to assess the relationship of a joint venture with its parents under Article 101. Considering that this issue is currently controversial in the EU,[13] these suggestions may also contribute to the debate in this respect.

[13] See Case T-76/08 *El du Pont v Commission* [2012] ECR II-0000; Case T-77/08 *Dow Chemical v Commission* [2012] ECR II-0000; Alison Jones, 'The Boundaries of an Undertaking in EU Competition Law' (2012) 8 *European Competition Journal* 301.

III. Methodology

In dealing with all the central and ancillary issues presented above, this thesis relies on various legal, economic and business management propositions and solutions that have been developed by legislators, courts, authorities, academics and practitioners. Having regard to these propositions and solutions, this thesis offers its own interpretations, propositions and solutions that make it original as a doctoral thesis.

As a document-based and doctrinal piece of research involving some comparative elements, this thesis relies on resources that can be divided into four groups.

The first group of resources includes EU competition legislation, particularly Article 101 TFEU and the Merger Regulation, and also US competition legislation, particularly section 1 of the Sherman Act[14] and section 7 of the Clayton Act.[15] For some arguments, the thesis makes its own interpretation of the wording of these legislative statutes.

The second group of resources encompasses reported judicial decisions in both the EU and the US. Given the broad language of those statutes in both jurisdictions, the judicial interpretation generally gives the most important guidance about how they are applied. Compared to the EU, court decisions are of greater significance in the US due to the litigation-oriented character of the US enforcement regime. This thesis includes the evaluation of various court decisions concerning its central or ancillary issues, and draws its own conclusions based on these decisions.

The third group of resources involves administrative decisions and guidelines in the EU and the US. In the EU, the Commission has published various guidelines in which it explains its position on the assessment of full-function and partial function joint ventures, and other relevant issues. The most important of these are the Jurisdictional Notice,[16] the Horizontal Merger Guidelines,[17] and the Cooperation

[14] 15 USC secs 1-2.
[15] 15 USC secs 12-27.
[16] Commission Consolidated Jurisdictional Notice under Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings [2008] OJ C95/1.

Guidelines.[18] In addition to these guidelines, this thesis assesses numerous Commission decisions together with various papers and reports published by the Commission. Considering its domination in the EU merger control regime, all of this guidance provided by the Commission serves as a main basis for many of the arguments and recommendations made in this thesis.

In the US, the enforcement authorities, the Antitrust Division of the US Department of Justice (DOJ) and the Federal Trade Commission (FTC), do not play the dominant role that the Commission enjoys in EU merger control. However, the guidance given by these authorities is still of great importance. In particular, Antitrust Guidelines on Collaborations among Competitors (Collaboration Guidelines)[19] constitute a significant document regarding the appraisal of joint ventures in the US. The thesis explores these guidelines and the decisions adopted by the authorities in respect of joint ventures in order to make some interpretations and conclusions about the US approach.

The final group of resources used by this thesis are academic works, including books, articles, commentaries, speeches etc, devoted to the analysis of joint ventures as an economic and business phenomenon, and to the substantive appraisal of this phenomenon in EU and US competition law.

IV. Outline of Chapters

This thesis consists of seven chapters including this introduction chapter.

The second chapter explores the nature of joint ventures as a business and economic phenomenon, in order to enhance the understanding of the analyses, discussions and

---

[17] Commission Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings [2004] OJ C31/5.

[18] Commission Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements [2010] OJ C11/1 (new Cooperation Guidelines). For the previous Cooperation Guidelines, see Commission Guidelines on the applicability of Article 81 of the EC Treaty to horizontal cooperation agreements [2001] OJ C3/2 (2001 Cooperation Guidelines).

[19] DOJ and FTC, 'Antitrust Guidelines for Collaborations Among Competitors' 64 Fed Reg 54483 (1999) <http://www.ftc.gov/os/1999/10/jointventureguidelines.htm> accessed 05 April 2013.

proposals contained in the later chapters of the thesis. In this respect, the chapter defines the concept of 'joint venture', classifies it based on several criteria, and explains its economic role along with its advantages and disadvantages as a form of interfirm collaboration. This chapter does not extensively discuss the legal distinction between full-function and partial function joint ventures and leaves this issue to the following chapters.

The third chapter explains how full-function joint ventures are appraised under the EU merger control regime. It describes the full-functionality criterion by giving a historical background; provides a brief overview of procedural issues; shows how the effects of these joint ventures are analysed under the Merger Regulation; and discusses the treatment of their conduct and operation under Article 101. This chapter includes the interpretation of the approaches of the EU courts and particularly the Commission on various issues that form the core of this thesis. These interpretations are used as a foundation in the sixth chapter.

The fourth chapter describes the competition assessment of partial function joint ventures by the Commission and the EU courts under Article 101. Because there have not been many Commission decisions since the abolition of the notification regime by Regulation 1/2003, [20] the chapter mainly follows the guidance set out in the Cooperation Guidelines. This chapter also includes some interpretations of, and propositions related to, the Commission's practice, which are relied upon in the sixth chapter.

The fifth chapter explains the treatment of joint ventures in US competition law. In order to provide a proper comparison of the EU and US approaches, this chapter firstly describes the main characteristics of US enforcement regime, and the correlation between section 7 of the Clayton Act and section 1 of the Sherman Act. Then, it shows the approaches of the enforcement authorities and courts to the application of the merger standard to joint ventures, and to the analysis of the conduct and operation of joint ventures.

[20] Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty [2003] OJ L1/1

The sixth chapter is dedicated to the implications of the analysis of the current approach to joint ventures under the EU merger control regime, and to the discussion and proposal of alternative approaches and solutions based on these implications and other findings in the previous chapters.

The seventh chapter presents the conclusions of this thesis.

This thesis is based on the law and materials available as of 05 April 2013.

CHAPTER 2
NOTION, TYPES AND ECONOMIC ASPECTS OF JOINT VENTURES

I. Introduction

This chapter seeks to explore the phenomenon of joint venture in order to provide a better understanding of the later chapters, and also to show the importance of joint ventures for the general economy, which contributes to the necessity of adopting an appropriate approach to them under competition law. In this respect, it firstly defines the term 'joint venture' for the purposes of this thesis. This definition helps to distinguish joint ventures from other interfirm collaborations, and to analyse the competition rules of the EU and the US in relation to them. The chapter, secondly, explains the classification of joint ventures according to certain criteria. Since the distinction between full-function and partial function joint ventures is explained elaborately in the third chapter, herein it is mentioned just briefly. This second part therefore focuses on categorising joint ventures by the competitive relationship between their parents and by their allotted function, which are indicative of their economic impact. The third part of the chapter, however, explains the economic role of joint ventures, ie their functions in respect of specific industries, motives behind their formation and their drawbacks as a business model. These explanations also help to set the scene for the analysis in the later chapters.

II. The Concept of Joint Venture

There is a lack of a single universally agreeable definition for the term 'joint venture'.[1] It is defined in a variety of ways by both different disciplines and different commentators. In the broadest sense, the term is used to refer to any form of collaboration between two or more firms to carry out some commercial goals.[2]

[1] Joseph Kattan, 'Antitrust Analysis of Technology Joint Ventures: Allocative Efficiency and the Rewards of Innovation' (1993) 61 *Antitrust Law Journal* 937, 937.

[2] Robert Pitofsky, 'Joint Ventures under the Antitrust Laws: Some Reflections on the Significance of Penn-Olin' (1969) 82 *Harvard Law Review* 1007, 1007; Joseph F Brodley, 'Joint Ventures and Antitrust Policy' (1982) 95 *Harvard Law Review* 1521, 1524-25; Richard W Pogue, 'Antitrust Considerations in Forming a Joint Venture' (1985) 54 *Antitrust Law Journal* 925, 925; John Anthony Chavez, 'Joint Ventures in the European Union and the U.S.' (1999) 44 *Antitrust Bulletin* 959, 961;

Pursuant to this definition, virtually all types of commercial transactions between two firms, from cartels to amalgamations, may be called joint ventures.[3]

This broad definition may make sense from a business standpoint. However, it is not useful for competition law purposes because it does not facilitate distinguishing between joint ventures and other types of collaborations, including amalgamations and acquisitions and loose contractual agreements.[4] Therefore, commentators usually prefer narrower definitions for the competition assessment of joint ventures. Some commentators highlight integration as a feature that draws a line between joint ventures and other collaborations.[5] This approach is also adopted within the report of the Organisation for Economic Cooperation and Development (OECD) concerning competition issues in joint ventures.[6] In the report, the term joint venture is defined as 'participating firms agreeing by contract or otherwise to combine, other than by merger, significant productive (tangible or intangible) assets, and to do this by going beyond ad hoc co-operation'.[7]

This definition may be conducive to separating joint ventures from simple contractual agreements such as distribution and licence agreements. Nonetheless, it still does not consider some important aspects of joint ventures that make them special in terms of competition law. In particular, it seems insufficient to clarify the distinction between joint ventures and amalgamations and acquisitions, which also require the integration of the parties.

Anthony Woolich, 'Joint Ventures in the European Union' in Martin Mankabady (ed), *Joint ventures in Europe* (3rd edn,Tottel Publishing 2008) 2.

[3] Pitofsky, 'Joint Ventures under the Antitrust Laws' (n 2) 1007; ABA, *Antitrust Law Developments* (6th edn, ABA Publishing vol 1 2007) 433-34; Woolich (n 2) 2.

[4] Brodley (n 2) 1525.

[5] Woolich defines joint ventures as 'a form of cooperation between two or more parties whose primary effect is the creation of a means to facilitate an on-going pooling or exchange of resources'. Woolich (n 2) 2. According to Chang, Evans and Schmalensee, 'a joint venture emerges when two or more firms join forces to do the sorts of things that single firms do internally, such as conducting research and development, developing a new product, entering a new industry, or securing scale economies through the concentration of production'. Howard H Chang, David S Evans and Richard Schmalensee, 'Some Economic Principles for Guiding Antitrust Policy towards Joint Ventures' (1998) 1998 *Columbia Business Law Review* 223, 229. For a similar definition, see also Herbert Hovenkamp, *Federal Antitrust Policy*: *The Law of Competition and Its Practice* (4th edn, West Publishing 2011) 217.

[6] OECD, 'Competition Issues in Joint Ventures' (2001) <http://www.oecd.org/competition/abuse/2379097.pdf> accessed 05 April 2013.

[7] ibid 20.

In this regard, through taking into account the distinctive features of joint ventures, Brodley provides a more elaborate definition for competition law purposes. He considers an integration of operations between two or more independent firms as a joint venture, provided that it satisfies four conditions. These conditions are that: (i) the operation concerned is performed by an entity separate from its parents (ii) this entity is jointly controlled by the parent firms that are not under common control; (iii) each parent makes a significant contribution to the entity; and (iv) it results in new production capacity, a new technology or product or entry into a new market.[8] Goyder also defines joint ventures in a similar way. His definition encompasses the first three conditions of Brodley's definition, while providing a different fourth condition which requires a formal decision that allocates to the entity responsibility for performing its allotted functions.[9]

The condition, common in both definitions, which requires a significant contribution by the parents, refers to the structural aspect of joint ventures that separates them from loose agreements, such as distribution, subcontracting or licence agreements. Such a contribution indicates the seriousness of the parties in integrating their economic operations. In general, this integration is capable of creating efficiencies, which forms the primary basis for approaching joint ventures more permissively under competition law, particularly compared to cartel agreements.[10] The condition requiring the creation of an entity separate from the participants may also facilitate distinguishing joint ventures from contractual agreements, in which the parties do not set up any separate entity to realise the objectives set out in the agreement.[11]

The joint control requirement, however, primarily refers to the behavioural aspect of joint ventures that draws a line between them and amalgamations and acquisitions. This condition makes it necessary to examine the impact of the continuing relationship between the parents in the context of the joint venture on their activities

[8] Brodley (n 2) 1526.
[9] D G Goyder, Joanna Goyder and Albertina Albors-Llorens, *Goyder's EC Competition Law* (5th edn, Oxford University Press 2009) 461.
[10] Robert Pitofsky, 'A Framework for Antitrust Analysis of Joint Ventures' (1985) 54 *Antitrust Law Journal* 893, 893; Gregory J Werden, 'Antitrust Analysis of Joint Ventures: An Overview' (1998) 66 *Antitrust Law Journal* 701, 702.
[11] Brodley (n 2) 1525.

outside the joint venture, which is not normally an issue in the case of amalgamations and acquisitions. It also excludes some business organisations, including professional sports leagues, credit card networks and joint selling or buying agencies, in which none of the member firms is able to exercise decisive influence over the business policies of the entity concerned. In the US, where joint control is generally not considered as a core element in defining joint ventures from a competition law perspective, these organisations are also regarded as joint ventures.[12] As can be inferred from the later chapters of this thesis, the fact that the parents have the ability to decisively influence the operation of the joint venture undoubtedly results in certain competition issues, which may not arise in the event of the aforementioned organisations. Chapter 5 below indicates that treating these two different situations in the same way appears to lead to some complications in relating to the competition assessment of joint ventures in the US. Therefore, for the purposes of this thesis, the joint control element is mainly understood as in the EU.[13]

Accordingly, these three common conditions are the fundamental elements of joint ventures that make them special from a competition viewpoint. The fourth condition provided by Brodley, the creation of new capabilities in terms of production, technology, product, or entry into a new market, is not a distinctive feature of joint ventures. Rather, it indicates economic benefits that a joint venture may bring about. In particular, this condition may give rise to the exclusion of the joint use of existing facilities, due to the fact that they have relatively less potential to create these benefits.[14] Similarly, the fourth condition of Goyder's definition seeking a formal allocation of functions to the joint venture is not directly relevant to the competition analysis, and may unduly exclude some operations from the concept of joint venture. In this respect, the fulfilment of the three conditions common to the definitions given by Brodley and Goyder should be sufficient for a collaboration to be considered as a joint venture.

In the light of all these explanations, the term joint venture may be defined to cover the creation of a jointly controlled entity which is separate from its parents and to

[12] See Chapter 5 below.
[13] See Chapter 3/III/A below.
[14] Brodley (n 2) 1525 fn 5.

which the parents contribute significantly in terms of assets, capital and staff. This definition is also in line with the Commission's approach.

III. Types of Joint Ventures

A- Full-Function Joint Ventures vis-à-vis Partial Function Joint Ventures

EU competition law makes a distinction between full-function and partial function joint ventures in order to determine the applicable substantive and procedural rules to the joint venture in question. Accordingly, full-function joint ventures are treated as concentrations and are subject to the Merger Regulation. In contrast, partial function joint ventures are considered to be simple agreements, and are examined in accordance with Article 101 TFEU within the framework of Regulation 1/2003.[15]

The concept of full-functionality is defined in Article 3(4) of the Merger Regulation as 'performing on a lasting basis all the functions of an autonomous economic entity'. This definition firstly requires that the joint venture is provided with a management dedicated to its day-to-day operations and with the necessary resources in terms of finance, staff and assets. Secondly, it provides that the joint venture has autonomy to enter into business relationships with third parties and to deal with its parents on an arm's length basis.[16] A more elaborate explanation on the full-functionality criterion and the applicable substantive tests is given in the next chapter.

B- Economic Classification of Joint Ventures

1. Horizontal Joint Ventures vis-à-vis Non-Horizontal Joint Ventures

Competition concerns that may arise from a joint venture normally depend on whether it is characterised as horizontal. Two different criteria may be used for the

[15] Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty [2003] OJ L1/1.
[16] See Commission Consolidated Jurisdictional Notice under Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings [2008] OJ C95/1, paras 91-109.

purpose of this categorisation. Firstly, a joint venture may be considered as horizontal, if the parent firms are either actual or potential competitors in the market in which it is intended to operate.[17] These horizontal joint ventures are generally viewed more dangerous than other types, since they lead to the loss of direct competition between their parent firms.[18] Therefore, this categorisation has the same function as the traditional classification of mergers as horizontal and non-horizontal.[19]

Nevertheless, such classification does not address the risk of coordination between the parent firms with regard to markets other than those of the joint venture. In order to cover these horizontal competition concerns, secondly, joint ventures may be classified as horizontal if the parent firms are actual or potential competitors in the joint venture's market or in any other market related to that market.[20] This definition seems to be used implicitly in the Cooperation Guidelines.[21]

These two definitions for horizontal joint ventures overlap with each other to the extent that the parents are competitors only in the joint venture's market. If the horizontal relationship between the parents extends beyond the joint venture's market, the joint venture is likely to raise more serious competition concerns because it may result in both an increase in market concentration and a risk of coordination.

Non-horizontal joint ventures may also be divided into two categories, vertical and conglomerate, based on two different criteria. A joint venture, first of all, can be classified as vertical if it is intended to operate in markets vertically related to those

[17] See Jeffrey Pfeffer and Phillip Novak, 'Patterns of Joint Venture Activity: Implications for Antitrust Policy' (1976) 21 *Antitrust Bulletin* 315, 322-23; Brodley (n 2) 1552; Commission, 'The Impact of Joint Ventures on Competition: The Case of Petrochemical Industry in the EEC' (1991) 21; Tony W Tong and Jeffrey J Reuer, 'Competitive Consequences of Interfirm Collaboration: How Joint Ventures Shape Industry Profitability' (2010) 41 *Journal of International Business Studies* 1056, 1058-61.
[18] Brodley (n 2) 1552; Commission, 'Impacts of Joint Ventures on Competition' (n 17) 21.
[19] See Commission Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings [2004] OJ C31/5, para 5 fn 6.
[20] See Pitofsky, 'A Framework for Antitrust Analysis of Joint Ventures' (n 10) 894-95; Chang and others (n 5) 230.
[21] Commission Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements [2010] OJ C11/1. See also Chapter 6/III/B/1 below.

of the parents.[22] These joint ventures are usually used by parent firms as a way of supplying or purchasing final or intermediary products. In this respect, they may result in a reduction in the production and transactional costs of the parents, but at the same time may cause foreclosure concerns.[23] Alternatively, joint ventures may be characterised as vertical if there is a buyer-seller relationship among the parents.[24] Nevertheless, it should be noted that the existence of such a vertical relationship does not normally provide a distinctive incentive for firms to set up a joint venture and does not lead to serious competition concerns and, therefore, it may not be suitable for categorising joint ventures.[25]

Based on the position of the parents with regard to the market of the joint venture, a conglomerate joint venture may be defined as one whose parents do not operate either in the joint venture's market or in markets vertically related to that. These joint ventures normally raise less serious concerns in relation to the joint venture market compared to horizontal and vertical joint ventures. Yet, they may give rise to spill-over effects with respect to other markets where the parent firms are in competition. Conglomerate joint ventures, defined as requiring the absence of any horizontal or vertical link between the parties in relation to either the joint venture's market or any other market, however, do not normally lead to these effects. They are generally the least dangerous type of joint venture from a competition law perspective.

Some joint ventures may comprise either two, or possibly all, of the horizontal, vertical and conglomerate aspects described above. This may be the case particularly where the joint venture has more than two parents. For example, a joint venture established for the production of a pharmaceutical product may involve two participants operating at the production level, one participant engaged in the distribution of the product, and one investor participant that does not operate in any market related to that of the joint venture. It is more difficult to analyse the effects of

[22] Commission, 'Impacts of Joint Ventures o n Competition' (n 17) 22.
[23] ibid. This criterion is used by the Commission in order to classify the effects of a joint venture as vertical. See Chapter 3/V/A/4/b below.
[24] See Pfeffer and Novak (n 17) 322.
[25] However, in some decisions, the Commission appears to consider the vertical relationship between the parent firms in analysing the effects of the joint venture. See Chapter 3/V/B/1 below.

such hybrid joint ventures because of the complexity of the relationship networks between the parents.[26]

2. Classification of Joint Ventures by Function

The function allotted to the joint venture by its parents is usually indicative of its effects on competition. Various categories are used by commentators in classifying joint ventures by function, including R&D, production, marketing, purchasing, selling, distribution, commercialisation and standardisation.[27] However, in this thesis, joint ventures are divided into four main groups according to their predominant function, as: (i) R&D joint ventures; (ii) production joint ventures; (iii) sales joint ventures; and (iv) purchasing joint ventures.[28] Joint ventures may fall into only one of these groups or may include features of more than one.[29]

a) R&D Joint Ventures

In the context of R&D joint ventures, parent firms pool their intellectual properties, financial assets and other resources for developing new or improved products or processes, or for gaining some technical knowledge.[30] The function of many R&D joint ventures is limited to carrying out a specific R&D project. These so-called pure R&D joint ventures[31] usually provide that the resulting innovation is licensed or assigned to the parent firms if the project ends successfully. However, in most cases, R&D joint ventures also encompass the production and distribution of the resulting product.[32]

---

[26] Commission, 'Impacts of Joint Ventures on Competition' (n 17) 23.
[27] See OECD, *Competition Policy and Joint ventures* (OECD 1986) 14-18.
[28] These categories are also used by the Commission in approaching partial function joint ventures. See Chapter 4 below.
[29] Andrew I Gavil, William E Kovacic and Jonathan B Baker, *Antitrust Law in Perspective: Cases, Concepts and Problems in Competition Policy* (Thomson West 2002) 203.
[30] ibid.
[31] See OECD, *Competition Policy and Joint ventures* (n 27) 14; new Cooperation Guidelines (n 21) paras 111-146.
[32] OECD, *Competition Policy and Joint ventures* (n 27) 14.

R&D joint ventures are very common in a number of industries, especially in high-technology industries which are mainly characterised by dynamic competition.[33] In these industries firms usually choose the joint venture format for R&D purposes, in order to remove free riding problems, or to share risks or costs in projects requiring huge investment. Such joint ventures usually introduce new, improved or cheaper products which otherwise would not emerge, and they also eliminate the duplication of the same R&D effort, thereby avoiding the loss of social welfare.[34] Nonetheless, in some cases, R&D joint ventures may result in less developed products or higher prices, compared to a situation in which each parent independently conducts the R&D. These joint ventures may also reduce competition outside the joint project as a result of information exchange between the parents.[35]

b) Production Joint Ventures

Production joint ventures refer to those into which parent firms combine their resources in order to jointly produce a final product or inputs to a final product.[36] These joint ventures serve as a particularly effective way for small firms to overcome capacity constraints and achieve economies of scale.[37] They may also lead to substantial efficiencies by integrating complementary assets and technologies.[38] This integration may enable parent firms to produce a new or improved product that none of them could produce separately, and to reduce their production and transactional costs.[39]

---

[33] See IV/A/1 below.
[34] Morton I Kamien, Eitan Muller and Israel Zang, 'Research Joint Ventures and R&D Cartels' (1992) 82 *American Economic Review* 1293, 1293; Chang and others (n 5) 230; Gavil and others (n 29) 203; Philippe Billiet, 'Situating Cooperative R&D Joint Ventures between the Need to Innovate and Innovation-Related Competition Rules' (2009) 11 *European Journal of Law Reform* 1, 10-11.
[35] Kamien and others (n 34) 1293. For more information on free riding and information flow issues in relating to R&D joint ventures, see also Morton I Kamien and Israel Zang, 'Meet Me Halfway: Research Joint Ventures and Absorptive Capacity' (2000) 18 *International Journal of Industrial Organization* 995; Maria Jose Gil Molto, Nikolas Georgantzis and Vicente Orts, 'Cooperative R&D with Endogenous Technology Differentiation' (2005) 14 *Journal of Economics and Management Strategy* 461; Billiet (n 34). See also Chapter 4/V/A below.
[36] Herbert Hovenkamp, *Antitrust Law: An Analysis of Antitrust Principles and Their Application,* vol XIII (Aspen Law & Business 1999) 116.
[37] Chang and others (n 5) 231.
[38] Chang and others (n 5) 231; Gavil and others (n 29) 203.
[39] OECD, *Competition Policy and Joint ventures* (n 27) 16; Carl Shapiro and Robert D Willig, 'On the Antitrust Treatment of Joint Ventures' (1990) 4 *Journal of Economic Perspectives* 113, 114.

Parent firms may utilise production joint ventures in order to learn from each other's know-how. In some cases, their expectations from a production joint venture may be particularly to obtain the necessary knowledge about the characteristics of the market they plan to enter independently in the future. The NUMMI joint venture between General Motors and Toyota is a well-known example in this respect.[40]

Despite these benefits of production joint ventures from a business perspective, they may give rise to social losses by providing firms with market power that allows them to increase prices by way of reducing output, or of charging high prices for the products transferred from the joint venture to the parents.[41] These concerns essentially form the grounds for the application of competition rules to production joint ventures.[42]

c) Sales Joint Ventures

Firms also set up joint ventures to engage in joint selling of products or services. These joint ventures often also include the distribution and advertising of the products. Therefore, they are sometimes called distribution or marketing joint ventures.

Sales joint ventures, in general, may allow firms to reduce their distribution and transaction costs, penetrate new markets, or offer a one-stop shop and improved services to customers.[43] Actually, joint sales agencies and distribution agreements are also used by firms in order to obtain those benefits. However, the joint venture format may be preferable from a business viewpoint, particularly where a more extensive integration is needed to achieve the target, and/or where firms intend to retain a significant degree of control over these integrated operations.

---

[40] Joanne E Oxley and Brian S Silverman, 'Inter-firm Alliances: A New Institutional Economic Approach' in Eric Brousseau and Jean-Michel Glachant (eds), *New Institutional Economics: A Guide Book* (Cambridge University Press 2008) 211. See also Chapter 5/IV/B below.

[41] Shapiro and Willig (n 39) 114-15.

[42] See Chapter 4/V/B below. For more information on the characteristics of production joint ventures, see also Timothy F Bresnahan and Steven C Salop, 'Quantifying the Competitive Effects of Production Joint Ventures' (1986) 4 *International Journal of Industrial Organization* 155; Zhiqi Chen and Thomas W Ross, 'Cooperating Upstream While Competing Downstream: A Theory of Input Joint Ventures' (2003) 21 *International Journal of Industrial Organization* 381.

[43] Gavil and others (n 29) 203.

Because sales joint ventures may enable competitors to fix prices and reduce output, they are normally treated more suspiciously compared to the other types of joint ventures. This treatment may be softened in cases where the joint venture involves integration leading to significant efficiencies.[44]

d) Purchasing Joint Ventures

Purchasing joint ventures serve the joint buying of products or services, although joint buying agencies or agreements are more commonly used for this purpose. Jointly purchased products are, in most cases, raw materials forming an input to the parents' own production.[45] However, these joint ventures may also relate to final products. For instance, competing firms engaging in the retailing of certain products may establish a joint venture at the wholesale level in order to jointly purchase those products.

Purchasing joint ventures are usually formed by small and medium-sized firms to increase their buying power, thereby enabling them to successfully negotiate with sellers to purchase products with more favourable conditions. Even larger firms may need to combine their buying activities particularly when importing products.[46] Therefore, purchasing joint ventures generally result in a reduction in costs and the introduction of cheaper and new products, and enable small firms to compete with larger firms.[47]

Nonetheless, these joint ventures may threaten competition by approximating the costs of parent firms to each other and facilitating information flow between them. They may also give the parents buying power that may reduce competition in the purchasing market, in a way that harms competition in the supplying market as well.[48]

---

[44] See Chapter 4/V/D below.
[45] OECD, *Competition Policy and Joint ventures* (n 27) 16.
[46] ibid.
[47] ibid.
[48] See Chapter 4/V/C below.

IV. Economic Role of Joint Ventures

This part first describes the role of joint ventures with regard to some specific industries, including the high-technology, network, airline and mining industries, and the relationship between international joint ventures and globalisation. Finally, it explains the economic motives behind joint ventures and their drawbacks as a business model.

A- Joint Ventures in Specific Industries

1. High-Technology Industries

High-technology industries are generally accepted as encompassing the telecommunications, biotechnology, computer and computer software, electronics, aerospace, pharmaceutical and semi-conductor industries.[49] These industries play a crucial role in economic growth. The data of Eurostat shows that the total turnover of approximately 800,000 enterprises operating in these industries across the EU reached virtually 1.5 trillion Euros in the 2000s.[50]

The high-technology industries may be differentiated from other industries according to the speed of innovation. In these industries, due to rapid technological changes, the life cycle of products is much shorter than in other industries.[51] Therefore, they are often characterised by dynamic competition based on innovation, rather than by classical price competition.[52] The producers of new technologies meeting the expectations of customers frequently gain a significant first mover advantage and, thus, significant market power. However, because of the short life of the product, such market power may decrease rapidly if the firm cannot predict future trends and

[49] See Ivan K Fong and John Kent Walker, 'International High-Technology Joint Ventures: An Antitrust and Antidumping Analysis' (1989) 7 *International Tax and Business Lawyer* 57, 61; John Temple Lang, 'European Community Antitrust Law: Innovation Markets and High Technology Industries' (1997) 20 *Fordham International Law Journal* 717, 717.
[50] See Eurostat, 'Science, Technology and Innovation in Europe' (2012) 98-101.
[51] Fong and Walker (n 49) 61; Lang (n 49) 718; Thomas A Piraino, 'A Proposed Antitrust Approach to High Technology Competition' (2003) 44 *William and Mary Law Review* 65, 74.
[52] Lang (n 49) 720.

pursue an innovation policy accordingly.[53] This requires firms to continuously conduct R&D efforts in order to retain or improve their position in the market.[54]

Nonetheless, given the uncertainties resulting from the rapid pace of technological development, allocating a great amount of financial resources to R&D, which largely form sunk costs, usually poses high risks.[55] The formation of a joint venture is a popular way used by firms to minimize these risks.[56] In particular, firms prefer to set up R&D joint ventures to share the sunk costs of R&D and decrease the uncertainties and risks of forecasting future trends. Pooling the complementary technologies and expertise of the participants facilitates achieving these objectives.

Because of the high frequency of innovation in the high-technology industries, the objective of joint ventures is often not limited only to a specific R&D project. Rather, many joint ventures integrate all the R&D activities of the parents in the market. Firms may even allot other business functions including production, advertising and distribution to such joint ventures in order to provide the rapid and effective entry of new products to the market.[57] The joint venture Sony-Ericsson, between Sony Corporation and L.M. Ericsson, may be given as an example of such a joint venture. In 2001, these two firms integrated their world-wide operations of developing, designing, manufacturing, marketing and distributing mobile phones into a new company, Sony-Ericsson. By doing this, they aimed to be able to compete against Nokia and other competitors in the industry, which was subject to continuous technological change.[58]

---

[53] David J Teece and Mary Coleman, 'The Meaning of Monopoly: Antitrust Analysis in High-Technology industries' (1998) 43 *Antitrust Bulletin* 801, 804; David S Barrett, 'The European Commission's Antitrust Analysis of High-Technology Joint Ventures and Strategic Alliances: A Diverging Analysis?' (1999) 12 *Transnational Lawyer* 475, 478; Piraino, 'A Proposed Antitrust Approach to High Technology Competition' (n 51) 75.

[54] Fong and Walker (n 49) 61; Janusz A Ordover, 'Competition Policy for High-Technology Industries' (1996) 24 *International Business Lawyer* 479, 479; Lang (n 49) 718.

[55] Ordover (n 54) 480; Teece and Coleman (n 53) 804; Piraino, 'A Proposed Antitrust Approach to High Technology Competition' (n 51) 75.

[56] Ordover (n 54) 480; Chang and others (n 5) 233; Barrett (n 53) 478; Piraino, 'A Proposed Antitrust Approach to High Technology Competition' (n 51) 92.

[57] Barrett (n 53) 478-79.

[58] See Sam Omatseye, 'Sony Ericsson Phone Marriage Starts Oct. 1' *RCR Wireless News* (30 April 2001) <http://www.rcrwireless.com/article/20010430/sub/sony-ericsson-phone-marriage-starts-oct-1/> accessed 05 April 2013.

In the high-technology industries, the creation of a joint venture is a particularly important tool for small firms to overcome their lack of expertise and finance, and high entry barriers. However, as in the example of Sony-Ericsson, large firms also participate in joint ventures to reduce investment risks and retain or increase their competitiveness.[59] Many large firms build a network of joint ventures with different firms for different high-technology products. For example, in addition to Sony-Ericsson in the mobile phone industry, Sony has participated in various joint ventures including Intertrust[60] in the area of digital rights management, and SonyNec[61] in the market for optical data storage disk drive products.

2. Network Industries

Networks are an increasingly widespread phenomenon in today's economy as a result of rapid technological development, the rising complexity of needs, and the liberalisation trend in certain sectors such as telecommunications, energy and railways. A 'network' may be defined as 'a mixture of facilities and rules which allow a firm or a group of firms to exchange or share transactions, data, electronic impulses, information, energy, and physical traffic'.[62] Telephone, the Internet and ATM systems are some classical examples of networks.

Network industries have a distinctive characteristic which economists call 'network externality' or 'network effect'. Network externalities refer to situations where the network becomes more valuable to its users when another user participates in it.[63]

---

[59] Piraino, 'A Proposed Antitrust Approach to High Technology Competition' (n 51) 92.
[60] See *Sony/Philips/Intertrust* (Case COMP/M.3042) [2002].
[61] See *Sony/NEC* (Case COMP/M.4139) [2006]. However, Sony acquired sole control of SonyNec in 2008 and changed the name of the company to 'Sony Optiarc Inc.'. See <http://www.sony.net/SonyInfo/News/Press/200809/08-0911E/index.html> accessed 05 April 2013.
[62] David A Balto, 'Networks and Exclusivity: Antitrust Analysis to Promote Network Competition' (1999) 7 *George Mason Law Review* 523, 523. For similar definitions, see also Donald I Baker, 'Compulsory Access to Network Joint Ventures under the Sherman Act: Rules or Roulette?' (1993) 1993 *Utah Law Review* 999, 1002; Thomas A Piraino, 'The Antitrust Analysis of Network Joint Ventures' (1996) 47 *Hastings Law Journal* 5, 21; William H Pratt, James D Sonda and Mark A Racanelli, 'Refusals to Deal in the Context of Network Joint Ventures' (1997) 52 *Business Lawyer* 531, 533.
[63] David S Evans and Richard Schmalensee, 'A Guide to the Antitrust Economics of Networks' (1996) 10 *Antitrust* 36, 36; Mark A Lemley and David McGovan, 'Legal Implications of Network Economic Effects' (1998) 86 *California Law Review* 479, 482-83; Balto (n 62) 524; William J Kolasky, 'Network Effects: A Contrarian View' (1999) 7 *George Mason Law Review* 577, 579; Carl Shapiro, 'Exclusivity in Network Industries' (1999) 7 *George Mason Law Review* 673, 673.

For example, telephone networks or the Internet are more valuable to their users if a great number of people use them. In these examples, network externalities arise directly.[64] However, these effects may exist indirectly where the large number of network participants increases the incentive to purchase complementary products.[65]

Network externalities may result in economies of scale and scope on both the supply and the demand side.[66] For instance, in the case of credit card networks, such as Visa and MasterCard, the average cost incurred by the network per membership decreases as the number of member banks increases. On the other side, this increase in the number of member banks makes the membership more beneficial to each bank.

In most cases, networks entail various horizontal and vertical links between different firms. This creates another type of externality such that an action of one firm gives rise to some negative results, borne not by these firms but by other firms.[67] Therefore, cooperation among firms has an essential role for the proper functioning of these industries. In some cases, a physical integration of the facilities of competitors may be necessary to provide better services to customers.[68] For example, in order to offer customers a more widespread network, telephone firms have to agree on how to connect with each other and route traffic.[69]

The need for cooperation in network industries is also of importance in relation to innovation. In the absence of cooperation, the risk of free riding by other firms is likely to decrease the incentive to innovate.[70] Moreover, cooperation may be significant where the innovation becomes valuable if others firms in the network also

[64] Evans and Schmalensee (n 63) 36.
[65] ibid.
[66] Evans and Schmalensee (n 63) 36; Kolasky, 'Network Effects' (n 63) 579-80.
[67] Dennis W Carlton and J Mark Klamer, 'The Need for Coordination among Firms, with Special Reference to Network Industries' (1983) 50 *University of Chicago Law Review* 446, 450; Kolasky, 'Network Effects' (n 63) 610.
[68] Evans and Schmalensee (n 63) 37.
[69] ibid.
[70] Carlton and Klamer (n 67) 453; Kolasky, 'Network Effects' (n 63) 610.

adapt it.[71] Hence, the refusal of any firm to cooperate may discourage other firms from investing in R&D.[72]

In many network industries, firms also need to cooperate with respect to the standardisation of technical and operational rules in order to enhance the interoperability between the products of firms in the network.[73] Such standard-setting is particularly common in high-technology networks, such as computer software and hardware systems.[74]

Achieving the necessary cooperation through a series of contracts is often highly costly for firms and also becomes unwieldy as the network expands in size.[75] In this respect, joint ventures play an increasingly important role in network industries as they diminish the costs resulting from a series of horizontal and vertical agreements between firms in the network.[76] Furthermore, joint ventures allow small firms which do not have the necessary finance and expertise, to provide network services on their own, to combine their complementary assets and, thus, to compete with large firms.[77] Even large firms may need to set up a joint venture to make a network more attractive through increasing demand and output with respect to the network.[78]

Firms may limit participation in a network joint venture. This may be the case, for example, if the objective of firms in forming the joint venture is to create a network that will compete with other networks. However, in many cases, firms intend to make the joint venture open to participation from other firms. Where the participation of all firms in the joint venture is essential for the success of the

[71] ibid.
[72] Carlton and Klamer give a railway system as an example of this situation. They state that a new railway engine that can only be used in a particular rail design will have little value, even if only one firm does not adopt this rail design. Carlton and Klamer (n 67) 453 fn 26.
[73] Carlton and Klamer (n 67) 454; Evan and Schmalensee (n 63) 38.
[74] For example, many manufacturers including Apple, Dell, Hitachi, HP, JVC, LG, Mitsubishi, Panasonic, Pioneer, Philips, Sharp, Samsung and Intel have established an organisation named Blue-ray Disc Association, which was responsible for developing and licensing Blu-ray Disc technology and for establishing format standards and promoting business opportunities for Blu-ray Disc. See <http://blu-raydisc.com/en/association/GeneralInfo.aspx> accessed 05 April 2013.
[75] Carlton and Klamer (n 67) 451; Kolasky, 'Network Effects' (n 63) 611.
[76] Piraino, 'The Antitrust Analysis of Network Joint Ventures' (n 62) 21; Chang and others (n 5) 237; Balto (n 62) 524.
[77] Piraino, 'The Antitrust Analysis of Network Joint Ventures' (n 62) 21; Balto (n 62) 524.
[78] Balto (n 62) 524.

network, firms generally prefer the latter type. It should be borne in mind that in such cases, the entity concerned may not be considered as a joint venture because it loses its characteristic of being under the joint control of two or more firms, within the sense of this thesis.[79]

For example, in 1998, Nokia and Ericsson, two large mobile phone manufacturers, and Psion, a developer and manufacturer of handheld portable computers and modems, set up the joint venture Symbian, for the purpose of developing the operating system of Psion to establish industry standards. Symbian was jointly controlled by all three parents.[80] However, in the same year, Motorola also became a shareholder in Symbian. As a result, Symbian lost its joint venture character because the parents no longer exercised joint control over it.[81] Indeed, in 2008, a new independent non-profit organisation called the Symbian Foundation, which has many member firms such as Samsung, LG and SanDisk, replaced Symbian.[82]

3. Air Transport Industry

The air transport industry was deregulated in 1978 in the US, and in the following decades in Europe and other parts of the world.[83] This deregulation trend has led to more competition in the industry because of new entries intensifying competitive constraints on incumbent airline firms by lowering prices. In addition, the rising globalisation in the airline industry, supported by deregulation and international agreements between countries, has forced airline firms to operate at a global level.[84] As a result, firms have needed to cooperate in order to achieve the necessary cost

---

[79] See 43-44 above.
[80] See *Nokia/Ericsson/Psion* (Case IV/JV.6) [1998].
[81] See *Nokia/Ericsson/Psion/Motorola (Symbian II)* (Case IV/JV.12) [1998].
[82] The Symbian Foundation has recently transitioned to a licensing body. See <http://licensing.symbian.org/> accessed 05 April 2013.
[83] See Kostas Iatrou and Mauro Oretti, *Airline Choices for the Future: From Alliances to Mergers* (Ashgate Publishing 2007) 5-9.
[84] As stated in Article 6 of the Chicago Convention on International Civil Aviation dated December 7 1944, to operate international air services in the territory of a state, there must be special permission or authorisation granted by that state. Therefore, states sign bilateral air transport agreements or open sky agreements to grant such permission or authorisation.

reductions and retain or improve their market position in the international market. In the air transport industry, this cooperation is usually called an 'airline alliance'.[85]

Airline alliances, in general, enable participant firms to operate more efficiently, and achieve economies of scale, scope and density[86] by improving their use of capacity, or by reducing costs through eliminating the unnecessary duplication of operations.[87] Furthermore, through alliances, firms may overcome regulatory barriers to operating in foreign markets, including restrictions on foreign ownership and capacity under bilateral air service agreements, and limited access to airport infrastructures.[88] Alliances also allow firms to offer a better quality of services to consumers, such as providing better frequent flyer programmes, a larger network and better ticketing services.[89] In addition to these industry-specific benefits, alliances may be an effective tool for small firms, as in other industries, to cope with the uncertainties and difficulties of operating in the industry, and, thus, to compete with larger firms.[90]

Airline alliances may encompass a broad spectrum of cooperation forms. Code-sharing, for example, is a fundamental element of airline cooperation. This form of cooperation enables each participant to sell space independently under its own airline designator code on a peculiar flight, thereby expanding its flight network without physically operating its own aeroplane.[91] Airline alliances may also include

---

[85] This concept is broader than the term joint venture as it covers simple contractual agreements as well.

[86] Economies of density refer to changes in total cost as a result of a change in output at a fixed network size. For more detailed information on economies of density in the air transport industry, see Douglas W Caves, Laurits R Christensen and Michael W Tretheway, 'Economies of Density versus Economies of Scale: Why Trunk and Local Service Airline Costs Differ' (1984) 15 *RAND Journal of Economics* 471.

[87] Scott Kimpel, 'Antitrust Considerations in International Airline Alliances' (1998) 63 *Journal of Air Law and Commerce* 475, 476; Svetlana Mosin, 'Riding the Merger Wave: Strategic Airlines in the Airline Industry' (2000) 27 *Transportation Law Journal* 271, 272; Iatrou and Oretti (n 83) 4.

[88] Warren B Chik and Sivakant Tiwari, 'Legal Implications of Airline Cooperation: Some Legal Issues and Consequences Arising from the Rise of Airline Strategic Alliances and Integration in the International Dimension' (2001) 13 *Singapore Academy of Law Journal* 296, 296 fn.1; Iatrou and Oretti (n 83) 5.

[89] Iatrou and Oretti (n 83) 4-5; William J Kolasky, 'Antitrust Enforcement Guidelines for Strategic Alliances', the FTC's Hearings on Joint Ventures (July 1, 1997) <http://www.ftc.gov/bc/cac/wkolasky-testimony.pdf> accessed 05 April 2013.

[90] Iatrou and Oretti (n 83) 5.

[91] Birgit Kleymann and Hannu Seristo, *Managing Strategic Airline Alliances* (Ashgate Publishing 2004) 13; Maria Manuel Leitao Marques and Ana Abrunhosa, 'Cooperative Networking: Bridging the Cooperation-Concentration Gap' in Hanns Ullrich (ed), *The Evolution of European Competition Law: Whose Regulation, Which Competition* (Edward Elgar Publishing 2006) 130.

cooperation on revenue and cost sharing; pricing; frequent flyer programmes; route and schedule planning; marketing and sales; travel agents and other commissions; branding/co-branding; integration and development of information systems, engineering and maintenance services.[92]

The degree of integration in airlines alliances differs according to the objectives and commitment of the participants. Customer expectations, an uncertain operating environment, the regulatory framework, and managerial preferences are decisive factors in this respect.[93] Some alliances, called 'market alliances', require a relatively low level of integration, limited to code-sharing, joint frequent flyer programmes and joint advertising.[94] Star and Oneworld are typical examples of such alliances.

Airline firms sometimes need stronger and wider integration in order to provide the targeted cost reduction, network expansion and other operating synergies, and, thus, to retain or improve their position in the competitive air transport industry. Amalgamations and acquisitions would be a viable option for firms to achieve these objectives.[95] However, regulatory restrictions, such as those on foreign ownership, may limit the use of these options.[96] Moreover, brand image is an important component for large airline firms that have carried national emblems for many years. Therefore, they may not favour amalgamations and acquisitions in which they lose their individual brand image.[97] Joint ventures constitute a good vehicle for firms to provide strong integration, whilst overcoming such regulatory and brand-related problems.

The first large airline joint venture was established between KLM, a Netherland flag carrier, and Northwest Airlines, a US flag carrier. The parties integrated their cargo

---

[92] European Competition Authorities Air Traffic Working Group, 'Report on Mergers and Alliances in Civil Aviation' (2002) <http://ec.europa.eu/competition/publications/eca/report.pdf> accessed 05 April 2013, 3.
[93] Kleymann and Seristo (n 91) 17-18.
[94] ibid 14.
[95] Iatrou and Oretti (n 83) 20-22.
[96] Leitao Marques and Abrunhosa (n 91) 130. On the other hand, it should be noted that in the air transport industry, the acquisition of minority shareholdings in competitors is commonly used by airline firms to convince these competitors to enter into an alliance with them. These alliances are generally called 'equity alliances'. See eg Kimpel (n 87) 476.
[97] Leitao Marques and Abrunhosa (n 91) 130.

and passenger transportation operations between Europe and the US into the joint venture and began to act as a single carrier. The joint venture comprised code sharing; revenue and cost sharing; joint pricing; coordination of capacity; coordination of network development, marketing and sales activities; fully combined frequent flyer programmes; and coordination of a number of infrastructure activities, such as ground handling, catering, and maintenance.[98] Similar joint ventures were set up between British Airways, American Airlines and Iberia,[99] and between Lufthansa, United Airlines and Scandinavian Airlines System (SAS)[100] for the transatlantic route; and between Lufthansa and SAS for German-Scandinavian traffic.[101]

An attempt to set up a more extensive joint venture was made by KLM and Alitalia in 1999. Whilst retaining their separate identities, they combined all their passenger and cargo services, except for maintenance, ground handling and charter flights, into two separate ventures, one for scheduled passenger services and one for cargo services. These joint ventures were not formed as separate corporate entities with legal personality, in order to prevent the risk of not being entitled to operate on international routes covered by bilateral air transport agreements. A 'Network Organizer' was jointly appointed to manage these two joint ventures. The Commission analysed this alliance, determined it to be a full-function joint venture and cleared it.[102] However, this alliance lasted for a very short time as KLM terminated it in 2000.[103]

In addition to these joint ventures relating to the main operations in the air transport industry, airline firms also form joint ventures to conduct upstream, downstream or

---

[98] See Commission Notices concerning the alliance agreements between KLM Royal Dutch Airlines and Northwest Airlines [1997] OJ C117/8, [1998] OJ C177/10, [2002] OJ C181/6. For more information, see also Mosin (n 87) 278-80; Iatrou and Oretti (n 83) 30-32.

[99] See *British Airways/American Airlines/Iberia* (Case COMP/39.596) Commission Decision 2010/C 58/07 [2010] OJ C58/20.

[100] See Commission Notices concerning the alliance between Lufthansa, SAS and United Airlines, [1996] OJ C289/8, [1998] OJ C239/5.

[101] See *Lufthansa/SAS* (Case IV/35.545) Commission Decision [1995] OJ C201/2. See also *British Midland Ltd/Deutsche Lufthansa AG/Scandinavian Airlines System SAS* (Case COMP/38.712) Commission Decision 2001/C 83/03 [2001] OJ C83/6.

[102] See *KLM/Alitalia* (Case Comp/JV.19) [1999]. For the analysis of this decision, see Enrico Maria Armani, 'Alitalia-KLM: A New Trend in Assessing Airline Alliances?' (1999) *European Commission Competition Policy Newsletter* No 3, 19-22.

[103] Iatrou and Oretti (n 83) 34-35.

neighbouring operations.[104] The joint venture DSS World Sourcing, established between Delta Air Lines, Singapore Airlines and Swissair to jointly purchase some equipment, may be given as an example of those covering upstream operations. This joint venture includes the joint purchasing of items ranging from in-flight amenities to computers and office equipment, crew uniforms and fuel.[105]

Joint ventures relating to maintenance and engineering are also common in the air transport industry. Some examples of these joint ventures are the joint venture Aerotechnic Industries S.A, between Air France and Royal Air Maroc;[106] the joint venture X-Air Services, between Sabena and TNT Airways;[107] and the joint venture Alitalia Maintenance Systems, between Alitalia and Lufthansa.[108]

Airline firms also need to cooperate with firms which have expertise in the fields of IT and telecommunications. For example, Lufthansa and Siemens set up the joint venture Synavion, which provides electronic data processing services to airports.[109] Similarly, Delta Air Lines formed a joint venture with AT&T to meet its internal computing requirements.[110]

4. Mining Industries

The mining industries generally encompass those based on natural resources including metals (eg iron, aluminium, gold, zinc), minerals, coal and crude oil and gas. Due to the fact that in most countries natural resources inherently belong to state, governmental influence is noticeably high in these industries. In the past, in many countries, mining operations were carried out by governmental bodies. However, the recent decades have witnessed some restructuring reforms in the

[104] Leitao Marques and Abrunhosa (n 91) 129.
[105] See Iatrou and Oretti (n 83) 25.
[106] See *Air France-KLM/Royal Air Maroc* (Case IV/M.5380) [2009].
[107] See *Sabena Technics/TNT Airways* (Case IV/M.5506) [2009].
[108] See <http://www.aviationtoday.com/am/categories/bga/Inflight-Dynamic-Propeller-Balancing-a-Reality_50.html> accessed 05 April 2013.
[109] See *Siemens Business Services/Lufthansa Systems/Synavion* (Case COMP/M.1936) [2000].
[110] See <http://www.independent.co.uk/news/business/att-plans-venture-with-delta-airlines-1378358.html> accessed 05 April 2013.

mining industry in numerous developed and developing countries.[111] The governmental bodies dealing with mining operations have mostly been converted to private companies which have then been privatised. Nonetheless, governments are still active in the mining industry by virtue of having significant shares in leading mining companies, and by maintaining the power to grant firms licences to perform mining activities.

Joint venture is an old phenomenon in the mining industries. In the iron and steel industry, for instance, joint ventures have been used since the end of World War II.[112] The research of Fusfeld on the US iron and steel industry in 1957 revealed that there was a network consisting of at least seventy-five joint ventures that dominated the entire industry in the US.[113] Similarly, Stuckey found that in 1979 approximately sixty joint ventures in the upstream aluminium industry controlled 66 % of the world's bauxite capacity and 51 % of its alumina capacity.[114]

Mining joint ventures can be observed all over the world. Due to the depletion of resources in their home countries, American, European and Japanese firms, in particular, began to search for new resources. Therefore, the number of international mining joint ventures has increased in regions with prosperous resources, including Canada, Australia, Africa, Latin America and the former Soviet Union region.[115] In Australia, for example, a large part of the exploration in the mineral industry has been conducted through joint ventures.[116] In 1983, Stuckey revealed that joint ventures covered the entire aluminium industry in Australia.[117]

---

[111] Darryl Reed, 'Resource Extraction Industries in Developing Countries' (2002) 39 *Journal of Business Ethics* 199, 205.
[112] Garth L Mangum, Sae-Young Kim and Stephen B Tallman, *Transnational marriages in the Steel Industry: Experience and Lessons for Global Business* (Praeger 1996) 2.
[113] Daniel R Fusfeld, 'Joint Subsidiaries in the Iron and Steel Industry' (1958) 48 *American Economic Review* 578.
[114] John Alan Stuckey, *Vertical Integration and Joint Ventures in the Aluminum Industry* (Harvard University Press 1983) 150.
[115] Thomas E Root, 'Economic Influences on the History and Development of the Mining Joint Venture as a Vehicle for Hard Mineral Exploration and Development' (1979) 12 *Natural Resources Lawyer* 491, 501; Mangum and others (n 112) 3.
[116] OECD, *Competition Policy and Joint ventures* (n 27) 15.
[117] Stuckey (n 114) 150.

In many cases, the primary objective behind mining joint ventures is to gain access to new resources or markets.[118] These joint ventures generally involve a large firm having the necessary financial and technological capabilities and a small firm holding the exploration right of the resource.[119] In particular, Western firms establish joint ventures with local firms in developing countries in order to reach their resources. In fact, foreign firms often do not have any alternative means, since most developing countries require local participation in the exploration of natural resources, in order to obtain a fair share of them.[120]

The formation of a joint venture enables local firms to effectively benefit from foreign firms' technology, expertise and financial and commercial skills in respect of the extraction, marketing and distribution of resources.[121] In many cases, the host government itself also has a lack of sufficient technological expertise and commercial ability to extract and market the resources. Therefore, joint ventures between host countries and multinational firms are also widespread in the mining industries.[122] This is the case, for example, in the oil and natural gas industry.[123] The multinational firm in this respect may also be a state-owned company operating in the industry. The joint venture MMG, between China National Petroleum Corporation, owned by Chinese Government, and KazMunaiGaz, owned by Kazakh Government, for the exploration, extraction, and processing of crude oil and natural gas in Kazakhstan, may be given as an example of such a joint venture.[124] Another example is the joint venture Salah Gas, between Statoil controlled by the Norwegian State, Sonatrach belonging to Algerian State and BP, a multinational oil firm, for the exploration, development and production of gas in the Salah region in Southern Algeria.[125]

[118] Mangum and others (n 112) 3.
[119] OECD, *Competition Policy and Joint Ventures* (n 27) 15.
[120] Stuckey (n 114) 153.
[121] Commission, 'Impacts of Joint Ventures on Competition' (n 17) 118.
[122] Stuckey (n 114) 153.
[123] Commission, 'Impacts of Joint Ventures on Competition' (n 17) 103-04.
[124] See *KNP/CNPC/MMG* (Case COMP/M.5513) [2009].
[125] See *Statoil/BP/Sonatrach/In Salah* (Case COMP/M.3230) [2003].

Exploration activities generally involve some political, geological and financial risks.[126] Investing in a developing country which does not have a stable political and economic structure poses serious risks (eg the risk of expropriation) in itself for foreign firms. Hence, joint ventures usually serve as a suitable tool to share these risks. Sharing costs, creating efficiencies by combining complementary assets and overcoming high entry and exit barriers also form some of the reasons for establishing joint ventures in those industries.[127]

Most mining industries have an oligopolistic structure. For example, according to the study of Fusfeld, the iron and steel industry in the US was dominated by two groups of large producers that controlled 50 of 53 intra-industry joint ventures.[128] Such a network of joint ventures may be used by firms to sustain oligopoly in the industry.[129] Firstly, as is apparent in other industries, a network of joint ventures can facilitate collusion between mining firms in respect of planning and conducting mining operations.[130] Furthermore, joint ventures between the leading firms of the industry may enable them to control all substantial reserves and, thus, create entry barriers for new or other incumbent firms by limiting their access to the necessary resources.[131] However, joint ventures may still be considered less dangerous, from a competition standpoint, than a full-merger of the parents in the market. In *Inco/Falconbridge*,[132] for instance, the Commission noted that the formation of a partial function joint venture in the nickel mining industry was less anticompetitive than the full-merger. This issue is discussed in more depth in the later chapters.[133]

---

[126] Colin Roberts, 'Competitive Effects of Mergers and Acquisitions of Exploration Drilling Contractors on the Global Mineral Exploration Industry' (2001) 19 *Journal of Energy and Natural Resources Law* 317, 317-18.
[127] Stuckey (n 114) 152-53; Thomas Lines, 'Restructuring of the Aluminium Industry: Implications for Developing Countries' (1990) 8 *Development Policy Review* 243, 248-49.
[128] Fusfeld (n 113) 582-85. Scheuerman stated that the structure of the industry changed during the following 30 years and that this was due, in particular, to the increase in global competition and foreign entries. William E Scheuerman, 'Joint Ventures in the U.S. Steel Industry: Steel's Restructuring Includes Efforts to Achieve Tighter Control over Raw Materials and Markets' (1990) 49 *American Journal of Economics and Sociology* 413, 414.
[129] Lines (n 127) 248.
[130] Stuckey (n 114) 153; Lines (n 127) 248.
[131] Stuckey (n 114) 153.
[132] Case COMP/M.4000 [2006] para 541.
[133] See particularly Chapter 3/V/A/4/a/cc below.

B- International Joint Ventures and Globalisation

The last several decades have witnessed a globalisation trend in many industries. As explained, with regard to the industries mentioned above, the reasons for this globalisation wave may vary from one industry to another. However, it may be stated that the liberalisation trend and adoption of regulations inducing foreign investments all over the world, and the rise in the understanding of the benefits of operating internationally among managers have generally played a crucial role in this trend.

Due to this globalisation wave, firms have needed to establish global business strategies for surviving in respect of the international competition. A successful global strategy, in this regard, entails the expansion of business operations beyond the boundaries of the home country, adaptation to the local characteristics of domestic markets, and the global integration of business operations in different countries.[134] Joint ventures constitute a popular business model for multinational firms to achieve these objectives. Indeed, the vast majority of joint ventures are established by firms from different countries. According to the data gained by Moskalev and Swensen from the study of the Thomson Financial SDC Platinum Alliances/Joint Ventures database, almost 60 % of 60,446 joint ventures reported between 1990 and 2000 had an international character.[135]

As stated above in relation to the mining industries, international joint ventures usually involve a multinational firm from an industrialised country and a local firm (or government) from a host developing country. However, the function of international joint ventures is often not limited merely to the exploration and extraction of raw materials. It is possible to observe many international joint ventures set up for different purposes ranging from production to R&D and distribution.

Many multinational firms from industrialised countries have spread their operations into emerging markets including China, India, Russia, Brazil and Eastern European

[134] Hans Jansson, *International Business Strategy in Emerging Country Markets: The Institutional Network Approach* (Edward Elgar Publishing 2008) 61-62.
[135] Sviatoslav A Moskalev and R Bruce Swensen, 'Joint Ventures around the Globe from 1990-2000: Forms, Types, Industries, Countries and Ownership Patterns' (2007) 16 *Review of Financial Economics* 29, 32. See also Tong and Reuer (n 17) 1061-62.

countries. This trend has increased the number of international joint ventures in these areas. Due to economic growth, firms from these emerging markets have become new multinationals,[136] and have set up joint ventures in other countries.[137]

When entering into a foreign market, firms may prefer to form joint ventures over wholly-owned subsidiaries for many reasons. Firstly, the formation of a joint venture with a local firm may lead to more favourable treatment from the host government. In this way, they may obtain a licence to operate or import, or the right to purchase land, or they may benefit from tax or tariff reductions. Local participation may also provide a more favourable approach from the local bureaucracy and public towards foreign investments.[138] This may facilitate overcoming any bureaucratic difficulties and prevent any uncertainties and delays in the operation.

Collaboration with local partners also enables multinational firms to adapt their product or service to the culture, customer preference and other characteristics of the host country's market and get access to the local distribution channels.[139] In addition, these joint ventures allow foreign firms to share the costs and risks of operating in developing countries, which are inherently more risky area than elsewhere in the world for foreign investments.[140] On the other hand, if local participation does not provide any complementary capabilities, multinational firms usually prefer wholly-owned subsidiaries when entering a new market.[141]

The formation of joint ventures with multinational firms also presents various advantages to local firms from developing countries. Benefiting from the technology and management know-how of multinational firms is one important incentive for

---

[136] Jansson (n 134) 1.
[137] See Seamus G Connolly, 'Joint Ventures with Third World Multinationals: A New Form of Entry to International Markets' (1984) 19 *Columbia Journal of World Business* 18.
[138] Pochara Theerathorn, Peter Wright and Bevalee Pray, 'Market Reaction to International Joint Venture Announcement: The Case of Developed Versus Less Developed Countries' (1991) 6 *International Trade Journal* 109, 110; Robert R Miller, Jack D Glen, Frederick Z. Jaspersen and Yannis Karmokolias, *International Joint Ventures in Developing Countries: Happy Marriages?* (The World Bank and International Finance Corporation 1996) 6.
[139] Kathryn Rudie Harrigan, 'Joint Ventures and Global Strategies' (1984) 19 *Columbia Journal of World Business* 7, 7-8; OECD, *Competition Policy and Joint Ventures* (n 27) 17; Miller and others (n 138) 5-6.
[140] Miller and others (n 138) 5.
[141] Moskalev and Swensen (n 135) 31.

them to get involved in such joint ventures.[142] Local firms may also obtain access to export markets by utilising the global connections of multinational firms.[143]

Not all international joint ventures are established between multinational firms and local firms from developing states in order to operate in a limited geographic area. There are also many international joint ventures that perform activities world-wide without any geographic limitation. These joint ventures are generally set up by multinational firms, both from industrialised countries, to improve their position in the global market. The joint venture Sony-Ericsson mentioned above[144] is one example of this kind of joint venture.

C- Motives behind Joint Ventures

The motives pursued by firms in participating in a joint venture have a significant influence on its design and characteristics and, therefore, are closely linked to its effects on competition.[145] Accordingly, the analysis of these motives is necessary to understand the nature of joint ventures in terms of competition law. There are several theoretical economic approaches that explain economic rationale for the formation of joint ventures. The transaction cost approach, developed mainly by Williamson, suggests that the incentive to minimise transaction and production costs is the prevailing factor for firms in choosing a business model.[146] According to this approach, joint ventures are preferred by firms primarily because they reduce these costs. Another explanation for the use of joint ventures is proposed by the strategic behaviour approach that focuses on the effects of strategic behaviours on the competitive positioning of a firm.[147] According to this approach, firms decide on

[142] Miller and others (n 138) 7-8.
[143] ibid 8.
[144] See 53 above.
[145] Commission, 'Impacts of Joint Ventures on Competition' (n 17) 28.
[146] See Oliver E Williamson, 'Transaction-Cost Economies: The Governance of Contractual Relations' (1979) 22 *Journal of Law and Economics* 233; Oliver E Williamson, 'The Economics of Organisation: The Transaction Cost Approach' (1981) 87 *American Journal of Sociology* 548. See also Bruce Kogut, 'Joint Ventures: Theoretical and Empirical Perspectives' (1988) 9 *Strategic Management Journal* 319, 320-21; Oxley and Silverman (n 40) 215-24.
[147] Kogut (n 146) 321-22.

whether to use the joint venture format based on whether it would maximise their profits through improving their competitive position vis-à-vis their competitors.[148]

Harrigan, however, classifies the motives for joint ventures as internal, competitive and strategic.[149] This classification is actually similar to the distinction between the transaction costs and strategic behaviour theories. It can be stated that the transaction cost theory refers to the internal motives, whilst the strategic behaviour theory refers to the competitive and strategic motives to explain the reasons for joint ventures. Despite the fact that these two theories use different criteria to explain firms' motives, they overlap and complement each other in many aspects. Furthermore, there are some other explanations for the use of joint ventures.[150] Therefore, it is herein relied on the transaction cost and the strategic behaviour theories, and other theories, in order to analyse the motives behind joint ventures.

In this context, these motives may be divided into six categories, which are: (i) providing transactional efficiencies; (ii) accessing complementary assets; (iii) reducing risks; (iv) achieving economies of scale; (v) entering into a new market; and (vi) acquiring market power. These motives may overlap with each other in part, and firms may have either one or all of these motives to set up a joint venture.

Most of these motives are similar to those for amalgamations and acquisitions. However, the joint venture model is generally preferred over these, because the parties can combine their operations only to the extent that it is necessary to achieve their targeted objectives. This is particularly the case if firms have ideas, know-how or expertise that may be used in an area unrelated to their core business.[151] However, if the parties' intention is to integrate all or most of their core business activities, amalgamations or acquisitions may be a better option for them.

---

[148] ibid.
[149] Kathryn Rudie Harrigan, *Strategies for Joint Ventures* (Lexington Books 1985) 28-36.
[150] Kogut (n 146) 322-23.
[151] OECD, *Competition Policy and Joint Ventures* (n 27) 21; Chang and others (n 5) 237 fn.35.

1. Providing Transactional Efficiencies

Joint ventures may be used as a means of avoiding high transaction costs stemming from conducting a complex business operation through formal agreements that include many uncertainties.[152] In a long term business relationship, it may be difficult to anticipate all future contingencies and to address all of them in the agreement.[153] If one party makes agreement-specific investments, it may lose its bargaining power against the other party, due to the fact that it is likely to become more reliant on the continuation of the agreement to recoup these investments. In this case, such a party may face the risk of opportunism and, thus, may demand more favourable terms thereby increasing the costs for the other party, or it may refuse to make the necessary investments.[154] Transaction costs may also increase where the parties need to enter a complex series of agreements for the project concerned. Negotiating and drafting these agreements may give rise to wasting time, effort and financial costs, which might even result in the failure of the project.

Through providing the partial integration of the parties, the joint venture format offers some advantages in overcoming these problems. First of all, it is easier to deal with problematic issues within the management of the joint venture in due course rather than anticipating and specifying them in drafting an agreement. The fact that each parent makes investments in the joint venture and shares profits normally decreases the likelihood of opportunism.[155] Furthermore, managerial control enables the parents to monitor the activity of the joint venture and, thus, reduce any information imbalance that intensifies the effects of opportunism.[156] Joint ventures may also eliminate uncertainties and delays resulting from concluding a series of agreements, by increasing the speed of the transaction between the parents. This is extremely important, particularly in the high-technology industries in which the

[152] Kogut (n 146) 320-21.
[153] Brodley (n 2) 1527; Pitofsky, 'A Framework for Antitrust Analysis of Joint Ventures' (n 10) 895; Chang and others (n 5) 240; Shane A Johnson and Mark B Houston, 'A Reexamination of the Motives and Gains in Joint Ventures' (2000) 35 *Journal of Financial and Quantitative Analysis* 67, 72.
[154] Brodley (n 2) 1527; Johnson and Houston (n 153) 72.
[155] Chang and others (n 5) 240.
[156] Brodley (n 2) 1527.

speed of technological change is very high, and in the network industries which require continuous cooperation between firms.[157]

2. Accessing Complementary Assets and Skills

Due to the rapid pace of technological development and increasing global competition, not only small firms but also large firms do not possess all of the necessary technologies, expertise and assets to sustain their competitive position in the market.[158] Therefore, accessing the complementary assets and skills of other firms constitutes a common rationale for the formation of joint ventures. This is particularly the case where firms need each other's technology to conduct R&D for a new product. In these cases, R&D joint ventures may be used to integrate such complementary technologies.[159] Such joint ventures form an effective way of technology transferring[160] and, therefore, are very popular in the high-technology industries.[161]

Technology transferring through joint ventures may also be the case, where one party holds a technology, and the other party possesses the necessary assets and capabilities to enable production by using this technology, and/or to market or distribute the resulting products. In these cases, joint ventures may be chosen over licence agreements by firms in order to obtain the transactional efficiencies mentioned above. The joint venture format may also be advantageous since managerial control allows the parties to benefit more effectively from each other's knowledge and skills. Furthermore, it may be profitable to the owner of the technology in cases where the innovation has the potential to become a huge success.

Joint ventures may also serve the integration of complementary assets and skills other than technology. For example, a firm may have a product but may lack the

[157] See IV/A/1 and 2 above.
[158] Oxley and Silverman (n 40) 210-11.
[159] OECD, *Competition Policy and Joint Ventures* (n 27) 19; Kattan (n 1) 940; Keith W Glaister and Peter J Buckley, 'Strategic Motives for International Alliance Formation' (1996) *33 Journal of Management Studies* 301, 305.
[160] OECD, *Competition Policy and Joint Ventures* (n 27) 19.
[161] See IV/A/1 above.

necessary skills to market it, whereas another firm without the capability to manufacture this product may have high level marketing skills.[162] In this case, these firms may realise synergies by combining these complementary skills.

Access to complementary assets and skills is a particularly common incentive for forming joint ventures with non-competitors.[163] For instance, a firm operating in a service industry may need to cooperate with another firm specialising in computer software, to improve its service quality and reduce operating costs. The joint venture between Delta Air Lines and AT&T may be given as an example of such a joint venture.[164] However, competitors also set up joint ventures for this purpose, where, for example, one party is strong in one technology or skill, whilst the other party is strong in another.[165]

3. Reducing Risks

Another common motive behind joint ventures is to efficiently share the risks and costs involved in a business operation. Although this motive applies especially to small firms, large firms also often prefer joint ventures for highly risky projects that include great uncertainties and require significant investments. For example, mining projects, particularly oil and gas exploration operations, may be viewed as risky even for large multinational firms because of the low success rate of the operation as well as the high level of investment.[166] Expanding operations into new geographical markets, particularly into developing countries, involves many political and economic risks for foreign firms. The formation of a joint venture with a local firm may decrease these risks by providing faster entry and success in the market and, therefore, the recoupment of investments.[167]

---

[162] Edmund W Kitch, 'The Antitrust Economics of Joint Ventures' (1985) 54 *Antitrust Law Journal* 957, 964; Chang and others (n 5) 240-41.
[163] OECD, *Competition Policy and Joint Ventures* (n 27) 19; Commission, 'Impacts of Joint Ventures on Competition' (n 17) 29; Kattan (n 1) 940.
[164] See 61 above.
[165] Kitch (n 162) 964.
[166] OECD, *Competition Policy and Joint Ventures* (n 27) 20.
[167] Glaister and Buckley (n 159) 304.

Spreading risks and costs may also be an important incentive for both small and large firms to engage in R&D. In particular, in the high-technology industries, uncertainties about the results of R&D, future success and the short life cycle of products, makes these activities very risky and costly.[168] In some circumstances, an innovation may not be protected sufficiently by intellectual property laws or may be easily reverse engineered by competitors.[169] This creates free riding problems that increase the risks in investing in R&D. In such cases, setting up an R&D joint venture with competitors may be an effective way to reduce these risks. These risks may also arise where all the sellers of a homogenous product benefit from the marketing efforts of a seller on the general characteristics of the product.[170] The formation of a joint venture between these sellers may be one way to deal with this problem.

4. Achieving Economies of Scale

In industries which are characterised by economies of scale (and/or economics of scope), joint ventures are widely used to achieve substantial cost savings. In particular, small firms with limited production capacities combine their production operations to increase their output, thereby minimising the production cost for per unit. Where the demand for the product is low, even larger firms may not be capable of achieving economies of scale through internal growth.[171] Amalgamations and acquisitions may also be used by firms as a vehicle to attain economies of scale. However, for this purpose, joint ventures may be chosen over these models, due to the fact that they may eliminate some uncertainties and difficulties resulting from the latter, and that they may also provide the opportunity to end the cooperation if the joint venture does not achieve as expected.[172]

In addition to the production level, economies of scale may be achieved at the R&D and distribution levels. For example, an R&D joint venture may avoid the costs of

[168] Kattan (n 1) 939; Johnson and Houston (n 153) 73.
[169] Kitch (n 162) 963; Kattan (n 1) 942-43; Chang and others (n 5) 238.
[170] Kitch (n 162) 963; Chang and others (n 5) 238.
[171] Glaister and Buckley (n 159) 304.
[172] P Mariti and R H Smiley, 'Co-Operative Agreements and the Organization of Industry' (1983) 31 *Journal of Industrial Economics* 437, 444-45.

duplicating the same process and perform more efficient research.[173] Purchasing and sales joint ventures may also give rise to cost-reductions in transactions with third parties, by increasing bargaining power while decreasing the number of agreements concluded for the operation.

5. Entering into New Markets

A traditional objective for establishing a joint venture is to enter new product or geographical markets, in most cases foreign markets. Multinational firms use the distribution channels and market knowledge of local firms, through joint ventures, in order to make a faster and stronger market entry. Where there are legal barriers to foreign firms, the formation of joint ventures with local firms may be the only way to avoid such barriers. These barriers are explained more elaborately in the previous parts in the context of the airline and mining industries.[174]

In some circumstances, joint ventures may also be useful when entering a specific region in the home country. This is particularly the case where a stand-alone entry to such a geographical market is not profitable because of the high transportation costs or the lack of knowledge about customer choices and demand for the product in the region. For example, in the cement industry, the transportation costs of supplying products to distant areas may make it difficult to compete with local manufacturers. Building a new plant in the region may also not be efficient if the demand for the product is limited. Therefore, setting up a production joint venture with a firm already operating in the region may enable firms to achieve a quicker and stronger entry. The joint venture between Pennsalt and Olin Mathieson, where the parties built a plant for the production of sodium chlorate in the Southeastern US, is a well-known example of a joint venture being established based on such a motive.[175]

Joint ventures may also be attractive to firms which aim to access new product markets. This may be particularly the case where the market is concentrated and

[173] Kitch (n 162) 963; Kattan (n 1) 939.
[174] See IV/A/3 and 4 above.
[175] See Pitofsky, 'Joint Ventures under the Antitrust Laws' (n 2).

characterised by high entry barriers.[176] In this regard, the formation of joint ventures may help all firms, but especially small firms, to overcome these entry barriers.

6. Acquiring Market Power

The motives explained above generally relate to the creation of efficiencies, ie the procompetitive effects of joint ventures. On the other hand, the purposes of firms forming joint ventures may be merely to coordinate with their competitors more effectively or to eliminate an important competitor, thereby increasing their market power.[177] For example, the studies of Fusfeld in the iron and steel industry and Stuckey in the aluminium industry show that creating a network of joint ventures may be used to facilitate collusion among active players in the industry, and to discourage new entries.[178] Similarly, vertical joint ventures may enable firms to prevent or hinder the access of competitors to an input or customers and, thus, gain a better competitive position against them. These motives mainly indicate the anticompetitive effects of joint ventures. In the following chapters, the analysis of these effects is given more elaborately.

D- Drawbacks of Joint Ventures as a Business Model

Despite having the potential benefits described above, joint ventures are, in some respects, cumbersome organisations with significant drawbacks. From a competition law perspective, it is essential to analyse these drawbacks and understand the reasons behind the rules and structures used by the parties to overcome them, and why firms prefer other types of business models, such as amalgamations and acquisitions, over joint ventures.[179]

Chang, Evans and Schmalensee divide the disadvantages of joint ventures into three main groups: divergent objectives, externalities and organisational problems.[180]

---

[176] OECD, *Competition Policy and Joint Ventures* (n 27) 20.
[177] Commission, 'Impacts of Joint Ventures on Competition' (n 17) 30; Glaister and Buckley (n 159) 305.
[178] Fusfeld (n 113); Stuckey (n 114).
[179] Chang and others (n 5) 243.
[180] ibid 242-49.

According to Harrigan, however, the primary drawbacks of joint ventures include loss of control, strategic inflexibility, competition law problems and sovereignty conflicts.[181] Through considering these categorisations, the dangers in using joint ventures may generally be explained under three headings: (i) divergence in objectives; (ii) trust problems; and (iii) ineffective management structure.

1. Divergence in Objectives

Even if firms reach a mutual understanding in setting up a joint venture, this does not eliminate all conflicts between their objectives with regard to the operations and strategies of the joint venture. These conflicts have the potential to lead to deadlocks in the joint venture's management, and prevent the parent firms achieving all of their expectations in participating in the joint venture.[182]

This may be the case especially in respect of international joint ventures involving multinational and local firms. Therein, the objective of the multinational firm is normally to use the joint venture in a way which creates optimal benefit to its entire global business, while the local firm is only concerned about maximising the profitability of the joint venture's business.[183] This difference in objectives may result in conflicts in certain areas. For example, the multinational firm may not be willing to permit the joint venture to export its products into other markets where it has already manufactured and distributed the products as part of its global business, since this would reduce its profits in those markets.[184] In contrast, such market expansion is likely to be in the interests of the local firm because it increases the profits of the joint venture.[185] Similar conflicts of interest may emerge in the areas of taxation and investment policies.[186]

A conflict of objectives can even arise in the context of joint ventures between firms from the same country. Chang, Evans and Schmalensee give a theoretical example of

[181] Harrigan, *Strategies for Joint Ventures* (n 149) 36-40.
[182] ibid 38.
[183] Miller and others (n 138) 14.
[184] ibid.
[185] ibid.
[186] ibid 15-16.

such a situation in relation to R&D joint ventures. They explain that where the parents agree to form an R&D joint venture for developing a new technology which could have different forms, there may be disagreement between them on the selection of the form of technology to be developed, particularly if the relative profit opportunities of the parents differ based on the chosen form.[187]

2. Trust Problems

By participating in a joint venture, each parent forgoes some control over capital, technology or other assets or skills in favour of other parents.[188] Such loss of control may be tolerated if there is some level of trust between the parent firms.[189] However, establishing such trust may be particularly difficult if the parents are, or become, competitors in advance of or after the formation of the joint venture. In such cases, one firm may fear that the other firm may access its customer portfolio, know-how or other trade secrets, and use these to acquire a competitive advantage against it.[190] As a result, in the absence of trust among the parties, they are likely to refrain from participating in the joint venture and choose another business model, or, to set up a joint venture with more trustworthy but less capable firms for the operation concerned.

3. Ineffective Management Structure

Many organisational problems in joint ventures arise from the fact that they are jointly controlled by at least two firms.[191] Therefore, unlikely solely controlled entities, joint ventures must have more complicated managerial mechanisms to carry out their day-to-day operations.[192] Informal negotiation, rather than hierarchical command, is the prevailing way of resolving conflicts in the decision-making

[187] Chang and others (n 5) 243.
[188] Harrigan, *Strategies for Joint Ventures* (n 149) 38; Chang and others (n 5) 246-47.
[189] Chang and others (n 5) 246.
[190] ibid.
[191] Brodley (n 2) 1529; Harrigan, *Strategies for Joint Ventures* (n 149) 38; Chang and others (n 5) 246.
[192] Chang and others (n 5) 246.

processes of joint ventures.[193] In poorly structured joint ventures, this may result in deadlocks in the decision-making mechanism, and slow down the daily operations.

Since the decision-making bodies of the joint venture consist of the members appointed by the parent firms, it is normally expected that they will give priority to the interests of the parents over those of the joint venture. In this respect, to maintain the continuation of the joint venture, such bodies may act in a way which benefits all of the parents, even if this causes some loss of profit for the joint venture.[194] Accordingly, the more the management of the joint venture is autonomous of the parents the more likely it is that it will operate effectively. Nevertheless, the lack of a sufficient level of trust and conflicts of interest usually deter the parent firms from structuring such a management.

Many joint ventures involve participants with different corporate cultures. This may give rise to serious conflicts in understanding business problems and solving them, and, therefore, adversely affects the effectiveness of the joint venture's management. This may be the case especially in international joint ventures whose parents usually have different cultural backgrounds influenced by those of their home countries.[195] Nonetheless, cultural conflicts may also arise in the case of joint ventures between firms from the same country. Serious cultural clashes may cause the failure of the joint venture. The failures of Taligent, a joint venture, formed between Apple and IBM to develop a fully object-oriented operating system, and the joint venture, between Young & Rubicam and PaineWebber, may be given as examples of such cases.[196]

V. Concluding Remarks

Joint ventures are a special form of interfirm collaboration in which the parties integrate their operations into a separate entity, while remaining independent outside this integration. They therefore possess some characteristics of both amalgamations

[193] Brodley (n 2) 1529.
[194] Chang and others (n 5) 249.
[195] Miller and others (n 138) 18-19; Chang and others (n 5) 248.
[196] Chang and others (n 5) 248-49.

and acquisitions and loose contractual agreements, but at the same time differ from these two categories.

The economic effects of joint ventures may change according to their type. From an economic standpoint, joint ventures may be classified by using two different criteria. Firstly, based on the competitive relationship between the parents and between them and the joint venture, they may be divided into two groups: horizontal and non-horizontal (vertical and conglomerate). Secondly, according to the economic functions they perform, joint ventures can be categorised into four main groups: R&D, production, sales and purchasing joint ventures. As explained in the following chapters, these categorisations are essentially taken into account in setting out the principles for the analysis of joint ventures.

Joint ventures have become very popular in various industries, particularly the high-technology, network, airline and mining industries, which are characterised by the need for strong cooperation among industry players. A great number of these joint ventures involve multinational and local firms. These international joint ventures have contributed to both the integration of markets and the globalisation process, by decreasing entry barriers to domestic markets and by leading to the dissemination of products and technologies across different countries. In the aforementioned industries and many other industries, joint ventures are also commonly used to reduce transaction and production costs, access complementary assets, and share risks. In addition to these efficiency-based motives, firms may form joint ventures for anticompetitive purposes.

Although popular from a business viewpoint, joint ventures have some drawbacks that may cause the failure of the operation and discourage firms from using them in the first place. The main source of these drawbacks is the fact that the parent firms have to share control over the integrated operations of the joint venture. Therefore, for a joint venture to last longer there must be some level of trust between the parents, and also coherence in their objectives and corporate cultures, which facilitate reaching a mutual understanding in operating the joint venture. The lack of trust, divergence in objectives and cultural clashes increase the risk of deadlocks in the

management of the joint venture, thereby resulting in its failure. These drawbacks and the ways provided in which firms overcome them should be taken into account in the competition analysis of joint ventures, particularly in assessing the relationship between the joint venture and its parents, in other words, the former's autonomy from the latter.

In short, joint ventures play a critical role for specific industries and in the general economy. This increases the significance of adopting the right approach to the competition analysis of joint ventures, which does not unduly prevent or hinder these inherently fragile organisations, while properly addressing their anticompetitive consequences. The later chapters intend to analyse the suitability of the current EU merger control regime in this regard.

CHAPTER 3
THE TREATMENT OF FULL-FUNCTION JOINT VENTURES UNDER THE EU MERGER REGULATION

I. Introduction

This chapter aims to explain the substantive appraisal of full-function joint ventures under the EU merger control rules, which constitutes the centre of gravity of this thesis. It firstly describes the previous criteria used in categorising joint ventures for the purposes of merger control, in order to provide a better understanding of the rationale behind the current regime regarding full-function joint ventures. Then, it defines the concept of full-functionality based on the Jurisdictional Notice[1] and the Commission's decisions.

Given the fact that they have also some important consequences in relation to the substantive assessment, this chapter thirdly gives a brief overview of the procedural issues in EU merger control. The following part of the chapter, however, explains the analysis of full-function joint ventures under Article 2(3) of the Merger Regulation and Article 101 TFEU, in combination with Article 2(4) of the Merger Regulation, in different subparts. Finally, the chapter discusses the assessment of the conduct and operation of full-function joint ventures.

II. Previous Criteria to Classify Joint Ventures for Merger Control Purposes

A- Joint Ventures as a Partial Merger prior to Regulation 4064/89

Until the adoption of Regulation 4064/89[2] there had not been any specific provision or regulation regarding merger control in the EU.[3] The absence of such a specific

[1] Commission Consolidated Jurisdictional Notice under Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings [2008] OJ C95/1.
[2] Council Regulation (EEC) No 4064/89 of 21 December 1989 on the control of concentrations between undertakings [1989] OJ L395/1, corrected version [1990] OJ L257/13.
[3] The omission of a merger control provision in the EEC Treaty, the predecessor of TFEU, was a deliberate choice, because, at that time, mergers were considered as an important tool in enabling community firms to adjust to the size of the common market, and to compete with non-community firms. See Commission, 'The Problem of Industrial Concentration in the Common Market',

rule led to a discussion about whether Articles 101 and 102 (Articles 85 and 86 of the EEC Treaty at that time) could be used to control mergers. The 1966 Memorandum of the Commission was the first elaborate examination regarding the applicability of these provisions to mergers. Therein, the Commission clearly set out that Article 102 prohibiting abuse of dominant position would be the only rule in challenging mergers on competition grounds.[4] The Commission concluded that Article 101 did not apply to concentrations on the basis that it was directed at agreements, and was thus not suitable for the assessment of concentrations, which bring firms 'under a single economic management at the expense of their economic independence as a permanent arrangement'.[5]

Therefore, in these early periods, the primary question with regard to the substantive appraisal of joint ventures was which types of joint ventures, if any, would be qualified as mergers and exempted from Article 101. In the 1966 Memorandum, the Commission stated that Article 101 would continue to be applicable to joint ventures where, apart from concentration, the parent firms had entered an agreement within the meaning of Article 101(1), or the joint venture had as its purpose 'a co-ordination of the market behaviour of firms remaining economically independent'.[6] Accordingly, the Commission, in its further practice, recognised that joint ventures could be immune from Article 101 in exceptional cases where they constituted a 'partial merger'. For a joint venture to be deemed as a partial merger, the Commission required that (i) 'the parent companies completely and irreversibly abandon business in the area covered by the joint venture', and (ii) 'the pooling of

---

Competition Series No 3 (1966), reprinted in Frank L Fine, *Mergers and Joint Ventures in Europe: The Law and Policy of the EEC* (2nd edn, Graham & Trotman/Martinus Nijhoff 1994) 691-713; Karen Banks, 'Mergers and Partial Mergers under EEC Law' (1987) 11 *Fordham International Law Journal* 255, 257.

[4] The ECJ also approved the application of Article 102 to mergers. See Case 6/*72 Continental Can v Commission* [1973] ECR 215. For more information on merger analysis under Article 102, see also 1966 Memorandum (n 3) Part III paras 16-27; Banks (n 3) 263-78; Fine, *Mergers and Joint Ventures in Europe* (n 3) 74-131.

[5] The 1966 Memorandum provides several reasons for the inapplicability of Article 101 to concentrations. Firstly, the uniform application of the same rule to both concentrations and restrictive agreements would result in the prohibition of either too few cartels or too many concentrations because restrictive agreements are normally prohibited as a rule, whilst concentrations are banned exceptionally if they lead to excessive market power. Secondly, individual exemption provisions under Article 101(3) are not appropriate for merger analysis. Thirdly, the application of the absolute nullity provided in Article 101 to concentrations may give rise to undesirable consequences. 1966 Memorandum (n 3) Part III paras 5-13.

[6] ibid Part III paras 14-15.

certain areas of business [...] not weaken competition in other areas, and particularly in related areas, where the firms involved remain formally independent of each other'.[7]

In *SHV/Chevron*,[8] the Commission applied the partial merger test in avoiding the application of Article 101 to a joint venture. In this case, the parent firms combined their distribution networks and assets in relation to certain petroleum products into the joint venture for fifty years, and withdrew completely from the joint venture's market. Although the parents remained independent in some other markets, the Commission provided that any cooperation between the parents in these markets through the joint venture was unlikely because the markets were technically and economically distinct from that of the joint venture. However, *SHV/Chevron* was an exceptional decision.[9] The Commission usually viewed joint ventures as cooperative agreements falling within Article 101 by applying the partial merger test very strictly.[10]

The applicability of Article 101 to joint ventures as well as acquisitions of minority shareholdings was also discussed by the ECJ in *Philip Morris* in 1987.[11] In 1981, Philip Morris, active in the cigarette industry, acquired from Rembrandt one-half of

---

[7] The Commission also stated that Article 101 would not apply to situations where 'the parent companies transfer[ed] all their assets to the joint venture and themselves bec[a]me no more than holding companies'. Such total integration was considered as a merger. See Commission, 'Sixth Report on Competition Policy' (1977) point 55. One example of this sort of merger, cleared by the Commission, was the *IMI/Heilman* case. See Commission, 'Seventh Report on Competition Policy' (1978) point 31.

[8] Case IV/26.872 Commission Decision 75/95/EEC [1975] OJ L38/14.

[9] Following *SHV/Chevron*, there had not been any formal decisions in which the Commission treated a joint venture as a partial merger, notwithstanding that the Commission took two informal decisions to that effect. See Commission, Ninth Report on Competition Policy (1980) point 131; Commission, Twelfth Report on Competition Policy (1983) point 100. See also Banks (n 3) 293.

[10] In *De Laval/Stork*, the Commission provided that the withdrawal of the parents from the joint venture's market would be irreversible, only if the parents had transferred their existing capacity and expertise into the joint venture in a way of eliminating them, not only as actual competitors but also as potential competitors from the market. Case IV/27.093 Commission Decision 88/110/EEC [1977] OJ L59/32. Furthermore, in *KEWA*, the Commission decided that a joint venture established between potential competitors to enter a new market would be subject to Article 101. Case IV/26.940/b Commission Decision 76/249/EEC [1976] OJ L51/15. For other decisions where the Commission viewed the joint venture as not constituting a partial merger, see eg *Bayer/Gist-Brocades* (Case IV/27.073) Commission Decision 76/172/EEC [1976] OJ L30/13; *Vacuum Interrupters Ltd* (Case IV/27.442) Commission Decision 77/160/EEC [1977] OJ L48/32; *GEC/Weir Sodium Circulators* (Case IV/29.428) Commission Decision 77/781/EEC [1977] OJ L327/26; *Rockwell/Iveco* (Case IV/30.437) Commission Decision 83/390/EEC [1983] OJ L224/19.

[11] Joined Cases 142 and 156/84 *BAT and Reynolds v Commission* [1987] ECR 4487.

its wholly-owned subsidiary, which had controlled Rothmans International (RI) operating in the cigarette industry. Upon this sale agreement and the partnership agreement between the parties in relation to RI's affairs, Philip Morris gained the ability to influence the strategic decisions of RI. The Commission objected to this acquisition on the grounds that it infringed both Articles 101 and 102. As a result, in 1984, Philip Morris and Rembrandt made a new agreement under which Philip Morris owned a direct minority shareholding in RI which did not enable it to influence the management of RI. The Commission posited that under those circumstances, there was no basis for the application of Article 101 or Article 102 to the acquisition of an equity stake by Philip Morris.[12] The competitors of Philip Morris and RI, however, brought a case against this clearance by the Commission before the ECJ.

The ECJ approved the decisions of the Commission with respect to both the 1981 and 1984 agreements. The Court identified the main issue therein as 'whether and in what circumstances the acquisition of a minority shareholding in a competing company may constitute an infringement of Article [101 and 102 TFEU]'.[13] The Court went on to accept the applicability of Article 101 to the acquisition of the minority shareholding in question, because the parties remained independent after the entry into force of the agreements.[14]

With regard to the application of Article 101, the Court set out guidance for determining whether the acquisition concerned had the object or effect of restricting competition within the meaning of Article 101(1). The Court recognised that the acquisition of a minority shareholding in a competitor may 'serve as an instrument for influencing the commercial conduct of the companies in question'.[15] It added that such an influence would be more likely if the investing company had gained 'legal or *de facto* control of the commercial conduct of the other company', or if the

[12] Commission, Fourteenth Report on Competition Policy (1985) points 98-100.
[13] *Philip Morris* (n 11) para 30.
[14] ibid para 31.
[15] ibid para 37.

acquisition had granted the investing company 'the possibility of reinforcing its position at a later stage and taking effective control of the other company'.[16]

These considerations led to controversy about whether the Court acknowledged the application of Article 101 to mergers in general.[17] However, since in its judgement the Court relied on the fact that the parties remained independent, it would be difficult to claim that it clearly allowed the application of Article 101 to acquisitions of sole control of competitors.[18] The judgement explained that Article 101 could apply to acquisitions of minority shareholdings which would result in joint control over the acquired firm, ie a joint venture situation. Given the emphasis of the Court on the possibility of coordination between the parties, the judgement did not seem to introduce an amendment to the Commission's practice regarding joint ventures up to that date.[19]

B- Distinction between Concentrative and Cooperative Joint ventures under the Original Version of Regulation 4064/89

Although the dictum of *Philip Morris* was not sufficiently clear, it was used by the Commission to threaten the use of Article 101, besides Article 102, in challenging mergers, if the European Council (Council) failed to adopt a regulation for this purpose.[20] Upon the insistence of the Commission, in 1989, the Council finally issued Regulation 4064/89 which set out special substantive and procedural rules for merger control.[21] Recital 23 of the Regulation provided that it was only aimed at

[16] ibid para 38-39.
[17] Banks (n 3) 307-08; Fine, *Mergers and Joint Ventures in Europe* (n 3) 56.
[18] Banks (n 3) 308-09.
[19] The *Philip Morris* judgement is still used as an important precedent in the application of Article 101 and 102 to acquisitions of minority shareholdings. See Commission, 'Antitrust Issues Involving Minority Shareholding and Interlocking Directorates', OECD Working Party No 3 on Co-operation and Enforcement (February 2008) <http://ec.europa.eu/competition/international/multilateral/2008_feb_antitrust_issues.pdf> accessed 05 April 2013. See also Barry E Hawk and Henry L Huser, '"Controlling" the Shifting Sands: Minority Shareholdings under EEC Competition Law' in Barry E Hawk (ed), *Mergers & Acquisitions and Joint Ventures* (Juris Publishing 2004) 153-82.
[20] James S Venit, 'The "Merger" Control Regulation: Europe Comes of Age ... or Caliban's Dinner' (1990) 27 *Common Market Law Review* 7, 12-13; Fine, *Mergers and Joint Ventures in Europe* (n 3) 58.
[21] The Commission for the first time proposed a draft for merger regulation in 1973. See [1973] OJ C92/1. For the evolution of this draft to Regulation 4064/89, see [1982] OJ C36/3; [1984] OJ C51/8; [1986] OJ C324/5; [1988] OJ C130/4; and [1989] OJ C22/14.

concentrations defined as 'operations bringing about a durable change in the structure of the undertakings concerned'. It emphasised that operations 'which have as their object or effect the coordination of the competitive behaviour of independent undertakings', however, were considered to have a cooperative nature and were excluded from the scope of the Regulation. Based on this approach, the Regulation introduced the concentrative-cooperative distinction in order to determine joint ventures falling into its jurisdiction. Under this classification, concentrative joint ventures were to be treated as concentrations under the Merger Regulation, while cooperative joint ventures were subject to the Article 101 regime.

To be considered as a concentrative joint venture and analysed under the Merger Regulation, a joint venture had to satisfy two conditions, one positive and one negative. According to the positive condition, a joint venture had to be full-function, ie perform all the functions of an autonomous economic entity on a lasting basis.[22] The negative condition, however, required that the joint venture must not give rise to the coordination of the competitive behaviour of the undertakings that remained independent of each other. The application of this condition by the Commission changed in the course of time. In the 1990 Notice, for this condition to be met, the Commission required the absence of a risk of coordination among the parent firms as well as between them and the joint venture. The Notice presumed that there would be a risk of coordination if all the parent firms or only one of them remained active or potential competitors with respect to the joint venture's market. It also recognised that such a risk could arise, depending on the facts of each case, if the parents continued to operate in upstream, downstream or neighbouring markets to those of the joint venture.[23]

However, the practice of the Commission following the 1990 Notice departed from the aforementioned approach in some aspects.[24] The Commission continued to

[22] Commission Notice regarding the concentrative and co-operative operations under Council Regulation (EEC) No 4064/89 on the control of concentrations between undertakings, [1990] OJ C203/10, paras 16-19 (1990 Notice). For more detailed information about the elements of this condition, see III/B below.
[23] 1990 Notice (n 22) paras 20-36.
[24] For more information regarding this earlier approach of the Commission, see Barry E Hawk, 'Joint Ventures under EEC Law' (1992) 15 *Fordham International Law Journal* 303, 319-21*;* Fine, *Mergers and Joint Ventures in Europe* (n 3) 160-71*;* Matthew P Downs, *The Notice concerning the Assessment*

presume the presence of the risk of coordination where at least two parent firms remained active in the joint venture's market. However, the Commission appeared to treat joint ventures as concentrative where only one parent retained activities in the same market as the joint venture.[25] It posited that in such cases no meaningful competition must be expected between the parent firm and the joint venture as the former would act as the industrial leader of the latter.[26] This approach was also reflected in the 1994 Notice which replaced the 1990 Notice.[27] The Commission therein stated that in analysing whether a joint venture was concentrative, any coordination between the parent firm and the joint venture would be considered 'only in so far as it was an instrument for producing or reinforcing the coordination between the parent firms'.[28]

In brief, the phenomenon of partial merger was transformed into the concept of concentrative joint venture in Regulation 4064/89. Due to the willingness of the Commission to treat joint ventures as concentrative by limiting the situations considered to result in coordination, a greater number of joint ventures fell into the category of mergers compared to the pre-regulation period. However, similar to the partial merger test, the concentrative-cooperative distinction provided that a joint venture was analysed either according to the merger test under the Merger Regulation or according to Article 101within the framework of Regulation 17/62.[29] As a result, firms usually sought to structure their joint ventures as concentrative in order to benefit from the more lenient test and the faster procedure under the Merger

---

of Cooperative Joint Ventures pursuant to Article 85 of the EEC Treaty: An Assessment (Leuven University Press 1995) 33-40; James Venit, 'The Treatment of Joint Ventures under the EC Merger Regulation- Almost through the Thicket' in Barry E Hawk (ed), *Mergers & Acquisitions and Joint Ventures* (Juris Publishing 2004) 521-27.

[25] See *Thompson/Pilkington* (Case IV/M.86) [1991].

[26] Venit, 'The Treatment of Joint Ventures' (n 24) 525-527; Frank L Fine, 'Revised Notice on the Distinction between Concentrative and Co-operative Joint Ventures' (1994) 15 *European Competition Law Review* 291, 292-93.

[27] Commission Notice on the distinction between concentrative and cooperative joint ventures under Council Regulation (EEC) No 4064/89 on the control of concentrations between undertakings [1994] OJ C385/1.

[28] ibid para 8.

[29] Council Regulation (EEC) No 17/1962: First Regulation implementing Articles 85 and 86 of the Treaty [1962] OJ 13/204, replaced by Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, [2003] OJ L1/1.

Regulation.[30] This task was, nevertheless, not so simple, because in spite of the guidelines provided by the Commission, the analysis of the risk of coordination between the parent firms contained significant uncertainties which gave rise to an increase in the legal costs of firms as well as the misallocation of administrative resources by the Commission.[31]

III. Definition of Full-Function Joint Ventures

The distinction between concentrative and cooperative joint ventures was widely criticised mainly on the grounds that it lacked clarity and was an artificial categorisation, which led to the application of different substantive tests and procedures to operations with similar effects on market structure.[32] Based on these criticisms, the Commission included a reform regarding joint ventures into Regulation 1310/97, amending Regulation 4064/89.[33] According to this reform, all full-function joint ventures would be viewed as falling within the Merger Regulation, regardless of whether they would result in the coordination of the competitive behaviour of the parent firms. If the creation of a full-function joint venture had the object or effect to lead to such coordination, it would be analysed pursuant to Article 101 under the Merger Regulation. As a consequence of this amendment, the presence of coordination which had been a condition relevant to the jurisdiction of the Merger Regulation became an independent consideration taken into account in the substantive analysis of full-function joint ventures under the Regulation.[34] This

---

[30] Alyssa A Grikscheit, 'Are We Compatible?: Current European Community Law on the Compatibility of Joint Ventures with the Common Market and Possibilities for Future Development' (1994) 92 *Michigan Law Review* 968, 993-94; Bernard Bensaid, David Encoaua and Antoine Winckler, 'Competition, Cooperation and Mergers: Economic and Policy Issues' (1994) 38 *European Economic Review* 637, 642-43; Geert A Zonnekeyn, 'The Treatment of Joint Ventures under the Amended E.C. Merger Regulation' (1998) 19 *European Competition Law Review* 414, 416.

[31] Hawk (n 24) 322-23; Venit, 'The Treatment of Joint Ventures' (n 24) 530.

[32] See Commission, 'Green Paper on the review of the Merger Regulation' COM (96) 19, 24; Anand S Pathak, 'The EC Commission's Approach to Joint Ventures: A Policy of Contradictions' (1991) 12 *European Competition Law Review* 171; Hawk (n 24) 322-324; Grikscheit (n 30); Edurne Navarro Varona, Andres Font Galarza, Jaime Folguera Crespo and Juan Briones Alonso, *Merger Control in the European Union: Law, Economics and Practice* (2nd edn, Oxford University Press 2005) 38-39.

[33] Council Regulation (EC) No 1310/97 of 30 June 1997 amending Regulation (EEC) No 4064/89 on the control of concentrations between undertakings [1997] OJ L180/1.

[34] Nonetheless, the Commission's practice prior to Regulation 1310/97 as to evaluating the possibility of any coordination may be utilised in analysing the likelihood of coordination according to Article 101, in combination with Article 2(4) of the Merger Regulation.

policy is also accepted in Regulation 139/2004 which is the current merger regulation.[35]

In this regard, full-functionality is currently the only criterion to identify joint ventures falling under the Merger Regulation. However, obviously, the Commission must firstly determine whether the operation in question amounts to a joint venture, ie whether the entity concerned is jointly controlled by two or more independent firms. Thus, this part explains how the Commission and the EU courts analyse both joint control and the full-functionality criterion, respectively.

A- Joint Control

Since the adoption of Regulation 4064/89, joint control has been considered as a condition in determining whether the entity in question constitutes a joint venture within the meaning of the Merger Regulation. In the Jurisdiction Notice, the Commission provides detailed guidance about the meaning of joint control based on its existing practice and the EU case law. The Notice stipulates that 'joint control exists where two or more undertakings have the possibility of exercising decisive influence over another undertaking'.[36] Decisive influence herein means the power to block the strategic decisions of an undertaking. In this regard, because in joint venture situations two or more firms have the power to block strategic decisions, these firms must reach a common understanding in determining the commercial policy of the joint venture.[37]

Joint control is regarded as clearly existing where both parents are equally represented in the decision-making bodies of the entity concerned. This is normally the case if both firms hold 50 % shares in the entity. However, in this scenario, there must not be any formal agreement empowering one of the parents with more voting

[35] Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings [2004] OJ L24/1. See also Commission, 'Green Paper on the review of Council Regulation (EEC) No 4064/89' COM (2001) 745 final, paras 100-24.
[36] Jurisdictional Notice (n 1) para 62. Such definition was also accepted by the General Court in *Cementbouw v Commission*. Case T-282/02 [2006] ECR II-319, paras 42. See also Case T-76/08 *El du Pont v Commission* [2012] ECR II-0000, para 69; Case T-77/08 *Dow Chemical v Commission* [2012] ECR II-0000, para 84.
[37] ibid.

rights or with a casting vote to be used in the event of a tied vote.[38] Equality in voting rights may also arise if two minority shareholders that collectively own a majority of voting rights establish, and transfer their voting rights to, a holding company in which they have equal voting rights.[39]

Even in the absence of equality between the parent firms in voting, joint control may arise, where in the statute of the company or in an agreement, minority shareholders are provided with specific veto rights.[40] It is not necessary that these veto rights grant their holders the power to exercise decisive influence on the day-to-day operations of the joint venture. Rather, it is enough that the minority shareholder has a veto right to block strategic decisions related to the business policy of the entity concerned.[41] Strategic decisions in this sense normally include those related to the budget, the business plan or the appointment of senior management. Decisions regarding major investments may also be considered as strategic depending on the nature of the market. The existence of a veto right in relation to any of the strategic decisions is sufficient to confer joint control regardless of whether such a veto right is actually used by the holder or not.[42]

The Commission also acknowledges that in certain circumstances joint control may exist on a *de facto* basis. Firstly, even if one parent is legally able to take all strategic

[38] The Commission recognises that a casting vote may not prevent the existence of joint control where it can be exercised only after a series of stages of arbitration and attempts at reconciliation or in a very limited field. Jurisdictional Notice (n 1) para 82. Furthermore, in *RTL/Veronica/Endemol*, the Commission decided that joint control existed, even if RTL had a casting vote right due to the fact that the other parent Endemol provided a contribution to the joint venture, which was vital for its operation. The Commission stated that this contribution made RTL dependent on Endemol for determining the strategic policy of the joint venture so that the exercise of the casting vote by RTL would be unlikely. Case IV/M.553 [1995] para 11.

[39] The joint exercise of voting rights by minority shareholders may also be provided by an agreement under which they undertake to act together in using their voting rights. Jurisdictional Notice (n 1) para 75.

[40] ibid para 65. Veto rights may be set out by means of a specific quorum required for strategic decisions to be taken. For example, where an 80 % majority of votes is necessary to adopt strategic decisions, shareholders holding more than 20 % will have the right to veto these decisions. Secondly, the statute of the joint venture or any other agreement may require the affirmative votes of certain minority shareholders in order for a strategic decision to be taken. ibid.

[41] Situations of joint control based on such veto rights are sometimes called 'negative control'.

[42] ibid para 67. Veto rights provided to minority shareholders to protect their financial interests as investors are not sufficient to confer joint control due to the fact that they are not related to strategic decisions. Therefore, veto rights concerning issues such as changes in the statute, an increase or decrease in the capital, or the liquidation, sale or winding-up of the joint venture do not form joint control. ibid para 66.

decisions, it may still depend on a minority shareholder that provides a significant contribution, which is crucial for the operation of the entity in question. This contribution may be a huge investment or the transfer of an intellectual property right or license right which is required for the joint venture to operate in the market. In such situations, the majority shareholder may not be able to enforce its position, and may have to reach an agreement with the minority shareholder on strategic decisions.[43] In *RTL/Veronica/Endemol*, the Commission stated that even if RTL had a majority shareholding and a casting vote, it could not enforce its position since Veronica-Endemol supplied the programmes that were vital for the operation of the joint venture, and held that this situation would lead to *de facto* joint control.[44]

Secondly, *de facto* joint control may arise between minority shareholders, if one of them makes a contribution that is crucial for the other to reach its goals in participating in the joint venture. The Commission provides that in these cases, strong common interests exist between the minority shareholders in a way which urges them to act together in using their voting rights regarding the strategic decisions of the entity.[45]

Merely passive investments are not normally deemed by the Commission to be significant contributions on the basis that they are not directly related to the operation of the entity concerned.[46] In *Hutchison/RCPM/ECT*,[47] it held that ABM, as a merely financial investor, had a different interest in getting involved in the joint venture from those of the other two strategic investors, Hutchison and RCPM, which provided a crucial contribution to the joint venture. Accordingly, the Commission found that Hutchison and RCPM, each owning 35 % of shares, had joint control over the joint venture, whereas there was not such joint control between ABM and any of the strategic investors.[48]

[43] ibid para 78.
[44] *RTL/Veronica/Endemol* (n 38) para 11.
[45] Jurisdictional Notice (n 1) para 77.
[46] ibid 79.
[47] *Hutchison/RCPM/ECT* (Case COMP/JV.55) [2001].
[48] ibid paras 14-21.

It should be noted that the necessity of coalitions between minority shareholders to take strategic decisions, on its own, is not assumed to confer joint control in the absence of strong common interests forcing them to act in the same way.[49] For instance, where a firm has just three shareholders each holding one third of the voting rights and a simple majority of votes is required to take strategic decisions, the majority can be provided by the coalition of any two of these shareholders. In this case, joint control does not exist if there is no strong commonality of interests between the shareholders.

B- Concept of Full-Functionality

1. Independence

The full functionality criterion essentially requires that the joint venture has an independent character which enables it to perform the functions normally carried out by undertakings in the same market. This independence requirement is considered to have two principal features, self-sufficiency and commercial autonomy.

a) Self-Sufficiency

With respect to the self-sufficiency element, the Commission provides that the joint venture must have the necessary internal resources including staff, assets and finance to operate independently in the market.[50] Accordingly, the joint venture first of all must have an independent management dedicated to its day-to-day operations. The personnel must be normally employed by the joint venture.[51] However, outsourcing the necessary personnel and expertise from third parties may not change the full-function character of the joint venture if it is common practice in the industry concerned.[52] This may be the case even if the necessary personnel are seconded by the parent firms to the joint venture, provided that the contract is made on an arm's

[49] Jurisdictional Notice (n 1) para 80.
[50] ibid para 94.
[51] See *ENW/Eastern* (Case IV/M.1315) [1998] para 9.
[52] Jurisdictional Notice (n 1) para 94. See also *Lonza/Teva (*Case COMP/M.5479) [2009] para 7.

length basis under normal commercial conditions.[53] The joint venture may also be considered as full-function if it receives its personnel from its parent firms only for a start-up period.[54] In *RSB/Tenex/Fuel Logistics*,[55] the Commission stated that in order for the full-functionality criterion to be met, the parent firms must submit a concrete plan on the process in which the joint venture would have its own staff.[56]

To be full-function, the joint venture must also have access to the necessary financial resources and tangible and intangible assets, including the intellectual property rights required for operating in the market. The joint venture does not necessarily have to have the legal ownership of these resources. In *Dupont/Hitachi*, the Commission did not question the full-functionality of the joint venture even if the parent remained the legal owner of the production facilities to be used by the joint venture, on the grounds that the joint venture would gain the strategic control of these facilities.[57] Similarly, in *KLM/Alitalia*,[58] the Commission decided that the fact that the joint venture would operate based on the infrastructure legally owned by the parents did not undermine its full-functionality, due to the fact that they were made available unconditionally for access by the joint venture.[59] Furthermore, the Commission may consider the joint venture as full-function, even if it is intended to use the facilities and equipment of the parent firms, as long as according to the specific features of the operation and the market concerned, this is necessary and lasts for a transitional period.[60]

---

[53] See *Thomson/Deutsche Aerospace AG* (Case IV/M.527) [1995] para 10; *Elf/Texaco/Antifreeze* (Case IV/M.1135) [1998] paras 6-7.

[54] Jurisdictional Notice (n 1) para 94. See also *Voest Alpine Industrieanlagenbau GmbH/Davy International Ltd* (Case IV/M.585) [1995] para 8; *Dupont/Hitachi* (Case IV/M.994) [1997] para 8; *BP/Chevron/ENI/Sonangol/Total* (Case COMP/M.6477) [2012] para 11.

[55] Case IV/M.904 [1997].

[56] ibid para 9.

[57] *Dupont/Hitachi* (n 54) para 10.

[58] Case COMP/JV.19 [2000].

[59] ibid paras 13-16. See also *PPC/Wind* (Case COMP/M.2565) [2001] para 11. With regard to intellectual property rights, it is sufficient that the necessary intellectual property rights and know-how are licensed to the joint venture for its duration. See eg *Thomson/Deutsche Aerospace AG* (n 53) para 10; *Union Carbide/Enichem* (Case IV/M.550) [1995] para 11.

[60] *Dupont/Hitachi* (n 54) paras 9-10. Similarly, the full-function status of the joint venture may not be questioned if it is funded by the parents only for an initial period. See *Hochtief/Geosea/Beluga Hochtief Offshore* (Case COMP/M.6315) [2011] para 14.

b) Commercial Autonomy

In order to have full-function character, the joint venture must also be capable of exercising its own commercial policy independently of its parents. However, it is accepted that this condition does not require that the joint venture enjoys autonomy in relation to the adoption of the strategic decisions defined above. In *Cementbouw*, the General Court held that an opposite conclusion would result in a situation where a jointly controlled undertaking could never be considered as a full-function joint venture.[61] Rather, the concept of autonomy herein is understood as requiring that the joint venture is essentially independent of its parents in determining its commercial policy, in relation to selling to, and purchasing from, third parties, and that it deals with its parents on an arm's length basis. In this regard, such commercial decisions concerning day-to-day operations are normally supposed to be taken by the independent management of the joint venture without potentially being subject to the exercise of a veto right by any parent firm.[62] Such commercial autonomy is considered to indicate that the joint venture has its own access to or presence in the market, ie it is not merely ancillary to the business operations of the parent firms. Thus, joint ventures which have only one specific function, such as R&D, production or distribution, are in principle not viewed to be full-function, since they do not have their own access to or presence in the market in this sense.[63]

The analysis of whether the joint venture has commercial autonomy may be essential, particularly if the parent firms retain significant activities in the markets where the joint venture is intended to operate. The future presence of the parents in these markets does not necessarily affect the full-function character of the joint venture, as long as it has an independent management dedicated to its day-to-day operations and the necessary finance, staff and assets to operate in the market. In *Wegener/PCM*,[64] for instance, the Commission did not question the full-functionality of the joint venture engaged in publishing national-regional newspapers, even if the

[61] See *Cementbouw* (n 36) para 62. See also Jurisdictional Notice (n 1) para 93.
[62] See eg *ECT/PONL/Euromax* (Case COMP/M.3576) [2004] para 12; *American Express/Fortis/Alpha Card* (Case COMP/M.5241) [2008] paras 12-15. For a contrary decision, see *Areva/Urenco/ETC* (Case COMP/M.3099) [2004] paras 158-163.
[63] Jurisdictional Notice (n 1) para 95.
[64] Case COMP/M.3817 [2005].

parent firms retained, to a significant extent, activities in the same market as the joint venture. In this decision, the Commission mainly relied on the fact that the joint venture would have its own editorial board, a team of dedicated full-time employees, and its own management independent from those of its parents, and set the prices for its newspapers and for the sale of national and regional advertisements.[65]

The absence of any future competition between the parent firms with regard to the joint venture's market, however, may be used positively by the Commission as evidence supporting the commercial independence of the joint venture.[66] In any case, as explained below, the presence of the two parent firms in the joint venture's market is taken into account in relation to the appraisal of the risk of coordination under Article 2(4) and (5) of the Merger Regulation.[67]

With regard to commercial autonomy, the Commission primarily focuses on the vertical relationship between the joint venture and its parents which operate in upstream or downstream markets. Accordingly, if a joint venture relies, to a significant extent, on sales to, and purchases from, its parent firms and has limited capacity to deal with third parties, its full-function character may be questioned.[68] In analysing such a relationship, the Commission takes into account a number of different situations.

First of all, the Commission acknowledges that the reliance of the joint venture almost entirely on supplies to or purchases from its parent firms does not normally undermine its full-function character, as long as this is only for an initial start-up

[65] ibid para 7. For some other decisions in which the Commission viewed the joint venture as full-function even if both parent firms retained some activities in the same market as the joint venture, see eg *Telia/Telenor/Schibsted* (Case IV/JV.1) [1998]; *Home Benelux BV* (Case IV/JV.11) [1998]; *Panagora/DG Bank* (Case IV/JV.14) [1998]; *Intracom/Siemens/STI* (Case COMP/M.2851) [2003].

[66] See eg *TPM/Wood Group* (Case IV/M.1224) [1998] para 5; *BT/AT&T* (Case IV/JV.15) [1999] paras 12 and 14; *KLM/Alitalia* (n 58) paras 11-12; *Woco/Michelin* (Case COMP/M.1907) [2000] para 8; *Delta Selections/Arla Foods Hellas* (Case COMP/M.2011) [2000] para 7; *Deutsche Bahn Cargo/Contship Italia* (Case COMP/M.2859) [2002] para 5.

[67] See V/B below.

[68] This may also be the case if, under an outsourcing agreement, the joint venture essentially provides its services to its parent firms or relies on the services provided by them. See Jurisdictional Notice (n 1) para 100. Therefore, the explanations made in this part also cover such outsourcing situations unless otherwise indicated.

period.[69] In these situations, the parties must submit evidence that the exclusivity will continue for a start-up period.[70] In the Jurisdictional Notice, the Commission stipulates that the initial period must not normally exceed a period of three years.[71] Nevertheless, a longer period may be deemed as initial according to the specific characteristic of the industry concerned. In *Areva/Urenco*, the Commission held that even if for a considerable period the joint venture would sell the equipment concerned, only to its parent firms, such a period could be viewed as an initial period due to 'the particularly long lead times prevailing in the nuclear industry'.[72]

If the joint venture is intended to make sales to its parent firms on a lasting basis, the Commission primarily takes into account the relative proportion of sales made to its parents compared to the total production of the joint venture.[73] In this regard, the Commission, in principle, presumes that the joint venture has full-function status if it achieves more than 50% of its turnover with third parties.[74] Below this threshold, the Commission evaluates the commercial autonomy of the joint venture on a case-by-case basis. The Jurisdictional Notice states that for the joint venture to qualify as full-function it may be sufficient that only 20 % of the joint venture's predicted sales goes to third parties, provided that the joint venture does not give preferential treatment to its parents and deals with them at arm's length on the basis of normal commercial conditions.[75] If less than 20 % of the joint venture's sales are intended to be to third parties, it is normally unlikely that the joint venture will be considered to be full-function. In *Electrabel/Energia Italiana/Interpower*,[76] the Commission found

[69] Jurisdictional Notice (n 1) para 97. See also eg *EDS/Lufthansa* (Case IV/M.560) [1995] para 11; *Nokia/Autloliv* (Case IV/M.686) [1996] para 6; *British Gas Trading Ltd/Group 4 Utility Services Ltd* (Case IV/M.791) [1996] para 11; *Home Benelux BV* (n 65) para 10.
[70] *RSB/Tenex/Fuel Logistics* (n 55) paras 15-16.
[71] Jurisdictional Notice (n 1) para 97.
[72] *Areva/Urenco* (n 62) para 15.
[73] Jurisdictional Notice (n 1) para 98. In determining the proportion of sales to be made to third parties, the Commission takes into consideration past accounts and substantiated business plans as well as the general structure of the market concerned. ibid para 99. The absence of a contractual exclusivity between the parents and the joint venture may be considered by the Commission as an indication of a lower volume of sales to the parents. See eg *UPM-Kymmene/April* (Case IV/M.1006) [1998] para 10; *Nortel/Norweb* (Case IV/M.1113) [1998] para 12; *SNPE/MBDA* (Case COMP/M.2938) [2002] para 7.
[74] Jurisdictional Notice (n 1) para 98. See also *Ruukki/Capman/Fortaco* (COMP/M.6737) [2012] para 11.
[75] ibid. See *Philips/Thomson/Sagem* (Case IV/M.293) [1993] paras 13-14.
[76] Case COMP/M.3003 [2002].

that the joint venture was not full-function, because only between 5 % and 15 % of its total sales were to go to third parties.[77]

Nonetheless, in certain situations, the Commission may take a more flexible approach in considering the proportion of sales to third parties. For example, in *Siemens/Italtel*,[78] the Commission did not question the commercial independence of the joint venture, even if it would rely entirely on sales to one of the parent firms, on the grounds that, in the foreseeable future, that parent firm would be the only buyer in the market due to its monopoly.[79] In addition, the Commission acknowledges that the fact that a joint venture makes use of the distribution system of one or more of its parent firms does not normally undermine its full-function character, provided that the parent firms are acting only as agents of the joint venture.[80]

With respect to purchases made from the parent firms, the Commission first of all analyses whether any significant value is added by the joint venture to the products or services in question. In *Union Carbide/Enichem*, the Commission decided that even if the joint venture was to purchase some products almost entirely from its parent firm, such exclusivity would not affect its full-function character because these purchases were of minor importance for the joint venture's operation.[81] Similarly, in *Saudi Aramco/MOH*,[82] the Commission found that the fact that the joint venture would make 90 % of its total crude oil purchases from its parents did not undermine its full-function status on the basis that significant added value was involved in the crude oil refining activities of the joint venture.[83] Furthermore, some decisions suggest that the Commission may not put into question the full-function

---

[77] ibid para 10. See also *Flachglas/Vegla* (Case IV/M.168) [1992]; *European Rail Shuttle* (Case COMP/D-2/38.086) [2002] OJ C13/5; *Gazprom/A2A* (Case COMP/M.5740) [2010] para 6.
[78] Case IV/M.468 Commission Decision 95/255/EC [1995] OJ L161/27.
[79] ibid para 12.
[80] Jurisdictional Notice (n 1) para 95. See also eg *TNT/Canada Post DBP Postdienst, La Poste, PTT Post & Sweden Post* (Case IV/M.102) [1991] para 14; *Wacker/Air Products* (Case IV/M.1097) [1998] para 15; *Cargill/Vandemoortele* (Case IV/M.1227) [1998] para 11; *American Express/Fortis/Alpha Card* (n 62) para 9; *Fortis/BCP* (Case COMP/M.3556) [2005] paras 15-17. In *Generali/Unicredito*, the Commission disqualified the joint venture as full-function since it was dependent to its parents, not only for its distribution functions but also for its technical and managerial functions. Case IV/M.711 [1996] paras 15-17. This decision was approved by the General Court. See Case T-87-96 *Generali and Unicredito v Commission* [1999] ECR II-203.
[81] *Union Carbide/Enichem* (n 59) para 16.
[82] Case IV/M.574 [1995].
[83] ibid para 9. See also *Metronet/Infraco* (Case COMP/M.2694) [2002] para 20.

character of a joint venture, if having only one main supplier is a characteristic of the industry concerned.[84]

The full-function character of a joint venture, nevertheless, will be questionable if it acts in the same way as a joint sales agency for its parent firms, ie if it adds only a little value to the product concerned.[85] However, the Commission provides an exception to this rule. Accordingly, if the joint venture carries out the normal functions of a trading firm in a trade market, it is principally deemed as full-function.[86] The Commission defines trade markets as those 'characterised by the existence of companies which specialise in the selling and distribution of products without being vertically integrated in addition to those which are integrated, and where different sources of supply are available for the products in question'.[87] In this respect, in order for a joint venture to be full-function it must have all the necessary facilities, such as outlets, transport fleets and sales personnel, and must be likely to make substantial purchases, not only from its parent firms but also from third parties.[88]

It should be noted that despite this comprehensive guidance by the Commission, the distinction between the concepts of commercial autonomy and joint control does not seem sufficiently clear and leads to some complications. The implications of this problematic situation are discussed extensively in Chapter 6 below.

2. Permanence

Since the concept of concentration only covers operations resulting in a 'lasting change' in the structure of the undertakings concerned and, thereby, the market concerned,[89] full-function joint ventures must also be intended to operate for a sufficiently long period to be considered as concentrations. The Commission accepts

[84] See eg *OK Ekonomisk Forening/Kuwait Petroleum Sverige AB* (Case IV/M.1256) [1998] para 13; *BP/Nova Chemicals* (Case COMP/M.3578) [2005] para 9.
[85] Jurisdictional Notice (n 1) para 101.
[86] ibid para 102.
[87] ibid.
[88] ibid. See also *AgrEVO/Marubeni* (Case IV/M.788) [1996] paras 9-10.
[89] Jurisdictional Notice (n 1) para 7.

that having sufficient resources and commercial autonomy normally indicates the permanence of the joint venture.[90] In this regard, if the joint venture is established for an indefinite period, it is in principle qualified as full-function.[91] If the joint venture agreement specifies a period for the duration of the joint venture, this period must be sufficiently long to bring about a lasting change in the structure of the undertakings concerned.[92] The Commission normally treats joint ventures with a period of eight years and above as permanent.[93] In *British Airways/TAT*,[94] it considered that just six and a half years was sufficient for the permanence condition to be met, on the basis that rapid and important legal and economic changes characterised the air transport industry.[95]

On the other hand, the Commission posits that a definite period of three years is very short in order to regard the joint venture as operating on a lasting basis.[96] The formation of a joint venture for a short period may be the case particularly where its purpose is limited only to carrying out a specific project such as building a power plant.[97]

3. Other Considerations regarding the Full-Functionality Criterion

Determining whether the full-functionality criterion is satisfied is particularly important if the jointly controlled entity is newly formed, or if joint control is established over an entity which previously did not perform all the functions of an autonomous entity. On the other hand, according to the Jurisdictional Notice, an

---

[90] ibid para 103.
[91] See eg *UPM Rus/Brist* (Case COMP/M.5150) [2008] para 8; *HBO/Ziggo/HBO Nederland* (Case COMP/M.6369) [2011] para 11; *ARM/Giesecke & Devrient/Gemalto* (Case COMP/M.6564) [2012] para 10. The fact that each parent has the right to unilaterally terminate the agreement after a specified period does not change the permanent character of the joint venture. See Jurisdictional Notice (n 1) para 103. See also *John Deere Capital Corp/Lombard North Central plc* (Case IV/M.823) [1996] para 9; *TKS/ITW Signode/Titan* (Case IV/M.970) Commission Decision 98/666/EC [1998] OJ L316/33, para 10.
[92] Jurisdictional Notice (n 1) para 103. Possible extension periods are also taken into account in determining the specified duration of the joint venture. ibid.
[93] See eg *Volvo/Atlas* (Case IV/M.152) [1992] para 8; *Lazard LLC/Intesa BCI* (Case COMP/M.2982) [2003] paras 7 and 14; *Serco/NedRailways/Northern Rail* (Case COMP/M.3554) [2004] para 7.
[94] Case IV/M.259 [1992].
[95] ibid para 10.
[96] See *Teneo/Merrill Lynch/Bankers Trust* (Case IV/M.722) [1996] para 15; *Lehman Brothers/SCG/Starwood/Le Meridien* (Case COMP/M.3858) [2005] fn 2.
[97] Jurisdictional Notice (n 1) para 104.

acquisition of joint control over another undertaking by two or more undertakings is considered as a concentration, regardless of whether the acquired undertaking will retain its full-function status after the transaction.[98] Therefore, such an acquisition constitutes a concentration even if the acquired undertaking begins to exclusively sell to or purchase from its parent firms, or relies on them in terms of human or material resources. The Commission recognises that in such cases there will be a change in the control of an undertaking, and it is sufficient to bring about a structural change in that market within the meaning of Article 3(1)(b) of the Merger Regulation.[99]

In the Jurisdictional Notice, the Commission also clarifies at which stage a concentration exists, if there are outstanding decisions of third parties that are essentially important for the joint venture to start its business activity.[100] These decisions, for example, may be the award of a contract, licences or access rights to property. The Commission acknowledges that in these situations a concentration arises once a decision has been taken in favour of the joint venture.[101]

Furthermore, an existing partial full-function joint venture may turn into a full-function joint venture due to a change in its activity. This may be the case, for instance, if a joint venture which previously only supplied to, or purchased from, its parents subsequently begins to substantially deal with third parties.[102] A partial function joint venture may also gain full-function character where its organisational structure is modified in a way which gives it the necessary resources and commercial autonomy.[103] The Jurisdictional Notice emphasises that a concentration arises when a decision leading to the joint venture meeting the full functionality criterion is taken by its shareholders or management.[104]

---

[98] ibid para 91.
[99] ibid. Whether this interpretation of Article 3 by the Commission is consistent and justifiable is discussed in Chapter 6 below.
[100] Jurisdictional Notice (n 1) para 105.
[101] ibid.
[102] ibid para 109. See also *Gazprom/A2A* (n 77).
[103] Jurisdictional Notice (n 1) para 109. See also *The Coca-Cola Company/NestlÃ©* (Case COMP/M.2276) [2001]; *American Express/Fortis/Alpha Card* (n 62) paras 8-15.
[104] Jurisdictional Notice (n 1) para 109.

Finally, the scope of the activities of a full-function joint venture may be extended into other product or geographical markets in the course of its lifetime. Such an extension is considered to be a concentration only if it entails the acquisition by the parents of the whole or part of another undertaking,[105] or if the joint venture is provided with significant additional tangible or intangible assets which constitute the basis or nucleus of that extension. In the latter case, the joint venture is required to carry out those extended activities on a full-function basis. [106] On the contrary, there will be no new concentration if the activities of a joint venture are extended without the transfer of additional assets.[107]

IV. Overview of Procedural Issues

As amalgamation and acquisition situations, the creation of full-function joint ventures is also examined according to the procedural rules set out in the Merger Regulation. A fundamental distinctive feature of this regime is to provide a 'one-stop-shop' principle. Under this principle, the Commission is granted a monopoly in examining concentrations which have a Community dimension. Thus, parties to these concentrations are not required to deal with the national competition authorities of Member States pursuant to their merger control legislation. The one-stop-shop principle also means that such concentrations are analysed exclusively under the Merger Regulation, and cannot be challenged with reference to Articles 101 and 102 TFEU. The only exception to this rule is provided for the risk of coordination between the parent firms in full-function joint venture cases, which is evaluated under Article 101 in accordance with Article 2(4) of the Merger Regulation. However, these effects are also to be analysed exclusively by the Commission within the merger procedure.[108]

As mentioned, only concentrations which have a Community dimension fall within the scope of the Merger Regulation. In order to have a Community dimension, a concentration must normally satisfy the turnover thresholds provided in Article 1 of

[105] ibid para 106.
[106] ibid para 107.
[107] ibid para 108.
[108] See V/B below.

the Merger Regulation. The second paragraph of the said article sets forth three cumulative threshold requirements: (i) the combined aggregate worldwide turnover of all the undertakings concerned must be more than 5 billion Euros; (ii) the aggregate Community-wide turnover of each of at least two of the undertakings concerned must be more than 250 million Euros; and (iii) each of the undertakings concerned must not achieve more than two-thirds of its aggregate Community-wide turnover within one and the same Member State.[109]

Once the Community dimension criterion is met, the parties are obliged to notify the Commission of the transaction before its consummation.[110] Until the Commission gives a decision, the concentration is suspended according to Article 5 of the Merger Regulation. To make the decision-taking process of the Commission faster and more efficient for the parties, the Regulation sets out some time limits that legally bind the Commission. Accordingly, in the first phase, which normally lasts 25 working days, the Commission must either clear the concentration or commence the second phase if the concentration raises serious doubts about its compatibility with the Internal Market. In the second phase, the Commission normally has another 90 working days to permit the concentration, with or without commitments, or prohibit it. Upon certain conditions, the first phase can be extended up to 35 working days, while the second phase can last up to 125 working days.[111] Therefore, in any event, a decision concerning a concentration cannot take longer than 160 days. If the Commission fails to reach a decision within these time limits, the concentration is viewed to be allowed.[112]

---

[109] According to the third paragraph of Article 1, however, concentrations which do not meet this threshold will still have a Community dimension if they meet a second threshold test. This test requires that: (i) the combined aggregate worldwide turnover of all the undertakings concerned is more than 2.5 billion Euros; (ii) in each of at least three Member States, the combined aggregate turnover of all the undertakings concerned is more than100 million Euros; (iii) in each of these three Member States, the aggregate turnover of each of at least two of the undertakings concerned is more than 25 million Euros; and (iv) each of the undertakings concerned does not achieve more than two-thirds of its aggregate Community-wide turnover within one and the same Member State.

[110] Article 4 of the Merger Regulation.

[111] Article 10 of the Merger Regulation.

[112] ibid. For more information about the procedural aspects of the EU merger control, see Navarro Varona and others (n 32) 349-96; Mihalis Kekelekis, *The EC Merger Control Regulation: Rights of Defence* (Kluwer Law International 2006), John Cook and Christopher Kerse, *EC Merger Control* (5th edn, Sweet & Maxwell 2009) 115-88.

V. Substantive Appraisal of the Creation of a Full-Function Joint Venture

As stated earlier, the creation of a full-function joint venture is normally appraised in accordance with two different substantive tests. Firstly, in all cases, it is examined under Article 2(3) of the Merger Regulation, which is the legal test applicable to all concentrations. Secondly, if the formation of a full-function joint venture has, as its object or effect, the coordination of the competitive behaviour of the undertakings concerned, this coordination will essentially be analysed with reference to Article 101, in combination with Article 2(4) and (5) of the Merger Regulation.

This part firstly explains the substantive appraisal of full-function joint ventures under Article 2(3). Since this test applies to full-function joint ventures mainly in the same way as mergers, the guidelines and the case law regarding merger analysis are explained through highlighting points on which the appraisal of full-function joint ventures may have a peculiar feature. Then, it shows how the risk of coordination between the parent firms is analysed under Article 101, based on the wording of Article 2(4) and (5) and the practice of the Commission. Finally, it discusses whether there is an overlap between the analysis under Article 2(3) and that under Article 2(4).

A- Analysis of Full-Function Joint Ventures under Article 2(3)

1. Legal Test

Article 2(3) of Regulation 4064/89 stated that '[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'. According to this provision, a merger would be prohibited if two conditions were cumulatively satisfied: (i) the merger must create or strengthen a dominant position; and (ii) this must significantly impede effective competition.[113] Since the requirement of the creation or

[113] See Case T-2/93 *Air France v Commission* [1994] ECR II-323, para 79; Case T-310/01 *Schneider Electric v Commission* [2002] ECRII-4071, paras 321 and 380; Case T-158/00 *ARD v Commission*

strengthening of a dominant position characterises this test, it has been generally called the 'dominance test'.

The application of the dominance test by the Commission had progressively developed from a formalistic approach based on market shares and concentration levels to a more economic-based approach, which also took into account other economic factors.[114] Moreover, the Commission and the EU courts recognised that the concept of dominance mentioned in Article 2(3) included not only dominance by a single firm, but also collective dominance by two or more firms.[115] Thus, the Commission was allowed to prohibit a merger which would result in tacit collusion between remaining independent firms in the market, even though the merged entity would not become the market leader.

Although this flexible interpretation of the dominance test by the Commission made it closer to the substantial lessening of competition (SLC) test used for the control of mergers in many jurisdictions including the US, it was questionable whether the dominance test provided an effective merger control compared to the SLC test. In its 2001 Green Paper,[116] the Commission concluded that the dominance test was similar to the SLC test in many aspects, and the vast majority of cases demonstrated a significant degree of convergence in the approaches to merger analysis in the EU and other jurisdictions using the SLC test.[117] On the other hand, the Commission provided that the dominance test may not constitute an effective tool in some

---

[2003] ECR II-3825, para 130. *In EDP v Commission*, the General Court provided that 'proof of the creation or strengthening of a dominant position within the meaning of Article 2(3) of the Merger Regulation may in certain cases constitute proof of a significant impediment to effective competition'. The Court, however, added that this did not mean that 'the second criterion [was] the same in law as the first, but only that it may follow from one and the same factual analysis of a specific market that both criteria [were] satisfied'. Case T-87/05 [2005] ECR II-3745, para 49. See also Lars-Hendrik Roller and Miguel De La Mano, 'The Impact of the New Substantive Test in European Merger Control' (2006) 2 *European Competition Journal* 9, 10-14; Nicholas Levy, 'The EU's SIEC Test Five Years On: Has It Made A Difference?' (2010) 6 *European Competition Journal* 211, 218-220.

[114] Sven N Volcker, 'Mind the Gap: Unilateral Effects Analysis Arrives in EC Merger Control' (2004) 25 *European Competition Law Review* 395, 398-400; Neil Horner, 'Unilateral Effects and the EC Merger Regulation – How the Commission Had Its Cake and Ate It Too' (2006) 2 *Hanse Law Review* 23, 24-25.

[115] See *Nestle/Perrier* (Case IV/M.190) Commission Decision 92/553/EEC [1992] OJ L356/1; Joined Cases C-68/94 and 30/95 *France and others v Commission* [1998] ECR I-1375 (*Kali and Salz*); Case T-102/96 *Gencor v Commission* [1999] ECR II-753; Case T-342/99 *Airtours v Commission* [2002] ECR II-2585.

[116] See n 35 above.

[117] ibid para 162.

situations where the merged entity, despite remaining smaller than the market leader, would gain the ability to raise prices, even if the conditions for a finding of collective dominance were not present.[118] However, it added that such a situation had not been encountered, and therefore the discussion was mainly hypothetical.[119] In the end, the Commission came to the conclusion that the application of the dominance test had hitherto revealed neither a major loophole in the scope of the merger test, nor a significant departure from the SLC test applied in other jurisdictions.[120]

Nevertheless, the discussion on whether there was a need to shift from the dominance test continued until the adoption of Regulation 139/2004.[121] The Council did not prefer a direct shift to the SLC test by entirely leaving out the concept of dominance. Accordingly, in Regulation 139/2004, it has provided a solution by extending the scope of the merger test to address all the anticompetitive effects of mergers by retaining the existing language and case law.[122] Article 2(3) of the Regulation stipulates that '[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'. Under this revised provision, significant impediment to effective competition (SIEC) becomes the essential criterion for merger control, whereas the creation or strengthening of a dominant position merely constitutes the primary but not the only example of such a significant impediment.[123]

---

[118] ibid para 166.
[119] ibid.
[120] ibid para 167.
[121] See Mario Monti, 'Keynote Address: Merger Control in the European Union- A Radical Reform' in Gotz Drauz and Michael Reynolds (eds), *EC Merger Control: A major Reform in Progress* (Richmond 2003) 7-8; Brian R Meiners and Kevin R Sullivan, 'Merger Analysis: SLC versus Dominance' in Gotz Drauz and Michael Reynolds (eds), *EC Merger Control A major Reform in Progress* (Richmond 2003) 185-193; Edith Muller and Ulf Boge, 'From the Market Dominance Test to the SLC Test: Are There Any Reasons for a Change?' (2002) 23 *European Competition Law Review* 495; Volcker (n 114) 401-03; Ioannis Kokkoris, *Merger Control in Europe: The Gap in the ECMR and National Merger Legislations* (Routledge 2011) 36-45.
[122] See Kyriakos Fountoukakos and Stephen Ryan, 'A New Substantive Test for EU Merger Control' (2005) 26 *European Competition Law Review* 277, 288; Horner (n 114) 35; Levy (n 113) 239.
[123] Recital 25 of the Merger Regulation emphasises that the SIEC test makes the scope of the merger test extend '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'.

With the adoption of Regulation 139/2004, the Commission also published the Horizontal Merger Guidelines which indicate its approach to merger analysis.[124] The principles and methodology followed in the Horizontal Merger Guidelines are quite similar to those in the 1992 Horizontal Merger Guidelines, which were in force at that time in the US.[125] Accordingly, similar to those in the US, these guidelines use the concept of 'coordinated effect' in order to refer to the situation of collective dominance. In order to refer to what are known in the US as unilateral effects, the Commission has provided the term 'non-coordinated effect'. Non-coordinated effects include not only situations where the merged entity would be in a dominant position, but also gap cases where it would not be the market leader.

There has been a debate on whether the introduction of the SIEC test has made an important difference in the Commission's approach to merger analysis.[126] It seems that there has not so far been a clear-cut gap case where the Commission prohibits a merger that would be allowed under the dominance test.[127] On the contrary, the number of prohibitions and the second phase interventions by the Commission in

[124] Commission Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings [2004] OJ C31/5.

[125] DOJ and FTC, 'Horizontal Merger Guidelines' (1992) <http://www.justice.gov/atr/public/guidelines/hmg.pdf> accessed 05 April 2013. In 2010, the FTC and the DOJ issued new guidelines that replaced the 1992 Horizontal Merger Guidelines. DOJ and FTC, 'Horizontal Merger Guidelines' (2010) <http://www.justice.gov/atr/public/guidelines/hmg-2010.pdf> accessed 05 April 2013 (2010 Horizontal Merger Guidelines). These new guidelines increase the importance of close competition between merging firms by using the upward pricing pressure (UPP) test, and allow departure from the step by step approach used in merger analysis as provided in the 1992 Guidelines. For debates regarding the consequences of the 2010 Horizontal Merger Guidelines, see Carl Shapiro, 'The 2010 Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years' (2010) 77 *Antitrust Law Journal* 49; James Langenfeld and Gregory G Wrobel, 'Upward Pricing Pressure Analysis under the 2010 Horizontal Merger Guidelines' (2010) 25 *Antitrust* 21; Deborah A Garza, 'Market Definition, the New Horizontal Merger Guidelines, and the Long March Away from Structural Presumptions' (2010) 10 *Antitrust Source* 1; Leah Brannon and Kathleen Bradish, 'The Revised Horizontal mergers: Can the Courts Be Persuaded?' (2010) 10 *Antitrust Source* 1; James A Keyte and Kenneth B Schwartz, '"Tally Ho": UPP and the 2010 Horizontal Merger Guidelines' (2011) 77 *Antitrust Law Journal* 587; Joseph Farrell, 'Fox, or Dangerous Hedgehog? Keyte and Schwartz on the 2010 Horizontal Merger Guidelines' (2011) 77 *Antitrust Law Journal* 661.

[126] See eg Roller and De La Mano (n 113); Frank Maier-Rigaud and Kay Parplies, 'EU Merger Control Five Years after the Introduction of the SIEC Test: What Explains the Drop in Enforcement Activity?' (2009) *European Competition Law Review* 565; Levy (n 113); Kokkoris (n 121).

[127] However, some cases where the Commission cleared the concentration upon certain commitments are viewed as gap cases. See Valentine Korah, *An Introductory Guide to EC Competition Law and Practice* (9th edn, Hart Publishing 2007) 406-07; Levy (n 113) 246-50; Kokkoris (n 121) 111-65; Richard Whish and David Bailey, *Competition Law* (7th edn, Oxford University Press 2012) 871.

merger cases appears to have decreased since the shift to the SIEC test.[128] One possible reason for this outcome may be the on-going trend in the Commission's practice, which started before the adoption of the SIEC test, to incorporate more economic elements into merger analysis.[129] Therefore, it is doubtful that the SIEC test, in practice, has brought about a radical change in EU merger control.[130] Nevertheless, it has had a welcome effect in removing potential uncertainties and debate that would arise from an excessively wide interpretation of the dominance test in order to apply to gap cases.[131]

The SIEC test essentially applies to full-function joint ventures in the same way as mergers. Hence, the Commission firstly delineates relevant markets affected by the joint venture. Secondly, it calculates market shares and concentration levels in these markets. Thirdly, it analyses possible coordinated and non-coordinated effects resulting from the joint venture based on market shares and other economic factors. Below this methodology is mainly followed in explaining how the effects of full-function joint ventures are examined under the SIEC test.

2. Definition of Relevant Market(s)

The delineation of relevant market(s) is a first and fundamental stage in merger analysis under EU competition law.[132] In *Kali and Salz*, the ECJ states that '[a] proper definition of the relevant market is a necessary precondition for any assessment of the effect of a concentration on competition'.[133] The Commission begins the substantive analysis by identifying possible markets where the concentration in question may result in a significant impediment to effective

[128] See Maier-Rigaud and Parplies (n 126); Levy (n 113) 244.
[129] Levy (n 113) 244-45.
[130] Roller and De La Mano (n 113) 27.
[131] See recital 25 of the Merger Regulation. For the possible ways to apply the dominance test to gap cases, see Volcker (n 114) 408-09.
[132] Mario Monti, 'Market Definition as a Cornerstone of EU Competition Policy', speech of October 5, 2001 < http://europa.eu/rapid/press-release_SPEECH-01-439_en.htm> accessed 05 April 2013. In the US, the 2010 Horizontal Merger Guidelines suggest that in some cases it may not be necessary to define relevant markets in order to analyse the competitive effects of mergers. However, it is controversial whether courts would approve this approach. For discussion on this issue, see Keyte and Schwartz (n 125); Brannon and Bradish (n 125); Farrell (n 125).
[133] *France and others v Commission* (n 115) para 143. See also *Airtours* (n 115) 19; Case T-177/04 *easyJet v Commission* [2006] ECR II-1931, para 55; Case T-151/05 *NVV and others v Commission* [2009] ECR II-1219, para 51.

competition. In this respect, defining the boundaries of the relevant market(s) enables the Commission to measure the market power of the merging firms based on market shares, concentration levels and other market characteristics. Market definition also reveals the competitive relationship between the merging parties, thereby determining the type of anticompetitive effects- horizontal, vertical or conglomerate- arising from the concentration. Despite the importance of market delineation, the Commission usually do not define the relevant market precisely, if the concentration does not give rise to any concerns under any alternative market definition.[134]

Merging parties usually prefer broader market definitions because the wider the relevant market the lower the market share they will have.[135] Nevertheless, a narrower market definition may be preferable from the viewpoint of the parties in joint venture cases, if according to the broader market definition two of them would be considered to retain significant activities in the joint venture's market. As mentioned above,[136] the fact that the parent firms continue to operate in the joint venture's market, in itself, does not disqualify the joint venture as full-function. However, they may be required to show stronger evidence to demonstrate that the joint venture will enjoy commercial autonomy and have a full-function character.

In its Notice on market definition,[137] the Commission sets out the principles for the definition of relevant product and geographical markets based on the existing case law. The Notice provides that in identifying relevant product and geographical markets, the Commission will normally examine the substitutability between different products and geographical areas from both the demand side and the supply side by utilising the so-called small but significant non-transitory increase in price

---

[134] See eg *LBO France/Aviapartner* (Case COMP/M.6671) [2012] para 53; *Goldman Sachs/KKR/QMH* (Case COMP/M.6738) [2012] para 19; *BayWa/Cefetra* (Case COMP/M.6740) [2012] para 16; *Strategic Value Partners/Kloeckner Holdings* (Case COMP/M.6681) [2013] para 22; *Azoty Tarnow/Zaklady Azotowe Pulawy* (Case COMP/M.6695) [2013] para 20.

[135] Alison Jones and Brenda Sufrin, *EU Competition Law: Text, Cases, and Materials* (4th edn, Oxford University Press 2011) 914. Hruska claims that with respect to the high-technology industries the market shares of the merging firms may increase as the relevant market expands. Andrew C Hruska, 'A Broad Market Approach to Antitrust Product Market Definition in Innovative Industries' (1993) 102 *Yale Law Journal* 305, 316.

[136] See 93-94 above.

[137] Commission Notice on the definition of relevant market for the purposes of Community competition law [1997] OJ C372/5.

(SSNIP) test.[138] In Form Co annexed to Regulation 802/2004[139] relating to the pre-notification of concentrations, the Commission categorises some relevant markets as 'affected markets', and requires the parties to submit some detailed information regarding them. According to the Form, affected markets refer to those where two or more merging parties have a combined market share of 15 % or more in relation to horizontal relationships, or where their individual or combined market share is 25 % or more with respect to vertical relationships.

These principles essentially apply to the delineation of relevant product and geographical markets in full-function joint venture cases as well. On the other hand, special consideration may be given to market definition in joint venture cases, where the purpose of the joint venture is to carry out a R&D project, and to produce and market the resulting product. This resulting product may replace existing products or may create completely new demand.[140] In the latter case, it may be necessary to define a separate market for the product to be developed through identifying, if possible, substitutable R&D efforts.[141]

3. Market Shares and Concentration Levels

Market shares and concentration levels are considered to give useful first indications of the market structure, and of the competitive positions of the merging parties and their competitors.[142] Recital 32 of the Merger Regulation establishes a presumption that a merger is in principle compatible with the common market where the combined market share of the merging parties does not exceed 25 %. In the

---

[138] For more detailed information regarding the definition of relevant market in concentration cases, see Navarro Varona and others (n 32) 87-141; Alistair Lindsay and Alison Berridge, *The EU Merger Regulation: Substantive Issues* (4th edn, Sweet & Maxwell 2012) 99-202; Cook and Kerse (n 112) 215-233; Ulrich Schwalbe and Daniel Zimmer, *Law and Economics in European Merger Control* (Oxford University Press 2009) 60-125.

[139] Commission Regulation (EC) No 802/2004 of 7 April 2004 on implementing Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings [2004] OJ L133/1.

[140] See Commission Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements [2011] OJ C11/1, paras 119-22. The principles in the Guidelines regarding market definition in partial function R&D joint venture cases may also apply to such full-function joint ventures.

[141] ibid para 119.

[142] Horizontal Merger Guidelines (n 124) para 14. See also Commission Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings [2008] OJ C265/6, para 24.

Horizontal Merger Guidelines, however, the Commission recognises that a market share of 50 % or more may indicate the existence of a dominant market position.[143]

The Commission also considers concentration levels based on the Herfindahl-Hirschman Index (HHI), in order to have an initial view about the impact of mergers on competition. Under the HHI, the squares of the market shares of all firms operating in the relevant market are summed, and then it is calculated how much the combination of the market shares of the merging firms will increase this sum. Such increase in the post-merger HHI is called 'delta'.

The Commission utilises the post-merger HHI and the level of delta as an indicator of the absence of competition concerns. Accordingly, if the post-merger HHI is below 1000, the merger is likely to be cleared with no further analysis irrespective of the delta level.[144] In addition, a merger is normally allowed if the delta is below 250 in the case of a post-merger HHI between 1000 and 2000, or below 150 in the case of a post-merger HHI above 2000. However, this second safe harbour is subject to certain exceptions. The exceptions mentioned as examples in the Horizontal Merger Guidelines are that: (i) one of the merging parties is a potential entrant or a recent entrant with a small market share, or an important innovator in ways not reflected in market shares, or a maverick firm; (ii) one of the parties has a pre-merger market share of 50 % or more; (iii) there are significant cross-shareholdings between firms in the market; and (iv) there are indications of past or on-going coordination, or facilitating practices.[145]

In the Non-Horizontal Merger Guidelines, the Commission also sets out certain market share and HHI thresholds in relation to vertical and conglomerate mergers. The Guidelines state that a non-horizontal merger is unlikely to create any competition concern, where the market share of the merged entity in each of the

[143] Horizontal Merger Guidelines (n 124) para 17. See also Case C-62/86 *Akzo v Commission* [1991] ECR I-3359, para 60; *Gencor* (n 115) para 205; Case T-221/95 *Endemol v Commission* [1999] ECR II-1299, para 134; Case T-210/01 *General Electric v Commission* [2005] ECR II-5575, para 115; *easyJet* (n 133) para 174.
[144] Horizontal Merger Guidelines (n 124) para 19.
[145] ibid para 20.

markets concerned is below 30 % and the post-merger HHI is below 2000.[146] In these situations, the Commission will normally not carry out an extensive investigation unless any of the exceptional situations similar to those listed above with regard to horizontal mergers is present.[147]

In measuring market shares and concentration levels in full-function joint venture cases, different scenarios should be taken into account. If none of the parent firms retains activities in the joint venture's market, market shares and concentration levels will undoubtedly be calculated in the same way as in amalgamation and acquisition situations. In this respect, the post-merger market share of the merged entity will be the combination of the pre-merger market shares of the parent firms and the joint venture, in the case that it has already operated in the market.[148] On the other hand, where one or more parents retain some activities in the joint venture's market, the applicability of this approach may become questionable. A more problematic scenario may arise if the parent firms continue to operate in the market through their joint ventures with third parties. In these circumstances, the crucial question is whether the Commission will take into consideration the existence or possibility of competition between the joint venture and the parent firms or their joint ventures with third parties.

In *Gencor v Commission*, the General Court founded that even if Gencor had joint control over LDP, there had been an effective competition between Implat, a solely controlled subsidiary of Gencor, and LDP. On this basis, the Court held that the change in the structure of LDP and Implat that eliminated competition between these two firms did amount to a concentration.[149] This decision may be interpreted to imply that the likelihood of future competition between the parents and the joint venture should be incorporated into merger analysis in joint venture cases. However, the Commission generally disregards the possibility of competition between the

[146] Non-Horizontal Merger Guidelines (n 142) para 25.
[147] ibid para 26.
[148] Horizontal Merger Guidelines (n 124) para 15.
[149] *Gencor* (n 115) paras 169-181.

parent firms and the joint venture, and aggregates their entire market shares in measuring market shares and applying the HHI.[150]

In *Exxon/Mobil*,[151] for example, the Commission aggregated the market share of the BP-Mobil joint venture with that of Mobil in assessing the competitive effect of the Exxon-Mobil joint venture in question.[152] It dismissed the parties' argument that BP-Mobil and Exxon-Mobil had to be treated as two independent firms competing against each other. The Commission states that:

> [T]he relations between the JV and the parents are considered on the basis of the generally correct assumption that they achieve some form of integration and that the parent company is in a position to control the commercial policy of its JV, so that from a competition point of view they are to be viewed as being not in competition with each other.[153]

The Commission also rejected the parties' claim that this approach was inconsistent with the *Gencor* decision. It stated that, in *Gencor*, the Court made an *ex-post* analysis on whether the parent and the joint venture had been in competition before the merger, while in the present case it had to carry out an *ex ante* analysis of the likelihood of future competition between Exxon-Mobil and BP-Mobil.[154] The Commission concludes that:

> [I]n accordance with the approach which must be followed in the context of the merger control review, the Commission is to assume the worst possible scenario for antitrust purposes, that is to say the alignment of the competitive strategies of Exxon/Mobil and BP/Mobil as a result of the joint control of the former over the latter.[155]

In *GE/Honeywell*,[156] the Commission also took into account the market shares of the existing joint ventures of each merging firm with third parties in calculating market

---

[150] Commission, 'Antitrust Issues Involving Minority Shareholding and Interlocking Directorates' (n 19) para 9.
[151] Case IV/M.1383 [1999].
[152] ibid paras 446-58.
[153] ibid para 449.
[154] ibid paras 456-58.
[155] ibid para 458.
[156] Case COMP/M.2220 [2001].

shares.[157] In such analysis, the Commission made a distinction according to whether the third party parent also operates in the market concerned. It aggregated the entire market share of CFMI, a joint venture between General Electric and Snecma, with that of General Electric on the basis that Snecma was not an actual or potential competitor to General Electric and CFMI.[158] Nonetheless, in calculating the market shares of General Electric's competitors, RR and P&W, the Commission aggregated the market shares of their joint venture IAE equally among these two firms, because both were active in the relevant market.[159] This approach of the Commission was also approved by the General Court.[160]

It should be noted that in *GE/Honeywell*, the Commission divided the market share of a joint venture equally between its parents which were not party to the merger in question. However, it may take a different approach in considering the market share of the joint venture of one merging party with a third party that is also active in the joint venture's market. For example, in *Mitsui/CVRD/Caemi*,[161] the Commission counted twice the market share of the joint venture, Samarco, by attributing its 100 % share separately to CVRD, a merging party, and BHP, a competitor of CVRD.[162]

To sum up, the practice of the Commission and the case law indicate that the worst case scenario from the viewpoint of competition is normally taken into account in analysing market shares and concentration levels in the case of full-function joint ventures. In this regard, the parent firms and the joint venture are usually treated as a

---

[157] ibid paras 46-67. For some other decisions where the Commission aggregated the market shares of the parents with that of the joint venture, see eg *RVI/VBC/Heuliez* (Case IV/M.092) [1991]; *Akzo/Nobel Industrier* (Case IV/M.390) [1994]; *Vodafone Airtouch/Mannesmann* (Case COMP/M.1795) [2000]. In the *European oxo-chemicals* case, the parties claimed that the parent firm and the joint venture would compete against each other in the market. The Commission did not settle the issue because the concentration was compatible with the common market even if the market shares of the parent and the joint venture were aggregated. *Celanese/Degussa* (Case COMP/M.3506) Commission Decision 2004/105/EC [2004] OJ L38/47, paras 150-165.

[158] *GE/Honeywell* (n 156) paras 46-49. See also *GE/Smiths Aerospace* (Case COMP/M.4561) [2007] para 13.

[159] In line with this approach, the Commission did not attribute any share of IAE to its other parents, MTU and Japanese Aero Engines, which were not independent players in the market. *GE/Honeywell* (n 156) paras 46 and 67.

[160] *General Electric v Commission* (n 143) paras 127-47.

[161] Case COMP/M.2420 Commission Decision 2004/270/EC [2004] OJ L92/50.

[162] ibid fns 38, 40 and 41.

single economic unit, and their market shares are combined for the purposes of the analysis.

4. Competitive Effects

a) Horizontal Effects

aa) Non-Coordinated Effects

According to the Horizontal Merger Guidelines, non-coordinated effects may arise where a merger removes important competitive constraints on one or more firms in the market, thereby increasing their market power to unilaterally raise prices.[163] This is particularly true where the merger leads to the creation or strengthening of a single dominant position.[164] In addition, the Guidelines recognise that a merger may give rise to non-coordinated effects as a result of the loss of important competitive constraints on the remaining competitors in an oligopolistic market, even in the absence of a strong likelihood of coordination among them.[165] In these so-called non-collusive oligopoly situations, the merged entity or another member of the oligopoly may obtain the ability to significantly increase prices, even though it is not the market leader.[166]

The Horizontal Merger Guidelines list a number of factors which will be taken into account in analysing whether the concentration in question would create non-coordinated effects. The Guidelines note that not all of these factors have to be present for such effects to be likely, and nor do they form an exhaustive list.[167]

---

[163] Horizontal Merger Guidelines (n 124) para 24.
[164] ibid para 25. See eg *Ryanair/Aer Lingus* (Case COMP/M.4439) [2007], affirmed in Case T-342/07 *Ryanair v Commission* [2010] ECR II-3457.
[165] Horizontal Merger Guidelines (n 124) para 25.
[166] See eg *T-Mobile Austria/Tele.ring* (Case COMP/M.3916) [2006]; *BASF/CIBA* (Case COMP/M.5355) [2009] paras 9-26. As mentioned above, non-collusive oligopoly situations are regarded as gap cases not covered by the dominance test under the old Merger Regulation. See V/A/1 above.
[167] Horizontal Merger Guidelines (n 124) para 26.

The first factor considered in the analysis of non-coordinated effects is whether the merging firms have large market shares.[168] The larger the market share, the more likely the merged entity is to be viewed as having market power.[169] Nonetheless, an analysis strictly based on market shares may be misleading with respect to markets involving differentiated products where some products are closer substitutes than others.[170] In such situations, the Commission also examines the closeness of competition between the products offered by the merging firms. The Horizontal Merger Guidelines explain that 'the higher the degree of substitutability between the merging firms' products, the more likely it is that the merging firms will raise prices significantly'.[171] Particularly if the products of the merging firms are regarded by a great number of customers as their first or second choices, the merged entity may enjoy market power to increase prices significantly, even though it does not have large market shares.[172] On the other hand, even where the merging firms possesses relatively high market shares, this may not lead to non-coordinative effects if the products of the merging firms are not close substitutes, or there is a high degree of substitutability between these products and those of competitors.[173]

Other factors listed in the Horizontal Merger Guidelines which increase the likelihood of non-coordinated effects are that (i) customers of the merging parties have difficulties switching to other suppliers because of a lack of viable alternative suppliers or of substantial switching costs;[174] (ii) competitors are unlikely to raise their supply substantially in response to a price increase by the merged entity;[175] (iii) the merged entity would have the ability and incentive to make the expansion of

---

[168] ibid para 27.
[169] For the indicative market thresholds for the existence of market power, see V/A/3 above.
[170] See Andrea Coscelli and Simon Baker, 'The Role of Market Shares in Differentiated Product Markets' (1999) 20 *European Competition Law Review* 412; Simon Bishop and Andrea Lofaro, 'Assessing Unilateral Effects in Practice Lessons from GE/Instrumentarium' (2005) 26 *European Competition Law Review* 205. The 2010 Horizontal Merger Guidelines in the US downplay the importance of market shares in analysing non-coordinated effects with respect to markets involving differentiated products. For discussion, see n 125 above.
[171] Horizontal Merger Guidelines (n 124) para 28.
[172] ibid.
[173] ibid. For more information about the analysis of non-coordinated effects in the case of differentiated products, see Lindsay and Berridge (n 138) 287-316.
[174] Horizontal Merger Guidelines (n 124) para 31. See eg *Boeing/McDonnell Douglas* (Case IV/M.877) Commission Decision 97/816/EC [1997] OJ L336/16, para 70; *Agfa Gevaert/DuPont* (Case IV/M.986) Commission Decision 98/475/EC [1998] OJ L211/22, paras 63-71.
[175] Horizontal Merger Guidelines (n 124) paras 32-35. See eg *CVC/Lenzing* (Case COMP/M.2187) [2001] paras 162-170; *EdF/British Energy* (Case COMP/M.5224) [2008] paras 25-37.

smaller firms and potential competitors more difficult or otherwise restrict the ability of rival firms to compete;[176] and (iv) the merger eliminates an important competitor which has more of an influence on the competitive process than their market shares or similar measures indicate.[177] In evaluating non-coordinated effects, the Commission also considers the countervailing buyer power of customers[178] and the likelihood of timely and sufficient entries to the market.[179]

These factors are also taken into consideration in analysing the non-coordinated effects of full-function joint ventures.[180] It might be asked whether the fact that the parent firms retain independent activities in the joint venture's market may be incorporated as a mitigating factor into this analysis. In *EDF/AEM/Edison*,[181] the Commission assumed that the parent firms EDF and AEM, which both would have independent activities in the relevant market, would 'align to a large extent their competitive behaviour to that of the joint venture Edison'.[182] Nevertheless, it added that '[i]t cannot be excluded however that in particular circumstances EDF and AEM may have different strategic goals, in order to maximise their own profits outside the joint venture'.[183] However, in its analysis, the Commission did not emphasise the possibility of the exercise of independent competitive strategies by the parents and the joint venture. It found that the joint venture would not give rise to any non-coordinated effect under the assumption that EDF, AEM and Edison would all act together.

[176] Horizontal Merger Guidelines (n 124) para 36.
[177] ibid para 37. See eg *Tele.ring* (n 166) paras 55-81*; StatoilHydro/ConocoPhillips* (Case COMP/M.4919) [2008] paras 151-94.
[178] Horizontal Merger Guidelines (n 124) paras 64-67. For more information on countervailing buyer, power see Lindsay and Berridge (n 138) 520-33.
[179] Horizontal Merger Guidelines (n 124) paras 68-75. For more information on entry barriers, see Lindsay and Berridge (n 138) 534-55.
[180] See eg *VNU/WPP* (Case COMP/M.3512) [2004]; *LSG Lufthansa Service Holding/Gate Gourmet Switzerland* (Case COMP/M.4170) [2006]; *STM/Intel* (Case COMP/M.4751) [2007]; *Ericsson/STM* (Case COMP/M.5332) [2008]; *T-Mobile/Orange* (Case COMP/M.5650) [2010]; *Votorantim/Fischer* (Case COMP/M.5907) [2011].
[181] Case COMP/M.3729 [2005].
[182] ibid para 49.
[183] ibid.

bb) Coordinated Effects

The SIEC test has not brought about a significant change in the analysis of coordinated effects, namely collective dominance. In this analysis, the Commission focuses on whether the merger may enable firms to coordinate their behaviour and increase prices, or whether it may make coordination easier for firms that are already coordinating before the merger.[184]

Based on the case law under the dominance test, the Horizontal Merger Guidelines set out the principles to be taken into account in assessing coordinated effects. Accordingly, the Commission firstly examines whether it would be possible for the remaining members of an oligopoly to reach the terms of coordination.[185] The Guidelines stipulate that 'the less complex and the more stable the economic environment, the easier it is for the firms to reach a common understanding on the terms of coordination'.[186] In this regard, the Commission considers various factors such as the number of players in the market; the homogeneity of products; the stability of demand and supply; the role of innovation in the market; symmetry of costs, market shares, capacity levels and levels of vertical integration; and structural links such as cross-shareholding or joint ventures.[187]

Once it finds that it is possible for firms to agree on the terms of coordination, the Commission analyses whether such coordination is likely to be sustainable. For coordination to be sustainable, the Commission requires the satisfaction of the three conditions set forth in *Airtours* by the General Court.[188] First, the market must be sufficiently transparent to enable coordinating firms to monitor, to a sufficient degree, deviations by any of them.[189] Some factors involved in the evaluation of transparency are the number of active players in the market, the publicity of

[184] Horizontal Merger Guidelines (n 124) para 39.
[185] ibid paras 44-48.
[186] ibid para 45.
[187] ibid paras 45 and 48. The Commission also assesses whether there are possible ways to overcome the complexity of the market, such as simplifying price rules or exchanging information through trade associations, cross-shareholdings or joint ventures. ibid para 47.
[188] *Airtours* (n 115) para 62.
[189] Horizontal Merger Guidelines (n 124) para 49.

transactions with customers, and the stability of the market.[190] The Commission also assesses whether coordinating firms use monitoring mechanisms to facilitate the detection of any deviations.[191]

In order for coordination to be sustained, secondly, there must be a credible deterrent mechanism convincing coordinating firms to adhere to the terms of coordination.[192] A deterrent mechanism is regarded as credible only if it is likely that the retaliation becomes sufficient to offset the benefits of deviation and is likely to be activated in a timely manner.[193] In this respect, the Commission particularly takes into account the frequency and volume of sales in the market, the incentive for non-deviating firms to retaliate, and the existence of commercial interactions, such as joint ventures, between coordinating firms in the relevant market or other markets.[194]

Thirdly, sustainable coordination requires that non-coordinating active firms and potential competitors, as well as customers, must not be able to jeopardise the outcome expected from coordination. In respect of this condition, the Commission considers the capacities of active competitors, the likelihood of sufficient and timely entries, and countervailing buyer power.[195]

In *Impala v Commission*,[196] the General Court suggested a more flexible approach in analysing whether these conditions are met. It held that the close alignment of prices over a long period in the market before the merger demonstrated the existence of a collective dominant position, even in the absence of direct evidence for strong transparency.[197] In the appeal, the ECJ agreed that the four conditions mentioned above were required for finding that a concentration is likely to lead to collective dominance. The Court also went one step further and gave guidance about how to apply these criteria in individual cases.[198] It emphasised that '[i]n applying those

[190] ibid para 50.
[191] ibid para 51.
[192] ibid paras 52-55.
[193] ibid para 53.
[194] ibid paras 54-55.
[195] ibid paras 56-57.
[196] Case T-464/04 [2006] ECR II-2289.
[197] ibid paras 252-54.
[198] Case C-413/06P *BMG and Sony v Impala* [2008] ECR I-4951, para 123.

criteria, it [was] necessary to avoid a mechanical approach involving the separate verification of each of those criteria taken in isolation, while taking no account of the overall economic mechanism of a hypothetical tacit coordination'.[199] Based on this principle, the Court found that the General Court erred in that it failed to carry out a careful investigation by considering 'a postulated monitoring mechanism forming part of a plausible theory of tacit coordination'.[200]

The Commission's practice and the case law do not indicate any considerable difference in relation to the appraisal of coordinated effects in joint venture cases as far as the joint venture's market is concerned.[201] However, the creation of a full-function joint venture may also increase the likelihood of tacit coordination in other markets where its parents are competitors, by creating a structural link which facilitates reaching the terms of coordination as well as monitoring and retaliating against deviations. In such situations, it may be questioned whether such coordination will, or should, be analysed with reference to Article 2(3) or Article 101, in combination with Article 2(4), or to both tests.[202]

cc) Efficiency Considerations

The Horizontal Merger Guidelines provide that a merger, which would be prohibited otherwise, may be cleared based on efficiencies, only if (i) the merger leads to substantial benefits to consumers;[203] (ii) these benefits are merger specific, ie there is no less restrictive alternative that creates the same efficiencies;[204] and (iii) they are verifiable, ie they are likely to materialise and be substantial enough to outweigh the potential harm of the merger to consumers.[205] It should be discussed whether the Commission may treat full-function joint ventures differently in relation to the application of these conditions.

---

[199] ibid para 125.
[200] ibid paras 125-134.
[201] See eg *Exxon/Mobile* (n 151); *Gencor/Lonrho* (Case IV/M.619) Commission Decision 97/26/EC [1997] OJ L11/30; *Mitsui/CVRD/Caemi* (n 161); *BP/E.ON* (Case COMP/M.2533) [2001]; *Sony/BMG* (Case COMP/M.3333) [2007].
[202] See V/C below. See also Chapter 6/III below.
[203] Horizontal Merger Guidelines (n 124) paras 79-84.
[204] ibid para 85.
[205] ibid paras 86-88.

With respect to the first condition, the Horizontal Merger Guidelines specifically mention that a joint venture set up to develop a new product may lead to some efficiencies that can be considered by the Commission. Nevertheless, this could be perceived as an indication of a wider role for efficiency claims in full-function joint venture cases than in amalgamation and acquisition cases, only if the former were more likely to satisfy the second condition, ie efficiencies were more likely to be viewed as merger-specific in the context of a full-function joint venture.

In the Horizontal Merger Guidelines, the Commission acknowledges that the creation of a joint venture may be regarded as a less restrictive alternative to a notified merger. This argument in fact was specifically used by the Commission in *Inco/Falconbridge*.[206] Therein, the parties claimed that the acquisition of Falconbridge by Alcon would bring about efficiencies resulting from the combination of their mining activities for nickel in the Sudbury basin in Canada.[207] The Commission held that the claimed efficiencies could not be viewed as merger-specific, because the creation of a partial function joint venture for the mining and processing of nickel in the Sudbury basin constituted a viable and less restrictive alternative.[208] This finding of the Commission could also apply if such a joint venture were organised to have a full-function character, since in that case the parent firms would also maintain their mining and processing activities outside the Sudbury basin, and compete at the refining and marketing level.

However, it should be remembered that the Commission, in practice, treats joint ventures as forming part of the same economic unit as their parents when assessing their anticompetitive effects, even if the parents retain some activities in the market. Therefore, despite the *Inco/Falconbridge* decision, it is difficult to claim that compared to full-merger cases, efficiencies are more likely to be considered by the Commission as merger-specific in the case of joint ventures leading to a partial integration of the parents' activities in the market.[209] Furthermore, it should be noted

[206] Case COMP/M.4000 [2006].
[207] ibid paras 532-33.
[208] ibid paras 539-42.
[209] Considering that if the parents retain some activities in the joint venture market, this requires an analysis of the risk of coordination between the parents in accordance with Article 101, it may be

that the Commission is not eager to accept efficiency claims if the concentration would result in significant anticompetitive effects.[210] It has not so far allowed a concentration which otherwise would be blocked on the basis of efficiency claims.[211] There is no decision indicating that the Commission may soften this approach with regard to efficiency claims in the case of full-function joint ventures.

b) Non-Horizontal Effects

The Commission recognises that the non-horizontal (ie vertical and conglomerate) aspects of concentrations are usually less likely to raise serious competition concerns than their horizontal aspects, because they do not normally result in the loss of direct competition, and are more likely to create substantial efficiencies.[212] However, it acknowledges that in specific cases those aspects may also give rise to non-coordinated and coordinated effects, which significantly impede effective competition.[213]

With respect to vertical aspects, non-coordinated effects may arise, if the merger gives rise to foreclosure concerns by hampering or eliminating actual or potential rivals' access to supplies or market, thereby reducing these firms' ability and/or incentive to compete.[214] Foreclosure effects may be in the form of input foreclosure where the merger is likely to raise the costs of downstream rivals by restricting their access to an important input; or in the form of customer foreclosure where the merger is likely to foreclose upstream rivals by restricting their access to a sufficient customer base.[215] The Non-Horizontal Merger Guidelines list three factors to be considered in the assessment of input and customer foreclosure. These are: (i) the ability of the merged entity to foreclose access to the input or downstream market;

---

stated that such joint ventures may even be perceived as more risky than those leading to full-integration in the market. For more elaborate discussion on this issue, see Chapter 6/III below.

[210] In early merger cases the Commission used to consider efficiencies as a factor contributing to the existence of a dominant position. See Lindsay and Berridge (n 138) 311-16.

[211] However, in relation to some mergers that would be cleared anyway, the Commission seemingly accepts the efficiency claims of the parties. See eg *Repsol Butano/Shell Gas* (Case COMP/M.3664) [2005]; *Aster 2/Flint Ink* (Case COMP/M.3886) [2005]; *Korsnas/AD Cartonboard* (Case COMP/M.4057) [2006].

[212] Non-Horizontal Merger Guidelines (n 142) paras 11-14.

[213] ibid paras 15-20.

[214] ibid para 29.

[215] ibid para 30.

(ii) the incentive for the merged entity to foreclose; and (iii) the overall impact of the merged entity on effective competition.[216]

An acquisition of joint control by two firms over another firm may give a greater ability to foreclose than an acquisition of sole control over the same firm by only one of them, because both parents collectively would have a stronger market position in the upstream or downstream market. However, this may increase the likelihood of foreclosure only if the parent firms have the incentive to align their competitive strategy to that of each other, in order to leverage their collective market power into the joint venture's market. In full-function joint venture cases, the incentive to foreclose is less likely to be present than in the case of sole control, due to the fact that the parent firms may have different profit-maximising policies and commercial interests. In analysing the vertical effects of a joint venture between Amadeus and GGL, the Commission held that the three parents of Amadeus (Lufthansa, Air France and Iberia) competed with each other, and each of them was a member of different airline alliances and, therefore, it was doubtful that they would accept that the joint venture favoured each of them to the detriment of each other and their respective allied partners.[217]

The incentive to foreclose in the context of full-function joint ventures may be considered even lower, if only one parent is in a vertical relationship with the joint venture, because any foreclosing strategy may not be profitable to the other parent. For instance, in *SNPE/MBDA*,[218] the Commission stated that MBDA would not use the joint venture to reinforce its competitive position in the relevant markets, on the ground that this would go against the joint venture's profit maximising strategy, and the other parent, SNPE, would oppose it.[219] Furthermore, if the parent firm was already vertically integrated before the transaction, the formation of the joint venture may even decrease its incentive to foreclose. In *Siemens/Italtel*, the Commission concluded that the acquisition of joint control by Siemens over Italtel, which was

[216] ibid paras 31-77.
[217] *Amadeus/GGL* (Case COMP/M.2794) [2002] para 20.
[218] *SNPE/MBDA* (n 73).
[219] ibid para 29. See also *Zeiss/EQT/Sola* (Case COMP/M.3670) [2005] para 23; *Alstom UK/Balfour Beatty* (Case COMP/M.4508) [2007] para 42; *HBO/Ziggo/HBO Nederland* (n 91) para 65.

previously solely controlled by STET, would reduce the objective interest of STET to favour the joint venture in order to foreclose the joint venture's competitors.[220]

Considering that full-function joint ventures normally must supply to and purchase from third parties and deal with their parents at arm's length, it should be unlikely that they would lead to foreclosure concerns for the parents' rivals. Although it does not ignore the possibility that these joint ventures may give preferential treatment to their parents, the Commission often takes into consideration the full-function character of the joint venture as a factor mitigating (but not eliminating) the risk of foreclosure.[221]

A vertical full-function joint venture may also lead to coordinated effects by facilitating tacit coordination among firms in an upstream or downstream market from that of the joint venture.[222] Where two or more parents are active in the same upstream or downstream market, the Commission usually analyses whether the joint venture may result in coordination between the parents in that market, according to Article 2(4) and (5) of the Merger Regulation rather than under Article 2(3).[223] Therefore, in the case of vertical joint ventures, the assessment of coordinated effects usually appears to be confined to situations where only one parent operates in the vertically related market.

The primary competition concern with regard to conglomerate mergers is also foreclosure. This may be the case particularly where the merger broadens the range of products offered by the merged entity, such that it could leverage its strong market position in one product market into another by tying or bundling or other exclusionary practices.[224] In assessing the likelihood of a foreclosure effect in such

---

[220] *Siemens/Italtel* (n 78) para 60. See also *Angelini/Phoenix* (Case COMP/M.2432) [2001] para 23; *Bertelsmann/Springer* (Case COMP/M.3178) [2005] para 159; *Fortis/BCP* (n 80) para 34.

[221] See eg *GFEL/LH/BA/AF/GF-X* (Case COMP/M.2830) [2002] para 15; *Cementbouw/ENCI* (Case COMP/M.3141) [2003] para 18; *Epson/Sanyo* (Case COMP/M.3459) [2004] para 16; *Unicredit/Banca IMI/EuroTLX SIM* (Case COMP/M.5495) [2009] para 62.

[222] See Non-Horizontal Merger Guidelines (n 142) paras 79-90.

[223] See eg *Accor/Hilton/Six Continents* (Case COMP/M.3101) [2003]; *Sony Pictures/Disney/ODG* (Case COMP/M.3542) [2004]; *Bertelsmann/Springer* (n 220); *Sony/BMG* (n 201).

[224] Non-Horizontal Merger Guidelines (n 142) para 93. This so-called portfolio effect theory is not accepted by the US enforcement authorities. This divergence between the EU and the US has become highly debatable after the Commission and the US authorities came to different conclusions in respect

cases, the Commission also considers the ability and incentive of the merged entity to foreclose, and the overall likely impact of such practice on prices and choices.[225]

Based on the similar reasons mentioned above in relation to vertical effects, a serious foreclosure risk is usually less likely to arise in the case of conglomerate joint ventures, notwithstanding that this risk is not completely disregarded by the Commission.[226] In *GE/Honeywell*, General Electric claimed that the products of CFMI, its joint venture with Snecma, could not be considered in assessing the possibility of bundling between the products of the merging parties, because Snecma would not allow the use of CFMI for bundling purposes. The Commission refused this claim on the basis that Snecma did not have any incentive to object to the involvement of CFMI in any bundling strategy.[227] Nonetheless, the General Court found that Snecma would not have a comparable commercial interest to that of General Electric in engaging in bundling. In this regard, the Court stated that 'the merged entity's 'lever' on the market for large commercial jet aircraft engines to promote its bundled sales would, in principle, be smaller in the case of CFMI engines than it would be in the case of engines manufactured by GE alone'.[228] This may be interpreted to mean that in conglomerate joint venture cases, the Commission has to consider whether the parent firm, which is not active in the neighbouring product market, has a commercial interest to contribute to the bundling or tying strategy in question.

---

of the GE/Honeywell merger. See William J Kolasky, 'Conglomerate Mergers and Range Effect: It's a Long Way from Chicago to Brussels' (2002) 10 *George Mason Law Review* 533; DOJ, 'Submission for OECD Roundtable on Portfolio Effects in Conglomerate Mergers' (October 12, 2001) <http://www.justice.gov/atr/public/international/9550.htm> accessed 05 April 2013; Lisa M Renzi, 'The GE/Honeywell Merger: Catalyst in the Transnational Conglomerate Merger Debate' (2002) 37 *New England Law Review* 109; Dimitri Giotakos, 'GE/Honeywell: A Theoretic Bundle Assessing Conglomerate Mergers Across the Atlantic' (2002) 23 *University of Pennsylvania Journal of International Economy Law* 469.

[225] Non-Horizontal Merger Guidelines (n 142) paras 95-118.

[226] For full-function joint venture cases where the Commission analysed possible conglomerate effects, see eg *Siemens/Drägerwerk* (Case COMP/M.2861) [2003]; *VNU/WPP* (n 180); *Sonae Industria/Tarkett* (Case COMP/M.4048) [2006]; *ARM/Giesecke & Devrient/Gemalto* (n 91) paras 180-83.

[227] *GE/Honeywell* (n 156) paras 392-95.

[228] *General Electric v Commission* (n 143) paras 459-61.

B- Analysis of the Risk of Coordination between the Parents under Article 101

Article 2(4) of the Merger Regulation stipulates that if the creation of a full-function joint venture has, as its object or effect, the coordination of the competitive behaviour of undertakings that remain independent, this coordination will be analysed with reference to the criteria of Article 101. This appraisal under Article 101 is in addition to the analysis under Article 2(3). However, if the joint venture does not have any market presence for EU customers, the only competition assessment may concern the risk of coordination as to the parents' independent activities in the EU.[229]

It should be noted that not all agreements between the parent firms are subject to Article 101 in accordance with Article 2(4). As in *Fujitsu/Siemens*,[230] the Commission accepts that only those which are directly related to and necessary for the formation of the joint venture can be examined under Article 2(4).[231] Other agreements, however, will be analysed separately with reference to Article 101 within the framework of Regulation 1/2003.[232] The Commission herein appears to utilise the principles for ancillary restraints in order to determine the scope of Article 2(4).[233]

Under Article 2(4), the Commission has not so far found that the creation of a full-function joint venture has an object to coordinate the independent activities of its parents. This is not surprising, because it is very unlikely that the parties would notify the Commission of a joint venture with an anticompetitive object. Moreover, considering that the parent firms normally make significant investments in the joint venture, the Commission usually does not give important consideration to the possibility that the parents have an anticompetitive object.[234] Therefore, the analysis

[229] See eg *Boeing/Lockheed Martin/United Launch Alliance* (Case COMP/M.3856) [2005].
[230] Case IV/JV.22 [1999].
[231] ibid paras 72-77.
[232] ibid para 77. See also *NYK/Lauritzen Cool/LauCool* (Case COMP/M.3798) [2005] paras 43-45.
[233] See Commission Notice on restrictions directly related and necessary to concentrations [2001] OJ C188/5.
[234] In many cases, the Commission disregarded this possibility on the basis that there was not clear evidence in that way. See eg *Telia/Telenor/Schibsted* (n 65) para 38; *KLM/Alitalia* (n 58) para 60; *Bertelsmann/Springer* (n 220) para 166; *Amadeus/Sabre* (Case COMP/M.4760) [2007] para 22.

under Article 101 usually focuses on whether the joint venture has, as its effect, the coordination of the competitive behaviour of independent firms.

The Commission acknowledges that for a restriction of competition within the sense of Article 101(1) to be established, it must be shown that (i) the coordination of the parent firms' competitive behaviour is likely; (ii) this coordination results in an appreciable restriction of competition; and (iii) there is a causal link between this restriction and the creation of the joint venture.[235] When the infringement of Article 101(1) is established, it is examined as to whether the four criteria of Article 101(3) are fulfilled.[236]

In this analysis under Article 101, the Commission, first of all, identifies candidate markets where there may be a risk of coordination. Thus, below, it is firstly explained how these markets are identified. Then, it is shown how the Commission assesses the conditions required to find a breach of Article 101(1), and the fulfilment of the exemption criteria under Article 101(3).

1. Candidate Markets for Coordination

The first subparagraph of Article 2(5) of the Merger Regulation provides that in analysing the risk of coordination, the Commission will consider 'whether two or more parent companies retain, to a significant extent, activities in the same market as the joint venture or in a market which is downstream or upstream from that of the joint venture or in a neighbouring market closely related to this market'.

Through focusing on the coordination of the independent activities of the parent firms, the Merger Regulation appears not to concern any coordination between the parents and the joint venture. This approach is consistent with the Commission's previous practice, which presumes that there would not be effective competition between the parent and the joint venture, since the former would act as the industrial

[235] See eg *BT/Airtel* (Case IV/M.3) [1998] para 23; *Telia/Sonera/Motorola/Omnitel* (Case IV/JV.9) [1998] para 27; *TXU Europe/EDF* (Case IV/M.36) [2000] para 41; *Bertelsmann/Springer* (n 220) para 164.
[236] See *BT/AT&T* (n 66) para 198; *Areva/Urenco* (n 62) para 224.

leader of the latter.[237] Thus, the joint venture's market may be identified as a candidate market for coordination if at least two parents remain active therein. The Commission also assesses the possibility of coordination if the parent firms continue to be potential competitors in relation to the joint venture's market.[238] This may be the case especially if the parents do not undertake not to enter the joint venture's market in the future.[239]

In any case, it may be asked whether the Commission will take into account the risk of coordination with regard to the joint venture's market, if, in analysing the coordinated and non-coordinated effects of joint ventures, it has already assumed that the parent firms would align their competitive behaviour with each other. *Wegener/PCM* shows that a joint venture may be viewed as leading to both the creation or strengthening of a dominant position and coordination between the parents in the joint venture's market.[240] Nonetheless, in *EDF/AEM/Edison*, as explained above,[241] the Commission assumed that the parents and the joint venture would act together for the purposes of the appraisal under Article 2(3), but did not analyse separately the likelihood of coordination between the parents according to Article 2(4). Even though this decision seems to constitute an exception to the general practice of the Commission, it raises confusion about whether the likelihood of coordination between the parents will be assessed in respect of markets where the joint venture is intended to operate.

Since the parent firms usually withdraw from the joint venture's markets in order not to compete with it, in the vast majority of cases, the risk of coordination is analysed with respect to upstream, downstream or neighbouring markets in which the two parents are active. In *Vodafone/Vivendi*,[242] the Commission found that the joint venture was likely to give rise to coordination between the parents in an upstream

[237] See 86 above.
[238] See eg *Home Benelux* (n 65) para 30; *Cegetel/Canal +/AOL/Bertelsmann* (Case IV/M.5) [1998] para 27; *Panagora/DG Bank* (n 65) para 29.
[239] See eg *Sydkraft/HEW/Hansa Energy Trading* (Case COMP/JV.28) [1999] paras 27 and 29.
[240] *Wegener/PCM* (n 64) para 62. See also eg *Telia/Telenor/Schibsted* (n 65); *Intracom/Siemens/STI* (n 65); *Total Holdings Europe SAS/ERG SPA* (Case COMP/M.5781) [2010] paras 77-78.
[241] See 115 above.
[242] Case COMP/JV.48 [2000].

market from that of the joint venture.[243] In *Areva/Urenco*, however, the Commission concluded that the joint venture would result in coordination in relation to a downstream market.[244]

Neighbouring markets may also be regarded as candidate markets for coordination. The Commission defines a neighbouring market as 'a separate but closely related market to the market of the joint venture, both markets having common characteristics including technology, customers and competitors'.[245] For example, the life insurance market is considered to be a neighbouring market to the non-life insurance market,[246] while the charter air transport market is a neighbouring market to the scheduled air transport market.[247] However, the scheduled air transport market is less likely to be viewed as a neighbouring market closely related to the life insurance market. Two different geographical markets in respect of the same product may also be considered as neighbouring markets from each other. In *Yara/Praxair*,[248] for instance, the Commission analysed the risk of coordination in national markets outside the scope of the joint venture, where the parent firms would continue to be active.[249] If the parent firms operate in the same market which is not closely related to that of joint venture, the Commission may still identify such a market as a candidate market, even though it would be unlikely to give important consideration to the risk of coordination therein.[250]

Although the Merger Regulation and the Commission's practice essentially concern horizontal coordination, in some decisions the Commission seemingly also assesses the possibility of vertical coordination. In *NC/Canal +/CDPQ/Bank America*,[251] the Commission decided that the creation of the joint venture NCH, engaged in cable

[243] ibid paras 83-88.
[244] *Areva/Urenco* (n 62) paras 221-225.
[245] 1994 Notice (n 27) para 18.
[246] *Skandia/Storebrand/Pohjola* (Case IV/JV.21) [1999].
[247] *KLM/Alitalia* (n 58) paras 52-55. For some other markets to be considered as neighbouring to each other, see *Ericsson/Nokia/Psion* (Case IV/M.6) [1998] para 21; *Fujitsu/Siemens* (n 230) para 38; *BVI Television/SPE Euromovies/Europe Movieco* (Case COMP/JV.30) para 28; *Ses Astra/Eutelsat* (Case COMP/M.4477) [2007] para 34.
[248] Case Comp/M/4823 [2007].
[249] ibid paras 43 and 45. See also eg *Enel/FT/DT* (Case IV/JV.2) [1998] para 34; *VIAG/Orange UK* (Case IV/JV.4) [1998] para 30.
[250] See eg *Amadeus/Sabre* (n 234) paras 24 and 26; *ARM/Giesecke & Devrient/Gemalto* (n 91) para 184.
[251] Case IV/M.1327 [1998].

television distribution in France, could lead to vertical coordination between the parent firms, with regard to access to the content needed to operate in the pay-tv market in Spain.[252] This decision shows that it may be necessary to identify possible markets where the parent firms would vertically coordinate their activities. Nevertheless, this will seldom occur because Article 2(4) is primarily targeted at horizontal coordination.[253]

2. Article 101(1) Analysis

a) Likelihood of Coordination

The likelihood of coordination usually depends on the form of possible coordination strategy. The forms of coordination listed in the Horizontal Merger Guidelines regarding coordinated effects are also relevant herein.[254] Accordingly, the purpose of coordination may be raising prices over a competitive level,[255] limiting output or capacity,[256] sharing markets or customers,[257] or conducting exclusionary practices.[258] However, it is not rare that the Commission analyses the risk of coordination between the parent firms without specifying the possible form of coordination.

In determining whether coordination is likely, the Commission takes into account a number of factors. It is however difficult to state that the Commission's practice is consistent in providing a general methodology for considering the significance of these factors in each individual case. In some decisions, the Commission decides

---

[252] ibid paras 33-38. See also *Wartsila Technology/Hyundai Heavy Industries* (Case COMP/M.4596) [2007] para 27.
[253] See eg *RWE Gas/Lattice International* (Case COMP/M.2744) [2002] paras 34-35.
[254] Horizontal Merger Guidelines (n 124) para 40.
[255] See eg *Fujitsu/Siemens* (n 230) para 57; *NC/Canal +/CDPQ/Bank America* (n 251) para 32; *Ericsson/Nokia/Psion* (n 247) para 31; *Sydkraft/HEW/Hansa Energy Trading* (n 239) para 27; *Boeing/Lockheed Martin/United Launch Alliance* (n 229) paras 21-26.
[256] See eg *Areva/Urenco* (n 62) paras 191-95.
[257] See ibid para 199.
[258] In *Boeing/Lockheed Martin/United Launch Alliance*, the Commission analysed whether it was likely that the parent firms would apply predatory pricing strategies to eliminate competitors. See (n 229) paras 27-36. Furthermore, in several cases, the Commission examined whether it was likely that the parents would adopt a bundling or tying strategy. See eg *Universal Studio Network/NTL/Studio Channel* (Case COMP/M.2211) [2000] paras 39-40; *Wegener/PCM* (n 64) 62; *Ses Astra/Eutelsat* (n 247) para 38. In *NC/Canal +/CDPQ/Bank America*, however, the Commission questioned whether one parent would pursue a discriminate policy against the competitors of the other parent to treat it favourably. See (n 251) paras 33-38.

whether the parent firms are likely to coordinate by using very general terms,[259] while, in other decisions, it makes a detailed analysis through giving important consideration to various factors.[260]

Its practice shows that in analysing the likelihood of coordination, the Commission essentially focuses on the incentive of the parents to coordinate. It does not, however, necessarily require that the parents have the ability to coordinate. Such ability seems to have more significance in respect of the appreciability of the restriction of competition.[261] Nonetheless, whether the parents have the ability to coordinate is also considered as a factor that affects the incentive for the parents to coordinate.[262]

In evaluating whether the parents have the ability to coordinate, the Commission firstly assesses their market shares. In *Wegener/PCM*, when finding that the coordination of the parents' competitive behaviour was likely, the Commission principally relied on the fact that the two parents and the joint venture were collectively the market leader with a combined market share of 45-55 %.[263] In *TXU Europe/EDF*, however, the Commission decided that given the parents' combined market share of 13% they could not coordinate successfully.[264]

Nevertheless, if the market is very concentrated, it is not always necessary that the parents collectively have a significant market share in order to conclude that they have the ability to coordinate. In *Fujitsu/Siemens*, although the parent firms had a combined market share of 20-40% in the financial workstations market, the second highest after that of NCR, the Commission considered coordination likely on the grounds that this market was highly concentrated.[265] Moreover, in relation to the DRAM market where the parent firms had a market share of less than 25%, the

[259] See eg *BT/AT&T* (n 66) paras 174 and 185-87; *Wegener/PCM* (n 64) para 62.
[260] See eg *Fujitsu/Siemens* (n 230) paras 53-59; *Telia/Telenor/Schibsted* (n 65) paras 42-46; *Areva/Urenco* (n 62).
[261] See V/B/2/b below.
[262] See eg *Telia/Telenor/Schibsted* (n 65) paras 42-44; *Skandia/Storebrand/Pohjola* (n 246); *Fujitsu/Siemens* (n 230) para 52; *TXU Europe/EDF* (n 235) paras 45-50; *Intracom/Siemens/STI* (n 65) para 42.
[263] *Wegener/PCM* (n 64) para 62.
[264] *TXU Europe/EDF* (n 235) para 46. See also *KLM/Alitalia* (n 58) paras 64; *Hitachi/STMicroelectronics/SuperH* (Case COMP/M.2439) [2001] para 31; *Lehman Brothers/SCG/Starwood/Le Meridien* (n 96) [2005] para 24.
[265] *Fujitsu/Siemens* (n 230) paras 62-62.

Commission provided that 'only a relationship of interdependence between the five major producers in the DRAM market would allow the conclusion that co-ordination of the competitive behaviour between Siemens and Fujitsu was sufficiently likely'.[266]

It is nevertheless not surprising that besides market shares and the level of concentration, other market characteristics may also play an important role in determining the ability of the parent firms to coordinate. In *Fujitsu/Siemens*,[267] the Commission came to the conclusion that the structure of the DRAM market was not conducive to coordination, due to the lack of transparency on prices, countervailing buyer power,[268] unstable demand level and rapid technological change in the market.[269] Similarly, in *Telia/Telenor/Schibsted*,[270] the Commission found that the high market shares of the parent firms in the dial-up internet access market were not indicative of their market power, based on the growing character of the market,[271] low switching costs ie high price-sensitivity,[272] and low entry barriers.[273] In some decisions, the Commission also considers the existence of substantial overcapacity in the market as a factor which decreases the ability and incentive to coordinate.[274] Furthermore, the fact that the market is regulated, or that the pricing or other competitive parameters are determined by third parties other than the parent firms, is regarded as diminishing the ability and incentive to coordinate.[275]

In addition to the ability to coordinate, another important factor affecting the incentive to coordinate is the value of the joint venture's business to the parent firms. The Commission's practice suggests that the greater the value of the joint venture, the greater the incentive the parent would have to coordinate. In *NC/Canal +/CDPQ/Bank America*, the Commission held that the success of the cable business

---

[266] ibid paras 53-56.
[267] ibid para 57.
[268] See also *Intracom/Siemens/STI* (n 65) para 43.
[269] See also ibid.
[270] *Telia/Telenor/Schibsted* (n 65) paras 42-43.
[271] See also *TXU Europe/EDF* (n 235) para 49; *Electrabel/TotalFinaElf/Photovoltech* (Case COMP/M.2712) [2002] para 25.
[272] See also *Intracom/Siemens/STI* (n 65) para 43.
[273] See also *Panagora/DG Bank* (n 65) para 32; *TXU Europe/EDF* (n 235) para 47; *Sydkraft/HEW/Hansa Energy Trading* (n 239) para 27; *Skandia/Storebrand/Pohjola* (n 246).
[274] See eg *Boeing/Lockheed Martin/United Launch Alliance* (n 229) para 26; *Berkshire Hathaway/Munich Re/GAUM* (Case COMP/M.5010) [2008] para 61.
[275] See eg *NSR/VS/CMI/IGO Plus* (Case IV/M.1504) [1999]; *Sony/BMG* (n 201) paras 178-82.

of the joint venture, NC, was very important to the parent Canal+, such that the other parent could convince Canal+ to treat it favourably in relation to access to its audio-visual rights in Spain.[276] In *Vodafone/Vivendi*, the Commission found that having regard to the importance of the joint venture's portal for the third generation phones businesses of the parent firms and the amount of investments required for the development of third generation services, the parent firms would be likely to have the incentive to coordinate in the mobile telecommunications market in Spain.[277] On the other hand, in many cases, the Commission decided that coordination was unlikely because the value of the joint venture's activities to the parents was very limited, in comparison with their overall activities or their activities in the candidate market for coordination.[278]

The Commission also takes into consideration the symmetry between the market positions of the parent firms. In *Yara/Praxair*, it viewed that coordination was unlikely due to the asymmetric market shares of the parent firms.[279] Moreover, in *NC/Canal +/CDPQ/Bank America*, the Commission found coordination to be unlikely with respect to the pay-tv market in Spain, on the grounds that one of the parent firms was a new entrant which had to get as many subscribers as possible in the start-up phase.[280]

Whether the joint venture facilitates information exchange between the parent firms is also considered in analysing the incentive for the parent firm to coordinate. In some decisions, the Commission has excluded the risk of coordination, because the joint venture does not give the parent firms access to competitive information regarding each other's independent operations, or the parent firms provide certain

[276] *NC/Canal +/CDPQ/Bank America* (n 251) para 33.
[277] *Vodafone/Vivendi* (n 242) para 86.
[278] See eg *Telia/Telenor/Schibsted* (n 65) para 45; *Telenor/Ergogroup/DNB/Accenture* (Case IV/M.2374) [2001] para 16; *Bertelsmann/Springer* (n 220) paras 167-68; *Boeing/Lockheed Martin/United Launch Alliance* (n 229) para 14; *Amadeus/Sabre* (n 234) para 23; *Ses Astra/Eutelsat* (n 247) para 37; *Bertelsmann/Planeta/Circulo* (Case COMP/M.5838) [2010] para 75.
[279] *Yara/Praxair* (n 248) paras 44 and 46. See also *Intracom/Siemens/STI* (n 65) para 44.
[280] *NC/Canal +/CDPQ/Bank America* (n 251) para 32.

safeguards that prevent the use of the joint venture for the purposes of information exchange.[281]

Some other factors affecting the likelihood of coordination are whether the parent firms are members of different alliances which are competing with each other;[282] whether the parent firms are active in the candidate market for coordination, only through a joint venture with third parties;[283] and, whether the characteristics of products or contracts in the candidate market induces the parent firms to compete rather than coordinating.[284]

b) Appreciable Restriction of Competition

Once it considers coordination to be likely, the Commission analyses whether such coordination is likely to have an appreciable effect on competition. As stated above, this analysis is closely linked with the ability of the parent firms to coordinate successfully. In *BT/AT&T*, after finding that the parent firms would have the incentive to coordinate without considering their ability to do it, the Commission decided that such coordination would be appreciable on the basis of the market structure and the strong market position of the parents.[285] In *Fujitsu/Siemens*, the Commission relied on the market shares of the parent firms and their interdependence with the biggest player in the market, in order to conclude that coordination was likely and would be appreciable.[286] In many cases, although coming to conclusion that the parents did not have the ability and incentive to coordinate, the Commission explained that even in the worst case scenario where the

[281] See eg *GFEL/LH/BA/AF/GF-X* (n 221) para 24; *Accor/Hilton/Six Continents* (n 223) paras 24-27; *LSG Lufthansa Service Holding/Gate Gourmet Switzerland* (n 180) paras 51-53; *Amadeus/Sabre* (n 234) para 25.
[282] See *The Airline Group/NATS* (Case COMP/M.2315) [2001] para 38.
[283] See eg *Bertelsmann/Mondadori/Bol Italia* (Case IV/M.0051) [2000] para 26; *Boeing/Lockheed Martin/United Launch Alliance* (n 229) para 23. For contrary decisions, see *NC/Canal +/CDPQ/Bank America* (n 251) paras 35-37; *Mubadala/Rolls-Royce* (Case COMP/M.5399) [2009] para 38.
[284] See eg *Ericsson/Nokia/Psion* (n 247) paras 31-35; *Thomson-CSF/Racal Electronics* (Case IV/M.1413) [1999] para 31.
[285] *BT/AT&T* (n 66) paras 175 and 188-90.
[286] *Fujitsu/Siemens* (n 230) para 64.

parents would coordinate, this coordination would not lead to an appreciable restriction of competition.[287]

In some cases, however, the Commission held that coordination was likely, but did not discuss whether it would result in an appreciable effect on competition.[288] Given the strong market position of the parent firms as well as the commitments submitted by the parties to remove the risk of coordination in such cases, the Commission may not have needed to assess the appreciability of the likely coordination.

The appreciability condition should also be understood to require that the coordination has an appreciable effect on trade between Member States. Such an effect on trade, in general, is required for a transaction to fall within the scope of Article 101(1).[289] In *BT/AT&T*, for instance, the Commission analysed separately whether any coordination would have an effect on trade between Member States.[290]

c) Causal Link

When the coordination is considered to be likely and appreciable, the Commission analyses whether it is a direct consequence of the creation of the joint venture. In such an analysis, the Commission examines particularly whether the parent firms had competed strongly with each other in the market before the formation of the joint venture. In this regard, the existence of previous contractual or structural links between the parent firms is viewed as an important indicator of the absence of competition before the creation of the joint venture, although this does not automatically mean that there is no causal link between the Article 2(4) effects and the joint venture.[291]

---

[287] See eg *Thomson-CSF/Racal Electronics* (n 284) para 34; *Elf/Texaco/Antifreeze* (n 53) para 16; *Home Benelux BV* (n 65) paras 35, 36 and 39; *Cegetel/Canal +/AOL/Bertelsmann* (n 238) paras 35-39; *Sydkraft/HEW/Hansa Energy Trading* (n 239) paras 27 and 29; *KLM/Alitalia* (n 58) paras 65-66; *Universal Studio Network/NTL/Studio Channel* (n 257) para 40.

[288] See eg *NC/Canal +/CDPQ/Bank America* (n 251) paras 33-38; *Vodafone/Vivendi* (n 242) paras 83-88; *Wegener/PCM* (n 64) para 62.

[289] See Commission Guidelines on the effect on trade concept contained in Articles 81 and 82 of the Treaty [2004] OJ C101/81.

[290] *BT/AT&T* (n 66) paras 176 and 191. See also *Fujitsu/Siemens* (n 230) para 65.

[291] Commission, 'Twenty-Eighth Report on Competition Policy' (1998) insert 7.

In *Enel/FT/DT*, the Commission stated that there had been a joint venture between the parent firms FT and DT, and that therefore they had not already competed strongly with each other in their respective home countries. Based on this finding, the Commission decided that it was not possible to claim that there was a causal link between the lack of competition between the parents and the creation of the joint venture in question.[292] Similarly, in *Telefonica/Portugal Telecom/Medi Telecom*,[293] the Commission held that the parent firms had not competed strongly against each other because of a general cooperation agreement between them and, thus, there was no causal link between the lack of competition and the formation of the joint venture.[294]

The Commission usually concludes that it is not necessary to examine the existence of a causal link if any coordination is not likely or appreciable.[295] However, in appraising any causal link, it also appears to take into account some factors relevant to the incentive to coordinate.[296] In *Boeing/Lockheed Martin/United Launch Alliance*, the Commission provided that there would be no causal link between the joint venture and the coordination, on the basis that the joint venture would not give the parents an incentive to coordinate.[297] In line with this approach adopted in the decision, it may be claimed that if it is shown that the joint venture will increase the incentive for the parent firms to coordinate the causal link is also likely to be considered proven. Indeed, in some decisions where it was found that the joint venture would create an incentive for the parent firms to coordinate, the Commission did not need to discuss the existence of any causal link.[298]

3. Analysis under Article 101(3)

If the joint venture causes any coordination caught by Article 101, the Commission normally analyses whether the exemption conditions laid down in Article 101(3) are

[292] *Enel/FT/DT* (n 249) paras 37.
[293] Case IV/JV.23 [1999].
[294] ibid para 29. See also *First/Keolis/TPE* (Case COMP/M.3273) [2003] para 13.
[295] See eg *Home Benelux BV* (n 65) paras 40; *Cegetel/Canal +/AOL/Bertelsmann* (n 238) para 39; *Mannesmann/Bell Atlantic/OPI* (Case IV/M.17) [1999] para 21.
[296] See *Enel/FT/DT* (n 249) paras 37-39; *Telefonica/Portugal Telecom/Medi Telecom* (n 293) para 29.
[297] *Boeing/Lockheed Martin/United Launch Alliance* (n 229) para 20.
[298] See eg *BT/AT&T* (n 66); *Vodafone/Vivendi* (n 242); *Wegener/PCM* (n 64).

satisfied. Since the parent firms usually give some commitments that exclude the risk of coordination, the Commission is not often required to make such an analysis.[299]

In *Areva/Urenco*, nevertheless, the Commission, to some extent, discussed the applicability of Article 101(3) to the risk of coordination between the parent firms. Although far from providing extensive guidance regarding the appraisal of these effects under Article 101(3), it gives some hints about the possible approach of the Commission to the issue. In this decision, the Commission held that the conditions of Article 101(3) were not fulfilled, particularly because there was no indication that any coordination between the parents would be likely to benefit consumers, or that the restrictions imposed were indispensable.[300] This implies that under Article 2(4), the Commission will take into account only efficiencies resulting from the coordination, but not those arising from integration by the joint venture. This approach seems to be compatible with the wording of Article 2(4), which states that 'any coordination' will be appraised in accordance with the criteria of Article 101(1) and (3).

Such a distinction may be important in analysing the first exemption condition, which requires that the transaction produces economic benefits. As in the *Areva/Urenco* case, it is unlikely that any horizontal coordination creates substantial benefits, because it does not involve any integration and usually tends to raise prices or exclude competitors.[301] Even if the benefits resulting from integration by the joint venture are included in the appraisal, it would be still very difficult to prove the fulfilment of the indispensability condition. Thus, it would be very exceptional that any coordination infringing Article 101(1) is exempted under Article 101(3).

C- Overlap between Article 2(3) and Article 2(4)

In some cases, any coordination between the parent firms may theoretically fall under both Article 2(3) and Article 2(4) of the Merger Regulation. Considering that

[299] See eg *BT/AT&T* (n 66) para 198; *NC/Canal +/CDPQ/Bank America* (n 251); *Vodafone/Vivendi* (n 242); *Wegener/PCM* (n 64).
[300] *Areva/Urenco* (n 62) para 224.
[301] If the joint venture results in vertical coordination falling within Article 101(1), efficiency claims may be more convincing.

compared to the analysis of coordinated effects under Article 2(3) the Commission appears to show less evidence to conclude that the coordination infringes Article 101, the question of which article(s) applies to the coordination may be of great significance.

For the purpose of distinguishing the scope of these two provisions from each other, it can be argued that Article 2(3) concerns coordination among all the remaining players in the market, whereas Article 2(4) concerns merely coordination between the parent firms. However, such an argument would not be sufficiently convincing, because in examining the likelihood of coordination and the appreciability of the restriction of competition with reference to Article 101, the Commission usually takes into account the market structure and the market positions of the competitors as well. For example, in *Fujitsu/Siemens*, the Commission relied on the interdependence between the parent firms and their competitors to conclude that the coordination was likely and had an appreciable effect on competition.[302]

Areva/Urenco provides some indications about how the Commission may approach any overlap between the scopes of the two rules. Therein, Areva and Urenco established the joint venture ETC, operating in the centrifuge market, which was a market upstream to the uranium enrichment market where they would continue to compete. According to the joint venture agreement, neither parent would be able to purchase centrifuges from the joint venture without the prior explicit approval of the other parent. The Commission firstly stated that the ability of the parents to control each other's capacity would enable them to establish successful coordination on capacities, and that this would consequently lead to a price increase in the uranium enrichment market, at both the EU and global levels.[303] Furthermore, by applying the collective dominance criteria, the Commission found that the joint venture would also result in tacit coordination between the parent firms in the EU uranium enrichment market.[304] Based on these findings, it decided that the joint venture would create a collective dominance for Areva and Urenco in the uranium enrichment market in accordance with Article 2(3). For the same reasons, it also held

[302] *Fujitsu/Siemens* (n 230) paras 62-65.
[303] *Areva/Urenco* (n 62) paras 174-91.
[304] ibid paras 192-219.

that the joint venture was also likely to restrict competition appreciably in the market within the sense of Article 101.[305]

The first implication that can be drawn from *Areva/Urenco* is that the Commission may also appraise the risk of coordination with respect to markets where the parent firms do not integrate their independent activities under Article 2(3). It may be claimed that this is not surprising because the Commission already makes such appraisals in the case of vertical mergers. However, it should be noted that in *Areva/Urenco*, the Commission analysed whether there would be any explicit or tacit coordination between the parent firms, but not between the merged entity and its competitors which is the focus in the analysis of vertical mergers. As mentioned above, the Commission usually examines the risk of coordination between the parent firms in markets downstream or upstream to that of the joint venture only according to Article 2(4). Therefore, *Areva/Urenco* may be considered to signal that any coordination between the parent firms in relation to neighbouring markets may also be subject to the SIEC test laid in Article 2(3).

Another conclusion from this decision can be that the Commission may apply both Article 2(3) and Article 101, in combination with Article 2(4), to the same coordination situation. Nonetheless, the Commission's practice may not be consistent in this respect. In *EDF/AEM/Edison*, for example, the Commission applied only the coordinated effect test under Article 2(3) to the risk of coordination in the joint venture's market, through assuming that the parents and the joint venture would align their competitive behaviour with each other.[306]

Given the fact that *Areva/Urenco* is the only case where the risk of coordination between the parents is explicitly analysed under Article 2(3), and that there is not any case law regarding the issue, it is doubtful that the Commission would adopt the same approach in its future practice. However, the decision still has importance as it

[305] ibid paras 221-25.
[306] See n 181. In *BP/Chevron/ENI/Sonangol/Total*, the Commission seemed to analyse the risk of coordination between the parents together with the possible non-coordinated and coordinated effects of the joint venture, without specifying which legal test it applied. See (n 54) paras 21-31.

shows the possibility that Article 2(3) may also be used to address the risk of coordination between the parent firms outside the joint venture.[307]

VI. Assessment of the Conduct and Operation of Full-Function Joint Ventures under Article 101

In EU competition law, it is not disputed that the acts and decisions of full-function joint ventures constitute unilateral conduct which fall within the scope of Article 102.[308] However, it is questionable whether a full-function joint venture forms a single economic unit, namely an undertaking, with its parents within the sense of Article 101. The answer to this question is especially important in deciding whether any agreement between the joint venture and its parent firm is caught by Article 101, and whether the parent firms can also be held liable for an infringement of competition rules by the joint venture.

The EU courts and the Commission recognise that Article 101(1), in principle, does not apply to agreements between a parent firm and its solely controlled subsidiary, if the latter enjoys no real economic autonomy from the former. In *Centrafarm BV v Sterling Drug Inc*,[309] the ECJ held that agreements between a firm and its subsidiary do not fall under Article 101, if they 'form an agreement unit within which the subsidiary has no real freedom to determine its course of action on the market, and if the agreements or practices are concerned merely with the internal allocation of tasks as between the undertakings'.[310]

However, it is difficult to determine whether this principle is also applicable to the relationship between a firm and its joint venture because the former has only joint control over the latter. In *Gosme/Martell-DMP*,[311] the Commission provided that Martell and its joint venture, DMP, with Piper-Heidsieck were separate undertakings

[307] See Chapter 6/III below.
[308] This issue is however highly debatable in US competition law. See Chapter 5/V below.
[309] Case C-15/74 [1974] ECR 1147.
[310] ibid para 41. See also Case C-48/69 *ICI v Commission* [1972] ECR 619, para 133-34; Case C-30/87 *Bodson v Pompes Funèbres* [1988] ECR 2479, para 19; Case C-73/95P *Viho Europe BV v Commission* [1996] ECR I-5457, para 14-17; Case T-112/05 *Akzo Nobel NV and others v Commission* [2007] ECR II-5049, para 57-58.
[311] Case IV/32186 Commission Decision 91/335/EEC [1991] OJ L185/23.

for the purpose of an agreement between them, because Martell did not have the ability to individually control the commercial activities of DMP.[312] It should be noted that this decision was given in the early 1990s, when the Commission used to consider the risk of coordination between the joint venture and its parent firm, in order to determine whether a joint venture was concentrative or cooperative. This decision, thus, seems to be in line with that early approach of the Commission. Nonetheless, as mentioned above, the Commission later began to assume that there would not be effective competition between a firm and its joint venture, and to ignore any risk of coordination between them for the purpose of identifying concentrative joint ventures.[313] This change calls into question the relevance of that decision in discussing whether a full-function joint venture constitutes a single economic unit with its parents.

Indeed, in the original draft of the new Cooperation Guidelines, the Commission proposed that a joint venture and its parents formed a single undertaking within the meaning of Article 101.[314] The draft stipulates that:

> As a joint venture forms part of one undertaking with each of the parent companies that jointly exercise decisive influence and effective control over it, Article 101 does not apply to agreements between the parents and such a joint venture, provided that the creation of the joint venture did not infringe EU competition law. Article 101 could, however, apply to agreements between the parents outside the scope of the joint venture and with regard to the agreement between the parents to create the joint venture.[315]

This principle was proposed to apply not only to full-function joint ventures, but also to partial function joint ventures.[316] However, the Commission did not retain such a principle in the final version of the Guidelines.[317]

---

[312] ibid paras 30-32.
[313] See 85-86 above.
[314] Commission, 'Draft Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements' SEC (2010) 528/2.
[315] ibid para 11.
[316] Commission, 'Impact Assessment accompanying document to the Draft Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements' SEC (2010) 1541 final, 43-44.
[317] See <http://ec.europa.eu/competition/consultations/2010_horizontals/> accessed 05 April 2013. For criticism of this proposed principle in the draft guidelines, see particularly Arnold & Porter LLP, 'Review of the Current Regime for the Assessment of Horizontal Cooperation Agreements under EU Competition Rules - Public Consultation' (2010)

Very recently, the General Court answered the question of whether a full-function joint venture and its parents constituted a single undertaking in a way that the latter would be responsible for an infringement of Article 101 by the former.[318] In the contested decision before the Court, the Commission concluded that El DuPont and Dow should be held jointly and severally liable for the participation of their full-function joint venture, DDE,[319] in a cartel.[320] The Commission came to this conclusion on the basis of 'objective factors demonstrating that DDE did not enjoy an autonomous position but, rather, that Dow and DuPont exercised decisive influence on the commercial conduct and policies of the joint venture on an equal footing'.[321] It states that:

> [I]t is possible to find that the joint venture and parents together form an economic unit for the purposes of the application of Article [101 TFEU] if the joint venture has not decided independently upon its own conduct on the market. The fact that the parents of a joint venture can be held liable is in line with the practice of the Commission on this specific issue, following the … general legal principles set by the Community Courts.[322]

El DuPont and Dow contested this decision before the General Court. They claimed that DDE, as a full-function joint venture, must be considered as an undertaking separate from its parents.[323] They mainly argued that a full-function joint venture must be presumed to act autonomously of its parents, and the fact that the parent firms have joint control over it without influencing its day-today operations would not change this situation. To support this argument, they referred to the *Rubber chemicals* decision[324] in which the Commission provided that a full-function joint venture could be presumed to be autonomous of its parent firms.[325]

<http://ec.europa.eu/competition/consultations/2010_horizontals/arnoldporter_en.pdf> accessed 05 April 2013.

[318] *El du Pont* (n 36); *Dow Chemical* (n 36).

[319] The Commission treated the formation of DDE as a concentrative joint venture within the meaning of the Merger Regulation. See *Dow/DuPont* (Case IV/M.663) [1996].

[320] *Chloroprene Rubber* (Case COMP/38.629) [2008] paras 420-40.

[321] ibid para 421.

[322] ibid para 434.

[323] *El du Pont* (n 36) paras 44-57; *Dow Chemical* (n 36) paras 45-68.

[324] Case COMP/F/38.443 [2005] para 263.

[325] *El du Pont* (n 36) para 52; *Dow Chemical* (n 36) para 55.

The General Court, however, affirmed the Commission's decision by dismissing the parties' arguments.[326] The Court held that the fact that DuPont and Dow had joint control of DDE, ie the power to block the strategic commercial decisions of DDE, indicated that they had, at least indirectly, exercised decisive influence over the conduct of DDE in question. The judgement sets out that:

> Although a full-function joint venture, for the purposes of Regulation No 4064/89, is deemed to perform on a lasting basis all the functions of an autonomous economic entity, and is, therefore, economically autonomous from an operational viewpoint, that autonomy does not mean, as the Commission made clear in paragraph 93 of its Consolidated Jurisdictional Notice under Regulation No 139/2004, that the joint venture enjoys autonomy as regards the adoption of its strategic decisions and that it is not therefore under the decisive influence exercised by its parent companies for the purposes of the application of Article [101 TFEU].[327]

As a consequence, the General Court found that the Commission was correct in deciding that DDE formed a single economic unit with each of its parents within the meaning of Article 101.

Based on this approach of the General Court, it may be claimed that an agreement between a full-function joint venture and its parent firm will be treated as unilateral conduct and excluded from the scope of Article 101. Actually, this would also be compatible with the Commission's practice of treating the joint venture and its parents as a single economic unit when applying Article 2(3) of the Merger Regulation. Nonetheless, this conclusion is unlikely to apply to an agreement involving the joint venture and at least two of its parent firms, because the parents do not have effective control over each other and do not therefore form a single economic unit. In addition, given the general tendency of the Commission and the General Court to interpret the relationship between the joint venture and its parents in a way which is the detriment of the parties, it is not sufficiently clear that they would consider the joint venture and one of its parents as a single economic unit within the sense of Article 101 for the purpose of an agreement between them.[328] Finally, it

[326] *El du Pont* (n 36) paras 58-83; *Dow Chemical* (n 36) paras 70-104.
[327] *El du Pont* (n 36) para 78; *Dow Chemical* (n 36) para 93.
[328] See Alison Jones, 'The Boundaries of an Undertaking in EU Competition Law' (2012) 8 *European Competition Journal* 301.

should be noted that the aforementioned decisions of the General Court have been appealed to the ECJ. Hence, the ECJ's decision should be awaited in order to form a more definite opinion on the issue.

VII. Concluding Remarks

The risk of coordination between the parent firms in relation to their independent activities has been a key element that distinguishes the substantive analysis of joint ventures from that of amalgamations and acquisitions. Until the late 1990s, the absence of such a risk had been one of the criteria required in order for a joint venture to be treated as a concentration. By the adoption of Regulation 1310/97, as also accepted in Regulation 139/2004, having full-function status has been deemed to be sufficient for a joint venture to fall within the Merger Regulation. The possibility of coordination between the parent firms, however, has become an independent consideration taken into account in the analysis of full-function joint ventures under the Merger Regulation. This reform was generally welcome because it reduced both uncertainties, and legal and administrative costs resulting from the distinction between concentrative and cooperative joint ventures. Nevertheless, the current regime does not seem to be free from problems either. The main problem in this respect appears to be the ambiguity as to what the autonomous character of full-function joint ventures means, and how it should be incorporated into the analysis of any competitive relationship between the joint venture and its parents under the Merger Regulation.

With regard to the assessment under Article 2(3), the Commission generally does not give special consideration to full-function joint ventures due to their autonomous character. In examining non-coordinated and coordinated effects in relation to the markets of the joint venture where the parent firms retain some activities, it usually considers the worst case scenario for competition, and assumes that the parents and the joint venture would align their competitive strategies with each other and, therefore, form a single economic unit. On the other hand, when evaluating the likelihood of foreclosure effects, the Commission sometimes takes into account, as mitigating factor, the fact that the joint venture would deal with its parents at arm's

length, or that any foreclosure strategy would not be in the interest of all of the parents. It is nonetheless difficult to argue that the Commission would disregard the risk of foreclosure, based solely on the assumed autonomy of the full-function joint venture.

The fact that it treats the parents and the joint venture as a single entity for the purpose of appraisal under Article 2(3) usually does not prevent the Commission from also evaluating the risk of coordination between the parents in relation to the joint venture's market under Article 2(4). This indicates an overlap between the scope of Article 2(3) and Article 2(4). The *Areva/Urenco* decision may be considered as evidence that such an overlap may be the case, not only in regard to the joint venture's market but also with respect to vertically related or neighbouring markets where the parents are in competition. Its practice shows that, in some cases, the Commission may find that the coordination is caught by Article 101 without making an extensive analysis as is carried out in relation to collective dominance under Article 2(3). Therefore, it is an important question as to the extent to which Article 2(3) either does, or should, apply to the coordination of the independent activities of the parent firms.

How to interpret the autonomy of full-function joint ventures may also be an issue in analysing whether these joint venture form a single economic unit with their parents within the meaning of Article 101. In the *El du Pont* and *Dow Chemical* decisions, the General Court approved that the parents should be considered to be a single undertaking in terms of liability for the participation of their full-function joint venture, DDE, in a cartel, because they had joint control of DDE and, thereby, were able to exercise effective influence on its operations. These decisions are currently pending in the appeal. The ECJ may take a different approach concerning the issue. In any case, the inconsistent approach of the Commission in treating the autonomy of full-function joint ventures makes it difficult to predict whether the joint venture and the parent firms may be viewed as the same undertaking in future cases. This problem, with the others mentioned herein, is addressed in Chapter 6 below.

CHAPTER 4
THE SUBSTANTIVE APPRAISAL OF PARTIAL FUNCTION JOINT VENTURES UNDER ARTICLE 101 TFEU

I. Introduction

This chapter seeks to analyse the substantive assessment of partial function joint ventures in the EU, in order to explore the extent to which it differs from that of full-function joint ventures. This comparison is necessary for a proper discussion on whether the full-functionality criterion is suitable to identify joint ventures that are to be treated as concentrations according to the Merger Regulation.

This chapter begins with a general overview of the enforcement of Article 101TFEU under Regulation 1/2003.[1] The Commission's guidelines and notices concerning joint ventures have been important instruments reflecting its approach with regard to the appraisal under Article 101, particularly since the abolition of the notification system by Regulation 1/2003. Therefore, secondly, the chapter explains the essence of the current guidelines,[2] through discussing any significant change in the general approach of the Commission compared to the previous guidelines. Based mainly on these guidelines, the chapter presents the general principles for the assessment of partial function joint ventures under Article 101, and explains the specific application of Article 101 to certain types of joint ventures. Finally, the chapter discusses the assessment of the conduct and operation of partial function joint ventures, particularly in the context of the concept of 'ancillary restraint'.

II. Overview of the Enforcement under Regulation 1/2003

Regulation 17/1962[3] was the first regulation which set out the principles for the enforcement of Article 101. One significant feature of this Regulation was that it

[1] Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty [2003] OJ L1/1.
[2] Commission Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements [2010] OJ C11/1.
[3] Council Regulation (EEC) No 17/1962: First Regulation implementing Articles 85 and 86 of the Treaty [1962] OJ 13/204.

gave the Commission exclusive power to grant exemptions in accordance with Article 101(3). National competition authorities and national courts, nevertheless, could not apply Article 101(3), although they could decide that an agreement infringed Article 101(1).

Regulation 17/1962 also provided a mandatory notification system for restrictive agreements to be exempted under Article 101(3). The Commission was to decide whether the notified agreement would benefit from a negative clearance if it would not restrict competition within the sense of Article 101(1), or from an exemption, if it fulfilled the conditions laid out in Article 101(3). Because the Regulation did not establish a specific time frame for the Commission to take a decision, the issue of a formal decision concerning certain agreements usually took a long time.[4] In order to limit the negative effects of this lengthy duration of proceedings in respect of the so-called structural joint ventures, including cooperative full-function joint ventures, the Commission voluntarily undertook to inform the parties about the first indications of its decision within two months following the notification.[5] In addition, the Commission published block exemption regulations and guidelines for certain agreements in order to decrease the number of notified agreements which would not raise any competition concerns.

The framework of the old regulation was widely criticised on the grounds that it was not suitable for effective enforcement of Article 101.[6] Based on these criticisms, in 2003, the Council adopted Regulation 1/2003, which has radically changed the framework for the enforcement of Articles 101 and 102.[7] Firstly, this regulation has abolished the notification system. Therefore, firms now have to make their own assessment regarding the legality of their agreement under Article 101(1) and (3).

---

[4] See Frank Montag, 'The Case for a Reform of Regulation 17/62: Problems and Possible Solutions from a Practitioner's Point of View' (1998) 22 *Fordham International Law Journal* 819, 825-26.

[5] See Form A/B annexed to Commission Regulation (EC) No 3385/94 of 21 December 1994 on the form, content and other details of applications and notifications provided for in Council Regulation No 17 [1994] OJ L377/28.

[6] See Montag (n 4); Mario Siragusa, 'A Critical Review of the White Paper on the Reform of the EC Competition Law Enforcement Rules' (1999) 23 *Fordham International Law Journal* 1089; Claus Dieter Ehlerman and Isabela Atanasiu (eds), *European Competition Law Annual 2000: The Modernisation of EC Antitrust Policy* (Hart Publishing 2001).

[7] See also Commission, 'White Paper on modernisation of the rules implementing Articles 85 and 86 of the EC Treaty' COM (99) 101 final.

Furthermore, it has given national competition authorities and national courts, besides the Commission, the power to enforce Article 101(3). In order to eliminate any inconsistency and other concerns resulting from the decentralisation of the application of Article 101, the Regulation provided the establishment of the so-called European Competition Network, within which national competition authorities and the Commission can discuss and cooperate on Article 101 cases.[8]

It may be argued that the abolition of the notification system has made the enforcement regime for partial function joint ventures more advantageous than that for full-function joint ventures under the Merger Regulation. Nonetheless, considering that partial function joint ventures usually involve large sunk investments, the self-assessment of the legality of these joint ventures may pose substantial risks for the parties.[9] The fact that national competition authorities and national courts also have the competence to apply Article 101 decreases the predictability about the legality of joint ventures, and makes the self-assessment more risky.[10] Actually, these concerns were raised in discussions before the adoption of Regulation 1/2003. It was debated whether a voluntary notification mechanism should be retained for 'grey area agreements' which included considerable investments.[11] Furthermore, in the White Paper on modernisation, it was envisaged that partial function production joint ventures would be included in the scope of the Merger Regulation.[12] However, in the Green Paper on the review of Regulation

---

[8] See A W Kist, 'Decentralisation of Enforcement of EC Competition Law: New Cooperation Procedures may be Necessary' (2002) 37 *Intereconomics* 36; Luis Ortiz Blanco (ed), *EC Competition Procedure* (2nd edn, Oxford University Press 2006) 35-46; Ivo Van Bael and Jean-Francois Bellis, *Competition Law of The European Community* (5th edn, Wolters Kluwer 2010) 953-71.

[9] Siragusa (n 6) 1097-99; Norton Rose, 'Comments on the Commission's Green Paper on the Review of the EC Merger Regulation' (2002) <http://ec.europa.eu/competition/consultations/2002_council_regulation/norton_rose.pdf> accessed 05 April 2013, paras 22-23; Christian Growitsch and Nicole Nulsch, 'Preventing Innovative Co-operations: The Legal Exemption's Unintended Side Effect' (2012) 33 *European Journal of Law and Economics* 1.

[10] D G Goyder, Joanna Goyder and Albertina Albors-Llorens, *Goyder's EC Competition Law* (5th edn, Oxford University Press 2009) 463.

[11] Commission, 'White Paper on Reform of Regulation 17: Summary of the Observations' (2000) <http://ec.europa.eu/competition/antitrust/others/wp_on_modernisation/summary_observations.pdf> accessed 05 April 2013, part 4.3. See also Siragusa (n 6); Barry E Hawk and Nathalie Denaeijer, 'The Development of Articles 81 and 82 EC Treaty: Legal Certainty' in Claus Dieter Ehlerman and Isabela Atanasiu (eds), *European Competition Law Annual 2000: The Modernisation of EC Antitrust Policy* (Hart Publishing 2001) 138-39.

[12] White Paper on modernisation (n 7) paras 14 and 79-81. See also Commission, 'Summary of Objections' (n 11) part 4.2.

4064/89,[13] the Commission changed its opinion so that partial function production joint ventures also remained outside the Merger Regulation.[14]

In sum, the framework of Regulation 1/2003 appears to have some drawbacks, particularly in terms of legal certainty compared to the enforcement regime under the Merger Regulation. Therefore, to the extent that the applicable procedural rules are concerned, the creation of a full-function joint venture may be preferable, from a business viewpoint, to the creation of a partial function joint venture for the same purpose.[15]

III. Commission Guidelines on the Appraisal of Joint Ventures under Article 101

Considering the uncertainties resulting from the enforcement regime, the Commission has published some guidelines in order to provide more clarity on its approach to the assessment of joint ventures under Article 101. The Notice on cooperative joint ventures of 1993[16] was the first in this respect after the adoption of the Merger Regulation. In the Notice, the Commission listed the categories of joint ventures which would not be considered to infringe Article 101(1),[17] and explained the legal and economic criteria which would be utilised, on a case-by-case basis, in analysing joint ventures falling outside these categories.[18] The Notice also included the assessment of full-function joint ventures falling into the category of cooperative

---

[13] Commission, 'Green Paper on the review of Council Regulation (EEC) No 4064/89' COM (2001) 745 final.
[14] ibid paras 102 and 120-24.
[15] Alec Burnside and Helen Crossley, 'Cooperation in Competition: A New Era?' (2005) 30 *European Law Review* 234, 247; Trevor Soames, Geert Goeteyn, Peter D Camesasca and Kristian Hugmark, 'EC Competition Law and Aviation: "Cautious Optimism Spreading its Wings"' (2006) 27 *European Competition Law Review* 599, 603; Michael Walther and Ulrich Baumgartner, 'Joint Venture Review under the New EC Merger Regulation' (2007) <http://www.gibsondunn.com/fstore/documents/pubs/2007_Antitrust_Rev-WaltherBaumgartner-Joint_Venture.pdf> accessed 05 April 2013, 22.
[16] Commission Notice concerning the assessment of cooperative joint ventures pursuant Article 85 of the EEC Treaty [1993] OJ C43/2.
[17] ibid para 15.
[18] The Notice provided that in evaluating whether a cooperative joint venture could lead to an appreciable restriction of competition within the sense of Article 101(1), the Commission would take into account various factors mostly related to the market power of the parent firms and the joint venture, the structure of the market and the relationship between the parents and the joint venture. ibid para 26.

joint ventures. It acknowledged that full-function joint ventures deserved more favourable treatment under Article 101 than other types of cooperative joint ventures,[19] because they generally promoted competition.[20]

Following the enactment of Regulation 1310/97 that also brought full-function joint ventures into the jurisdiction of the Merger Regulation[21] and the revision of block exemption regulations on R&D and specialisation agreements,[22] in 2001, the Commission issued a set of guidelines on horizontal cooperation agreements, which replaced the Notice on cooperative joint ventures.[23] These Guidelines concerned 'those types of cooperation which potentially generate efficiency gains'.[24] Hence, the Commission therein explained the application of Article 101, not only to partial function joint ventures but also to contractual cooperation agreements in respect of R&D, production, purchasing, commercialisation and standardisation, and environmental agreements. The Guidelines provided more guidance on the specific application of Article 101 to different types of collaborations compared to their predecessor, notwithstanding that they did not describe fully the general principles for the assessment of these collaborations under Article 101.[25]

---

[19] In the Notice, the Commission also gave guidance on the specific application of Article 101(3) to R&D, sales, purchasing and production joint ventures. ibid paras 59-63.

[20] ibid para 64. For more information about these guidelines, see Matthew P Downs, *The Notice concerning the Assessment of Cooperative Joint Ventures pursuant to Article 85 of the EEC Treaty: An Assessment* (Leuven University Press 1995).

[21] Council Regulation (EC) No 1310/97of 30 June 1997 amending Regulation (EEC) No 4064/89 on the control of concentrations between undertakings [1997] OJ L180/1.

[22] Commission Regulation (EC) No 2658/2000 of 29 November 2000 on the application of Article 81(3) of the Treaty to categories of specialisation agreements [2000] OJ L304/3; Commission Regulation (EC) No 2659/2000 of 29 November 2000 on the application of Article 81(3) of the Treaty to categories of research and development agreements [2000] OJ L304/7.

[23] Commission Guidelines on the applicability of Article 81 of the EC Treaty to horizontal cooperation agreements [2001] OJ C3/2. For general comments on these guidelines, see Hans Maks, 'The "New" Horizontal Agreements Approach in the EU: An "Economic" Assessment' (2002) 37 *Intereconomics* 28; Mario Siragusa and Cesare Rizza, 'Joint Ventures and Cooperation between Undertakings' in Valentine Korah (ed), *Competition law of the European Community*, vol 2 (2nd edn, Lexis Publishing 2001) sec 6.03-07.

[24] 2001 Cooperation Guidelines (n 23) para 10.

[25] This was one of the aspects of the Guidelines criticised by practitioners. See eg Freshfields Bruckhous Deringer, 'Response to the European Commission's Questionnaire on the Current Regime for the Assessment of Horizontal Cooperation Agreements' (30 January 2009) <http://ec.europa.eu/competition/consultations/2009_horizontal_agreements/freshfields_bruckhaus_deringer_en.pdf> accessed 05 April 2013; Reed Smith, 'Review of the Current Regime for the Assessment of Horizontal Cooperation Agreements under EU Antitrust Rules' (30 January 2009) <http://ec.europa.eu/competition/consultations/2009_horizontal_agreements/reed_smith_en.pdf> accessed 05 April 2013.

The 2001 Cooperation Guidelines became a very important tool for legal practitioners in making their own assessment of the legality of partial function joint ventures, especially after the shift to the self-assessment regime under Regulation 1/2003.[26] However, because it was published before such a reform, and block exemption regulations on R&D and specialisations agreements would be revised in 2010,[27] the Commission started to work on drafting new guidelines for horizontal cooperation agreements, and published them in 2011.[28]

The new Guidelines cover cooperation between actual or potential competitors as well as horizontal cooperation between non-competitors, for example, those between two firms which are active in the same product market but in different geographical markets, without being potential competitors.[29] The Guidelines, in the first part, give more elaborate explanations with regard to the general framework for the assessment of joint ventures and other horizontal cooperation agreements in accordance with Article 101.[30] Unlike their predecessors, these guidelines also set out the principles on the applicability of Article 101 to information exchange.[31] By appearing to embody similar principles to those used under the SIEC test, the new Guidelines differ from the previous guidelines, which were adopted at the time when concentrations were analysed according to the dominance test.

Given the paucity of decisions concerning partial function joint ventures following the adoption of Regulation 1/2003, the new Cooperation Guidelines, in conjunction with the Guidelines on the application of Article 101(3),[32] constitute the most reliable

[26] ibid.
[27] For the new block exemption regulations on these agreements, see Commission Regulation (EU) No 1217/2010 of 14 December 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to certain categories of research and development agreements [2010] OJ L335/36; Commission Regulation (EU) No 1218/2010 of 14 December 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to certain categories of specialisation agreements [2010] OJ L335/43.
[28] See n 2 above.
[29] ibid para 1.
[30] In this chapter, the term partial function joint venture is used instead of horizontal cooperation agreement by highlighting the differences between the approaches to joint ventures and other horizontal cooperation arrangements, if necessary.
[31] ibid 13-25. Unlike their predecessors, the new Guidelines do not contain a separate chapter on environmental agreements. They state that depending on the competition issues they give rise to, these agreements are generally to be assessed under the relevant chapters on R&D, production, commercialisation or standardisation agreements. See ibid 7 fn 1.
[32] Commission Guidelines on the application of Article 81(3) of the Treaty [2004] OJ C101/97.

evidence regarding the Commission's current approach to the assessment of those joint ventures. The principles set forth in these guidelines are explained elaborately, together with the relevant case law, in the later parts of this chapter.

IV. General Principles for the Assessment of the Formation of Partial Function Joint Ventures

Article 101 sets out a two-step analysis. In the first step, it is assessed whether the agreement in question has, as its object or effect, the restriction of competition within the meaning of Article 101(1). It should be noted that this step does not normally include the analysis of the procompetitive effects of the agreement. This analysis is essentially made under Article 101(3).[33] In this second step, it is examined whether the agreement, which is found to be restrictive within the sense of Article 101(1), fulfils the conditions laid down in Article 101(3), in order to be exempted from Article 101(1) and (2).

The legal test under Article 101 is viewed by some commentators to be stricter than that under the Merger Regulation.[34] The Commission's position in its 1966 Memorandum was that mergers should enjoy more lenient treatment than that provided under Article 101 in relation to agreements.[35] The adoption of the

[33] Prior to Regulation 1/2003, the difference between falling outside Article 101(1) and being exempted under Article 101(3) was very important, because the Commission had exclusive power to enforce Article 101(3). To solve this problem, some commentators claimed that national courts and competition authorities should apply a rule of reason, as in the US, under Article 101(1). See eg Valentine Korah, 'The Rise and Fall of Provisional Validity- The Need for a Rule of Reason in EEC Antitrust' (1981) 3 *Northwestern Journal of International Law and Business* 320; Christopher Bright, 'EU Competition Law Policy: Rules, Objectives and Deregulation' (1996) 16 *Oxford Journal of Legal Studies* 535. However, in *Métropole Télévision (M6) and others v Commission*, the General Court clearly stated that the rule of reason did not exist in EU competition law so that it was not required to analyse the procompetitive effects of an agreement offsetting its anticompetitive effects under Article 101(1). Case T-112/99 [2001] ECR II-2459, para 72. The Court provided that such an analysis would result in the loss of the effectiveness of the assessment under Article 101(3). ibid para 74. Despite this decision, it is still argued that procompetitive effects can be incorporated into the analysis under Article 101(1). See eg Renato Nazzini, 'Article 81 EC between Time Present and Time Past: A Normative Critique of "Restriction of Competition" in EU law' (2006) 43 *Common Market Law Review* 497.

[34] See Valentine Korah, *An Introductory Guide to EC Competition Law and Practice* (9th edn, Hart Publishing 2007) 429; Jonathan Faull and Ali Nikpay (eds), *Faull & Nikpay: The EC Law of Competition* (2nd edn, Oxford University Press 2007) 665-667.

[35] Commission, 'The Problem of Industrial Concentration in the Common Market', Competition Series No 3 (1966), reprinted in Frank L Fine, *Mergers and Joint Ventures in Europe: The Law and Policy of the EEC* (2nd edn, Graham & Trotman/MartinusNijhoff 1994) 691-713.

dominance test under Regulation 4068/89[36] could be considered as reflecting that approach.[37] However, in the Notice on cooperative joint ventures, the Commission set forth that: 'The determination of the cooperative character of a JV ha[d] … no substantive legal effects. It simply mean[t] that the JV [was] subject to the procedures set out in Regulation No 17 in the determination of its compliance with Article [101] (1) and (3).'[38] This was an indication that the Commission did not have a general policy of considering the test under Article 101 to be stricter than that under the Merger Regulation as far as joint ventures were concerned. Nevertheless, the Commission may have used such a statement particularly for full-function joint ventures which, at that time, were treated as cooperative joint ventures. Indeed, in the Green Paper on the review of Regulation 4064/89, the Commission opposed including partial function production joint ventures in the scope of the Merger Regulation, on the basis of not only procedural reasons but also substantive ones.[39]

The 2001 Cooperation Guidelines did not include any general statement that compares the assessment of partial function joint ventures with that of full-function joint ventures. The new Guidelines however clearly stipulate that '[t]here is often only a fine line between full-function joint ventures that fall under the Merger Regulation and non-full-function joint ventures that are assessed under Article 101 [so that] their effects can be quite similar'.[40] This indicates that the Commission is, in theory, in line with its approach in the Notice on cooperative joint ventures with respect to partial function joint ventures as well. The similarities between the principles set out in the Guidelines for the appraisal of partial function joint ventures under Article 101, and those for the analysis of full-function joint ventures under the Merger Regulation, are explained in the relevant points below.

[36] Council Regulation (EEC) No 4064/89 of 21 December 1989 on the control of concentrations between undertakings [1989] OJ L395/1, corrected version [1990] OJ L257/13.
[37] See Barry E Hawk, 'Joint Ventures under EEC Law' (1992) 15 *Fordham International Law Journal* 303, 309.
[38] Notice on cooperative joint ventures (n 16) para 11.
[39] See (n 13) paras 120-24. See also Chapter 6/II/C/2 below.
[40] New Cooperation Guidelines (n 2) para 21.

A- Assessment under Article 101(1)

1. Restriction of Competition by Object or Effect

Article 101(1) prohibits agreements which restrict competition through either their object or effect. For the purpose of this prohibition, the anticompetitive object and effect are alternative, not cumulative conditions.[41] Therefore, once it is established that an agreement has an anticompetitive object, it is not necessary to consider its actual or potential effects on competition in order for it to be caught by Article 101(1).[42] Whether an agreement restricts competition by its object is determined based on its objective meaning and purpose, which are taken into account in its economic and legal context.[43] In this regard, the subjective intention of the parties does not constitute a necessary factor, but may be considered by the Commission and the EU courts in such an assessment.[44]

Given the fact that it usually leads to an efficiency enhancing integration of the parties, the creation of a partial function joint venture, in itself, is unlikely to be deemed as having an anticompetitive object, unless it is sham, ie established to disguise an otherwise prohibited restriction, such as price fixing, market sharing or the control of outlets.[45] Accordingly, in the vast majority of cases, it is necessary to examine whether the joint venture restricts competition by its effect.

In order to find that an agreement restricts competition by its effect, it is required to demonstrate the presence of factors showing that 'competition has in fact been

---

[41] Case C-56/65 *Société Technique Minière v Maschinenbau Ulm* [1966] ECR 235, 249; Joined Cases C-501, 513,515 and 519/06P *GlaxoSmithKline Services Unlimited and others v Commission and others* [2009] ECR I-9291, para 55.

[42] Joined Cases C-56 and 58/64 *Consten and Grundig v Commission* [1966] ECR 299, 342; Case 45/85 *Verband der Sachversicherer v Commission* [1987] ECR 405, para 39; *GlaxoSmithKline* (n 41) para 55.

[43] *GlaxoSmithKline* (n 41) para 58.

[44] Joined Cases 29 and 30/83 *CRAM and Rheinzink v Commission* [1984] ECR 1679, para 26; Case C-551/03P *General Motors v Commission* [2006] ECR I-1373, paras 77-78; *GlaxoSmithKline* (n 41) para 58. See also Okeoghene Odudu, 'Interpreting Article 81(1): Object as Subjective Intention' (2001) 26 *European Law Review* 60.

[45] See Joined Cases T-374/94, T-375/94, T-384/94 and T-388/94 *European Night Services and others v Commission* [1998] ECR II-3141, para136. See also new Cooperation Guidelines (n 2) paras 128, 160-61, 205-06, 234-36.

prevented or restricted or distorted to an appreciable extent'.[46] Whether competition is actually restricted is assessed in comparison to the context in which competition would occur in the absence of the agreement concerned.[47] If the agreement leads to less competition in the market compared to this counter-factual situation, it is normally regarded as having restrictive effects.[48] The new Cooperation Guidelines provide that this may happen, if the agreement has, or is likely to have, 'an appreciable adverse impact on at least one of the parameters of competition on the market, such as price, output, product quality, product variety or innovation'.[49] This assessment is explained in detail below.[50]

2. Potential Restrictive Effects of Partial Function Joint Ventures

Compared to their predecessors, the new Cooperation Guidelines give more detailed guidance about the possible anticompetitive effects of partial function joint ventures. These effects are quite similar to those of full-function joint ventures which are analysed with reference Article 2(3) and (4) of the Merger Regulation. This is especially true for partial function production joint ventures which the Guidelines appear to use as a basis in establishing the general framework for the assessment of joint ventures under Article 101.[51]

The Guidelines first of all recognise that the creation of a partial function joint venture may limit competition between the parties through reducing their decision-making independence for the integrated activities. They state that these effects, corresponding to those of full-function joint ventures analysed under Article 2(3), may arise in three main ways. Accordingly, a partial function joint venture may: (i) 'be exclusive in the sense that it limits the possibility of the parties to compete

[46] *Société Technique Minière* (n 41) 249.
[47] ibid 250. See also new Cooperation Guidelines (n 2) 29.
[48] In this analysis, not only the actual effects of the agreement, but also its potential effects, must be taken into account. See Case 31/85 *ETA v DK Investment* [1985] ECR 3933, para 12; Joined Cases 142 and 156/84 *BAT and Reynolds* [1987] ECR 4487, para 54; Case C-7/95P *John Deere Ltd v Commission* [1998] ECR I-3111, para 77.
[49] New Cooperation Guidelines (n 2) para 27.
[50] For more information about the general assessment under Article 101(1), see Guidelines on the application of Article 101(3) (n 32); Okeoghene Odudu, *The Boundaries of EC Competition Law: The Scope of Article 81* (Oxford University Press 2006) 97-127; Faull and Nikpay (n 34) 218-269; Richard Whish and David Bailey, *Competition Law* (7th edn, Oxford University Press 2012) 115-40.
[51] See V/B below.

against each other or third parties as independent economic operators or as parties to other competing agreements'; (ii) 'require the parties to contribute such assets that their decision-making independence is appreciably reduced'; or (iii) 'affect the parties' financial interests in such a way that their decision-making independence is appreciably reduced'.[52] The first limitation can actually be the case if the joint venture agreement includes non-compete clauses. The other two effects, however, essentially depend on the importance of the combined assets and operations into the joint venture for the parties to be able to compete independently in the relevant market.[53]

Once it is found that the partial function joint venture leads to the loss of competition between the parties in such ways, the evaluation of its impact on overall competition in the market will be quite similar to the analysis of the non-coordinated effects of full-function joint ventures. According to the Guidelines, the Commission will assess whether the parties or their competitors may 'benefit from the reduction of competitive pressure that results from the agreement and may therefore find it profitable to increase their prices'.[54] This language is quite similar to that used for non-coordinated effects under the Horizontal Merger Guidelines.[55]

The Guidelines also acknowledge that partial function joint ventures may reduce competition between the parties by facilitating coordination between them outside the joint venture. They explain that:

> A horizontal [joint venture] may … decrease the parties' decision-making independence and as a result increase the likelihood that they will coordinate their behaviour in order to reach a collusive outcome but it may also make coordination easier, more stable or more effective for parties that were already coordinating before, either by making the coordination more robust or by permitting them to achieve even higher prices.[56]

---

[52] New Cooperation Guidelines (n 2) para 33.
[53] These limitations are considered by the US authorities in analysing the likelihood of competition between the parent firms and the joint venture under the rule of reason standard set out in the Collaboration Guidelines. See Chapter 5/IV/B below.
[54] New Cooperation Guidelines (n 2) para 34.
[55] Commission Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings [2004] OJ C31/5, para 24.
[56] New Cooperation Guidelines (n 2) para 37.

These effects apparently correspond to the risk of coordination examined in accordance with Article 101, in combination with Article 2(4). The Guidelines state that a partial function joint venture may lead to such a collusive outcome in two ways: (i) 'lead[ing] to the disclosure of strategic information thereby increasing the likelihood of coordination among the parties within or outside the field of the co-operation'; and (ii) 'achiev[ing] significant commonality of costs, so the parties may more easily coordinate market prices and output'.[57]

With regard to significant commonality of costs, the Guidelines provide that it may enable the parties to coordinate more easily only if: they have market power; the market characteristics are conducive to such coordination; the area of cooperation accounts for a high proportion of the parties' variable costs in a given market; and the parties combine their activities in the area of joint venture to a significant extent.[58] The Commission requires the presence of these conditions for finding any coordination likely. Its practice regarding the analysis of coordination in full-function joint venture cases, nevertheless, indicates that these factors may sometimes be more relevant for the assessment of the appreciability of the restriction of competition.[59] The Commission may use this approach in the Guidelines more systematically in the case of full-function joint ventures as well.

Moreover, the fact that the Commission lists these conditions only in the context of significant commonality of costs may be understood to mean that it focuses on the risk of coordination in relation to the joint venture's market and those downstream or upstream to that. Nevertheless, as in *NC/Canal +/CDPQ/Bank America*,[60] the Commission generally recognises that a full-function joint venture may enable the parent firms to coordinate more easily in neighbouring markets, due to the high value of the joint venture compared to those of their overall activities or their activities in the market concerned.[61] Because the situations listed as leading to a collusive

[57] ibid para 35.
[58] ibid para 36.
[59] See Chapter 3/V/B/2/b above.
[60] Case IV/M.1327 [1998].
[61] See Chapter 3/V/B/2/a above.

outcome in the Guidelines are not exhaustive, the Commission may also examine such a risk of coordination in relation to partial function joint ventures.[62]

Furthermore, the Guidelines state that joint ventures do not normally cause negative effects on competition within the meaning of Article 101(1), if, based on objective factors, the parties would not have the ability to independently carry out the project concerned, provided that there would be no less restrictive alternative for the same project.[63] The Commission herein does not seem to consider the possibility that such a joint venture may facilitate coordination between the parties outside the area covered by the joint venture. It may be claimed that in such cases, it is likely that less restrictive alternatives exist. However, this assessment should be made with regard to the indispensability condition under Article 101(3), rather than under Article 101(1). Thus, such guidance creates uncertainty about the assessment of those effects.[64]

Finally, as explained above, the Guidelines only emphasise unilateral effects that are similar to the non-coordinated effects of full-function joint ventures. However, they do not separately explain the analysis of coordinated effects in relation to partial function joint ventures. The reason behind this may be that such effects are to be considered in the context of a collusive outcome, given the fact that in the case of partial function joint ventures, the parties usually do not combine their entire activities in the market.

In addition to the loss of competition between the parties, the Guidelines briefly mention that partial function joint ventures may also result in anticompetitive foreclosure effects.[65] They provide more elaborate information about these effects in the relevant chapters for each category of joint ventures. These effects are actually

---

[62] Indeed, in the past, the Commission examined the risk of coordination as to neighbouring markets under Article 101. See eg *Ford/Volkswagen* (Case IV/33.814) Commission Decision 93/49/EEC [1993] OJ L20/14, para 21, affirmed in Case T-17/93 *Matra Hachette SA v Commission* ECR II-595; *Philips/Osram* (Case IV/34.252) Commission Decision 94/986/EC [1994] OJ L378/37, para 18; *British Interactive Broadcasting/Open* (Case IV/36.539) Commission Decision 1999/781/EC [1999] OJ L312/1, para 169.

[63] New Cooperation Guidelines (n 2) para 30.

[64] Nevertheless, this will not be an issue if the parties are not competing in any market closely related to that of the joint venture. In such cases, the only competition concern may be foreclosure effects.

[65] New Cooperation Guidelines (n 2) para 38.

almost identical to the foreclosure effects arising from the vertical aspects of full-function joint ventures.[66]

3. Appreciability of the Restriction of Competition

An agreement normally falls outside Article 101(1) if it has only an insignificant anticompetitive effect on the market.[67] In the Notice on agreements of minor importance,[68] the Commission sets out certain market share thresholds in order to create safe harbours for agreements, which are presumed not to have an appreciable adverse effect on competition. Accordingly, a horizontal agreement is considered not to restrict competition appreciably, if the combined market share of the parties does not exceed 10 % in any of the relevant markets.[69] The Notice states that the fact that the agreement is outside these safe harbours does not mean that it has significant anticompetitive effects.[70]

However, until the late 1990s, the Commission had had a tendency to automatically hold that the joint venture appreciably restricted competition, if the thresholds set forth in the Notice on agreements of minor importance, in force at that time, were exceeded, although the Notice on cooperative joint ventures suggested a more sophisticated analysis for that purpose.[71] In *European Night Services*, the General Court found this practice of the Commission to be erroneous. The Court held that 'the Commission must provide an adequate statement of its reasons for considering such agreements [exceeding the thresholds in the Notice on agreements of minor importance] to be caught by the prohibition in Article [101](1) of the Treaty'.[72]

The 2001 Cooperation Guidelines recognised that whether a joint venture could lead to an appreciable restriction of competition would depend on the market position of

---

[66] See Chapter 3/V/A/4/b above.
[67] *Société Technique Minière* (n 41) 250; Case 5/69 *Völk v Vervaecke* [1969] ECR 295, para 7; *John Deere* (n 48) para 77.
[68] Commission Notice on agreements of minor importance which do not appreciably restrict competition under Article 81(1) of the Treaty [2001] OJ C368/13.
[69] ibid para 7.
[70] ibid para 2.
[71] Faull and Nikpay (n 34) 669.
[72] *European Night Services* (n 45) paras 102-05.

the parties and the structure of the market.[73] The Commission therein used the HHI as an indicator of the impact of the joint venture on competition.[74] The new Cooperation Guidelines mainly follow the same approach as their predecessors, notwithstanding that they do not include the use of HHI.[75]

In line with the Guidelines on the application of Article 101(3),[76] the new Guidelines stipulate that an anticompetitive effect is likely to arise, if the parties individually or jointly possess some degree of market power, and if the joint venture leads to the creation, maintenance or strengthening of this market power or enables the parties to exploit it.[77] The Commission states that a degree of market power less than that required for a finding of dominance under Article 102 may be sufficient to decide that an agreement is caught by Article 101(1).[78] On the other hand, the Guidelines indicate that the Commission may seek the degree of market power required under the SIEC test in relation to non-coordinated effects, in order to decide that the joint venture would lead to an appreciable restriction.[79] Considering its past practice,[80] however, the Commission, in individual cases, may decide that Article 101(1) is infringed, even if the parties have less of a degree of market power than that, and it may analyse the anticompetitive effects of the joint venture more extensively under Article 101(3).

In measuring the degree of market power, the Commission firstly takes into account the market shares of the parties. In addition to the Notice on agreements of minor importance, the Guidelines establish the market share thresholds, which indicate that the cooperation is unlikely to lead to an appreciable restriction.[81] They do not, however, set out what market share presents the risk of an appreciable restriction.

---

[73] 2001 Cooperation Guidelines (n 23) paras 27-30.
[74] ibid para 29.
[75] New Cooperation Guidelines (n 2) paras 39-47.
[76] Guidelines on the application of Article 101(3) (n 32) para 25.
[77] New Cooperation Guidelines (n 2) para 28.
[78] ibid para 42.
[79] See Chapter 3/A/1 above.
[80] See Bright (n 33); Simon Bishop and Mike Walker, *The Economics of EU Competition Law: Concepts, Application and Measurement* (3rd edn, Sweet & Maxwell 2010) 158; Whish and Bailey (n 50) 115-16.
[81] New Cooperation Guidelines (n 2) para 44. Therein, the Commission especially utilises the thresholds provided in the relevant block exemption regulations for production and R&D joint ventures.

They provide that '[g]iven the variety of horizontal co-operation agreements and the different effects they may cause in different market situations, it is not possible to give a general market share threshold above which sufficient market power for causing restrictive effects on competition can be assumed'.[82]

The Guidelines also state that 'if one of just two parties has only an insignificant market share and if it does not possess important resources, even a high combined market share normally cannot be seen as indicating a likely restrictive effect on competition in the market'.[83] This may be construed as suggesting that in order for a joint venture to restrict appreciably competition, it must strengthen market power to a significant extent. This requirement seems to be similar to the delta criteria used in the application of the HHI in merger cases.[84] Nevertheless, in the Guidelines, the Commission does not establish an indicative level for this assessment.

In analysing whether the parties or their competitors would gain market power to increase prices independently, the Guidelines list factors which are almost the same as those provided in the Horizontal Merger Guidelines. These factors include: whether the parties have high market shares; whether they are close competitors; whether the customers have limited possibilities of switching suppliers; whether competitors are unlikely to increase supply if prices increase; and whether one of the parties is an important competitive force.[85] The Guidelines also explain that in this analysis, the Commission will take into account other factors, including the stability of market shares over time, entry barriers and the likelihood of market entry, and the countervailing power of buyers or suppliers.[86]

B- Exemption Analysis under Article 101(3)

Once it is found that an agreement infringes Article 101(1), it is examined whether it may benefit from an exemption under Article 101(3). Agreements satisfying the four cumulative conditions listed in Article 101(3) are exempted regardless of whether

[82] ibid.
[83] ibid.
[84] See Chapter 3/V/A/3 above.
[85] New Cooperation Guidelines (n 2) para 34. See Horizontal Merger Guidelines (n 55) paras 27-38.
[86] New Cooperation Guidelines (n 2) para 45.

they restrict competition by their object or effect.[87] Accordingly, it is also normally required to consider the precise effect of agreements having an anticompetitive object in the exemption assessment.[88]

The first condition of Article 101(3) requires that the agreement concerned contributes to improving the production or distribution of goods, or to promoting technical or economic progress. For the purpose of this condition, the claimed benefits must be objective, ie they must have 'such a character as to compensate for the disadvantages which they cause in the field of competition'.[89] Therefore, the subjective viewpoint of the parties is not decisive in this assessment.[90] These benefits can be lower costs, new or improved products or services.[91] The Cooperation Guidelines recognise that horizontal cooperation may lead to substantial economic benefits, especially if it provides an integration of complementary activities, skills or assets.[92]

The second exemption condition stipulates that a restrictive agreement and its individual restrictions must be indispensable to the attainment of the efficiencies.[93] The decisive factor for the assessment of this condition is 'whether or not the restrictive agreement and individual restrictions make it possible to perform the activity in question more efficiently than would likely have been the case in the absence of the agreement or the restriction concerned'.[94] In this regard, if it appears that there is an economically practicable and less restrictive alternative which would achieve the same efficiencies, the agreement or its individual restriction will not satisfy the indispensability condition. It should be noted that only realistic and

[87] Guidelines on the application of Article 101(3) (n 32) para 20.
[88] In *GlaxoSmithKline*, although recognising that the agreement in question including an export ban was a restriction of competition by object, the ECJ held that the Commission failed to make a proper analysis of the evidence put forward by the parties in order to prove that the agreement had fulfilled the conditions of Article 101(3). See n 41 above.
[89] *Consten and Grundig* (n 42) 348.
[90] See *Vanden Bergh Foods* (Case IV/34.073, IV/34.395 and IV/35.436) Commission Decision 98/531/EC [1998] OJ L246/1.
[91] Mario Monti, 'The Application of Community Competition Law by the National Courts', speech at Conference 'Towards the Application of Article 81(3) by National Courts' (27 November, 2000) <http://europa.eu/rapid/press-release_SPEECH-00-466_en.htm?locale=en> accessed 05 April 2013. See Guidelines on the application of Article 101(3) (n 32) paras 64-72.
[92] New Cooperation Guidelines (n 2) paras 2 and 50-52.
[93] Guidelines on the application of Article 101(3) (n 32) para 73.
[94] ibid para 74.

attainable alternatives, rather than hypothetical or theoretical ones, are considered in this analysis.[95]

The third exemption condition is that consumers receive a fair share of the resulting benefit.[96] To be exempted under Article 101(3), the resulting benefits must be appreciable to compensate for its harm to consumers.[97] It is sufficient that the overall effect of the agreement is neutral from the viewpoint of those consumers affected by the agreement.[98] In determining the ultimate effect of the agreement, its negative effects and positive effects on consumers are balanced in respect of each relevant market. Therefore, if the agreement has anticompetitive effects in one relevant market while having procompetitive effects in another market, these effects cannot be balanced under Article 101(3), unless the consumers affected by the agreement in both markets are substantially the same.[99] This issue may arise in particular if the joint venture gives rise to the risk of coordination in a market outside those of the joint venture.[100]

Finally, according to the fourth condition, the agreement must not eliminate competition in respect of a substantial part of the products in question. Up until the last decade, the Commission had considered the elimination of competition as equal to dominance, and presumed that if one party was dominant or would become so as a result of the agreement, the agreement was unlikely to be exempted because it would eliminate competition.[101] Nevertheless, in *Atlantic Container Line and others v Commission*,[102] the General Court explained that '[a]s the concept of eliminating competition is narrower than that of the existence or acquisition of a dominant position, an undertaking holding such a position is capable of benefiting from an

[95] ibid para 75.
[96] Actually a fair share for consumers is listed as the second condition under Article 101(3). However, the Commission usually analyses the indispensability condition before that condition. This methodology makes sense because efficiency claims in relation to restrictions which do not pass the indispensability test are not considered in determining the ultimate effect of the agreement on consumers. Faull and Nikpay (n 34) 304-05.
[97] *Consten and Grundig* (n 42) 348.
[98] Guidelines on the application of Article 101(3) (n 32) para 85.
[99] ibid para 43.
[100] See Chapter 6/III below.
[101] 2001 Cooperation Guidelines (n 23) para 36. See also Faull and Nikpay (n 34) 310.
[102] Joined Cases T-191, 212 and 214/98 [2003] ECR II-3275.

exemption'.[103] Based on this decision, the Commission also has recognised that 'not all restrictive agreements concluded by a dominant undertaking constitute an abuse of a dominant position'.[104] As a result, the fact that a dominant firm is party to a partial function joint venture, in principle, does not disqualify it from being exempted under Article 101(3). However, if such a joint venture forms an abuse of dominant position, it is still presumed not to benefit from exemption.[105]

The Commission often exempts an agreement only for a limited period of time. The question of which criteria must be used in determining the duration of the exemption was discussed in *European Night Services*. The Commission granted the joint venture an eight-year exemption, essentially based on 'the period for which it [could] reasonably be supposed that market conditions [would] remain substantially the same'.[106] The General Court, on the other hand, overruled the Commission's decision because it disregarded the length of time necessary to enable the parties to achieve a satisfactory return on their investment. In the decision, the Court particularly highlighted the fact that the parties had entered into financial commitments covering a period of twenty years.[107] Consistent with this decision, in the Guidelines on the application of Article 101(3), the Commission links the duration of exemption to the indispensability condition. It states that:

> In some cases a restriction may be indispensable only for a certain period of time, in which case the exception of Article [101](3) only applies during that period. In making this assessment it is necessary to take due account of the period of time required for the parties to achieve the efficiencies justifying the application of the exception rule. In cases where the benefits cannot be achieved without considerable investment, account must, in particular, be taken of the period of time required to ensure an adequate return on such investment.[108]

---

[103] ibid para 939.
[104] Guidelines on the application of Article 101(3) (n 32) para 106.
[105] ibid.
[106] *Night Services* (Case IV/34.600) Commission Decision 94/663/EC [1994] OJ L259/20, paras 71-84.
[107] *European Night Services* (n 45) paras 229-36.
[108] Guidelines on the application of Article 101(3) (n 32) para 81. In the new Cooperation Guidelines, the time of the assessment and the duration of the exemption are specifically discussed with respect to R&D cooperation. See V/A below.

It should be noted that as far as R&D and production joint ventures are concerned, it must firstly be examined whether the joint venture falls under the scope of the relevant block exemption regulations. The agreements covered by these regulations are presumed to meet the four conditions laid out in Article 101(3). Being outside those block exemptions does not mean that the joint venture infringes Article 101(1) or does not fulfil the conditions of exemption, but that it will be analysed in its individual context in accordance with the general principles explained above.

V. Specific Application of Article 101 to Certain Types of Joint ventures

A- R&D Joint Ventures

The Commission acknowledges that most R&D joint ventures, particularly those between non-competitors[109] and pure R&D joint ventures, do not give rise to any anticompetitive effect within the meaning of Article 101(1).[110] Rather, these joint ventures are generally considered to be procompetitive, because they usually integrate complementary skills and assets, or provide a wider dissemination of knowledge, thereby leading to the introduction of new or improved products or technologies, a quicker launch of these products and technologies, or the reduction of prices.[111]

On the other hand, the Commission recognises that R&D joint ventures, in some limited situations, may raise competition concerns in relation to existing product and/or technology markets,[112] and/or new product markets if the joint venture is directed at the development of new products.[113] In particular, they may have adverse

[109] In *Elopak/Metal Box-Odin*, the Commission considered the parent firms to be non-competitors, because '[n]either party could in the short term enter the market alone as such entry would require a knowledge of the other party's technology which could not be developed without significant and time-consuming investment'. Case IV/32.009 Commission Decision 90/410/EEC [1990] OJ L209/15. See also *Asahi/Saint-Gobain* (Case IV/33.863) Commission Decision 94/896/EC [1994] OJ L354/87.

[110] ibid paras 129-32. See also Commission, 'Fourteenth Report on Competition Policy' (1985) points 28-29.

[111] New Cooperation Guidelines (n 2) para 141. See also Chapter 2/III/B/2/a above.

[112] If the R&D concerns a key component for a final product, the relevant assessment may be made in respect of not only the market for that component, but also that for the final product. New Cooperation Guidelines (n 2) para 115.

[113] ibid paras 119-22 and 137-39. For discussion on defining relevant markets for the assessment of effects on competition in innovation, see John Temple Lang, 'European Community Antitrust Law:

effects on competition in innovation by retarding innovation and reducing the number or quality of products coming to the market later.[114] In addition, R&D joint ventures may result in the risk of coordination between the parties outside the joint venture.[115] This effect may be the main competition concern with respect to existing markets, if the joint venture aims at the development of products creating new markets.[116] Moreover, if the R&D joint venture includes the exclusive exploitation of the results, it may also be necessary to evaluate possible foreclosure effects.[117]

Pure R&D joint ventures may be anticompetitive only if they appreciably reduce competition in innovation by leaving only a limited number of credible competing R&D poles. If, nevertheless, the joint venture includes different stages of the exploitation of the results, such as licensing, production or marketing, the Commission examines its impact on competition more closely.[118] However, in any event, these effects are unlikely to emerge if the parties do not have market power in the relevant existing or future markets.[119]

R&D joint ventures in which the parties' combined market share does not exceed 25 % benefit from the safe harbour of the R&D Block Exemption Regulation, provided that they do not include the hard core restrictions listed in Article 5 of the Regulation.[120] R&D joint ventures exceeding the market share threshold of 25 % are, nevertheless, examined in their individual context under Article 101(1) and (3). In this regard, the higher the market power of the parties the more likely the joint

---

Innovation Markets and High Technology Industries' (1997) 20 *Fordham International Law Journal* 717.

[114] New Cooperation Guidelines (n 2) para 127.

[115] ibid.

[116] ibid para 114.

[117] ibid paras 127 and 138. See eg *Pasteur Mérieux-Merck* (Case IV/34.776) Commission Decision 94/770/EC [1994] OJ L309/1, paras 68-69.

[118] New Cooperation Guidelines (n 2) para 137. It should be borne in mind that joint ventures involving all of those stages may be considered as having full-function character. See eg *Ericsson/Nokia/Psion* (Case IV/JV.6) [1998].

[119] New Cooperation Guidelines (n 2) para 133.

[120] Any R&D cooperation that involves any of these hard core restrictions is also unlikely to be granted an exemption in the individual assessment, because they are presumed not to be indispensable to the attainment of the resulting efficiencies. ibid para 142.

venture is to be caught by Article 101(1) and the less likely it is that it will benefit from Article 101(3).[121]

The general principles explained above regarding the measurement of market power[122] also apply in R&D joint venture cases. However, if the joint venture is intended to develop a new product which would create completely new demand, those traditional principles may not be sufficient to measure the negative effects of the joint venture on competition in innovation.[123] For this purpose, it may be necessary to consider additionally the number of credible competing R&D efforts, if it is possible to identify them. The 2001 Cooperation Guidelines presumed that an R&D joint venture would eliminate competition in innovation if it combined the only two existing poles of research, because this could lead to a dominant position.[124] Considering the General Court's approach in *Atlantic Container*,[125] the Commission has not included such a presumption in the new Guidelines. However, the new Guidelines retain the example given in the old Guidelines,[126] in which it is considered that such an R&D joint venture leading to a dominant position is unlikely to fulfil the criteria of Article 101(3).[127]

The new Guidelines stipulate that any exemption given to a R&D joint venture will normally cease to apply, if any of the criteria of Article 101(3) are no longer met.[128] As held in *European Night Services*, in applying this principle, the Commission normally considers the initial sunk investments made by the parties, and the time and restraints needed for making and recouping an efficiency enhancing investment.[129]

---

[121] ibid para 143. For decisions in which the Commission analysed the R&D joint venture under Article 101(3), see eg *KSB/Goulds/Lowara/ITT* (Case IV/32.363) Commission Decision 91/38/EEC [1987] OJ L19/25; *Asahi/Saint-Gobain* (n 109).
[122] See IV/A/3 above.
[123] Those joint ventures are actually treated as non-horizontal cooperation and exempted under the R&D Block Exemption Regulation, irrespective of market shares, for the duration of the joint R&D and an additional period of seven years after the product is first put on the market. However, if the joint venture eliminates effective competition in innovation, the exemption of the Regulation may be withdrawn. New Cooperation Guidelines (n 2) para 126.
[124] 2001 Cooperation Guidelines (n 23) para 71.
[125] See 161-62 above.
[126] 2001 Cooperation Guidelines (n 23) para 75.
[127] New Cooperation Guidelines (n 2) para 147 (Example 1).
[128] ibid para 145.
[129] ibid.

However, the Commission adds that this subsequent review of the exemption will not be the case for restrictions which are irreversible events.[130]

B- Production Joint Ventures

Although agreements including price-fixing and limiting output are normally considered to restrict competition by their object, this principle does not apply to limitations concerning the capacity and production volume of production joint ventures or to the joint setting of the sales prices if the joint venture also covers the joint distribution of the products.[131] Therefore, the creation of production joint ventures is normally analysed according to whether it has any anticompetitive effect.[132]

A production joint venture is unlikely to restrict competition within the sense of Article 101(1) if the parents are not competitors,[133] or if it leads to a new market, in other words, it enables the parents to launch a new product which, on the basis of objective factors, they could not create otherwise.[134] Moreover, a production joint venture is not likely to infringe Article 101(1) if the parent firms do not hold market power in the relevant market(s).[135] The Specialisation Block Exemption Regulation provides a safe harbour for production joint ventures, with or without the joint distribution of the products, in which the parties' combined market share does not exceed 20 %.[136] If the market share threshold of 20 % is exceeded, whether a

[130] ibid para 146.
[131] ibid paras 160-61. The Guidelines state that production joint ventures involving joint distribution or marketing are more likely to restrict competition within the meaning of Article 101(1) than pure production joint ventures. With regard to these joint ventures, it is examined whether the joint distribution of the products is necessary for the joint production to take place in the first place. ibid para 167.
[132] See Frank L Fine, 'EEC Antitrust Aspects of Production Joint Ventures' (1992) 26 *International Lawyer* 89.
[133] See eg *Mitchell Cotts/Sofiltra* (Case IV/31.340) Commission Decision 87/100/EEC [1987] OJ L41/31, paras 19-20.
[134] New Cooperation Guidelines (n 2) para 163.
[135] ibid para 168. See eg *Mitchell Cotts/Sofiltra* (n 133) para 19; *British Interactive Broadcasting/Open* (n 62) para 169.
[136] In order to fall within this safe harbour, production joint ventures must also not contain any hard core restriction listed in Article 4 of the Specialisation Block Exemption Regulation. Production joint ventures including these restrictions are unlikely to be exempted under Article 101(3), because they are presumed not to be indispensable to the attainment of those benefits. New Cooperation Guidelines (n 2) para 184.

production joint venture is likely to give rise to anticompetitive effects will depend on the concentration level and other factors explained above with regard to the overall analysis of the appreciability of the restriction of competition.[137]

According to the Guidelines, the primary possible anticompetitive effect of production joint ventures is the direct limitation to competition between the parent firms.[138] Such direct limitation can arise in various ways. Firstly, the parent firms may limit the output of the joint venture, thereby decreasing the total output in the market that would have been brought to the market in the absence of the joint venture.[139] Secondly, a production joint venture may charge a high transfer price to its parents, which eventually could lead to higher downstream prices. The Guidelines set out that competitors may also find it profitable to increase their prices in response to this, thereby contributing to price increases.[140]

In addition to the direct loss of competition, production joint ventures may result in the coordination of the parties' competitive behaviour.[141] The likelihood of such coordination depends on the parents having market power and the existence of market characteristics conducive to such coordination, including high concentration levels and symmetrical market shares.[142] The Commission recognises that this effect may, first of all, result from commonality of costs. Accordingly, a production joint venture is more likely to lead to a risk of coordination, if the parents already have a high proportion of variable costs in common, and/or if the production costs of the product, subject to the joint production, constitute a large proportion of the total variable costs concerned.[143] In contrast, if the cooperation concerns products which require costly commercialisation or form an intermediate product amounting to a

[137] ibid paras 168-73.
[138] ibid para 157. See eg *Ford/Volkswagen* (n 62) para 20; *Exxon/Shell* (Case IV/33.640) Commission Decision 94/322/EC [1994] OJ L144/20. See also *Alcan/Alusuisse* (Case COMP/M.1663) [2000] paras 56-84.
[139] New Cooperation Guidelines (n 2) paras 174 and 187.
[140] ibid para 174.
[141] ibid para 158. See eg *Ford/Volkswagen* (n 62) para 21; *Philips/Osram* (n 62) para 18.
[142] New Cooperation Guidelines (n 2) paras 158 and 188.
[143] ibid paras 176-78.

small proportion of the variable costs of the final product, it is less likely that the joint venture could result in a collusive outcome.[144]

According to the Guidelines, secondly, production joint ventures can give rise to the risk of coordination, if they involve an exchange of commercially strategic information.[145] This analysis is made in conjunction with the overall effects of the joint venture.[146]

Lastly, production joint ventures may lead to an anticompetitive foreclosure of third parties in downstream or upstream markets from those of the joint venture.[147] The Commission recognises that through the formation of a production joint venture, the parent firms may gain market power in the upstream market, which enables them to raise the costs of their rivals in the downstream market by increasing the price of a key component, and, ultimately, to force them off the market.[148]

Production joint ventures are, in general, regarded to bring about efficiency gains in the form of cost savings or better quality products.[149] They can provide cost savings in particular by eliminating the duplication of production costs and/or by achieving economies of scale and scope. Furthermore, the Commission acknowledges that production joint ventures may enable the parent firms to improve product quality or increase product variety, if they put together their complementary skills and technologies.[150] The Guidelines stipulate that cost savings resulting from a production joint venture are less likely to be passed on to consumers to meet the criteria of Article 101(3), if they are related to the fixed costs of the parent firms rather than their variable costs, or if the parents have a strong position in the market.[151]

---

[144] ibid paras 178-79. See eg *Philips/Osram* (n 62) para 18.
[145] New Cooperation Guidelines (n 2) para 181.
[146] ibid.
[147] ibid para 159 and para 189. See eg *Philips/Osram* (n 62) para 17.
[148] New Cooperation Guidelines (n 2) para 189.
[149] ibid para 183. See also Chapter 2/III/B/2/b above.
[150] ibid.
[151] ibid para 185. For decisions in which the Commission examined a production joint venture in accordance with Article 101(3), see eg *Ford/Volkswagen* (n 62) paras 23-38; *Philips/Osram* (n 62) paras 24-31.

C- Purchasing Joint Ventures

With respect to purchasing cooperation, the Cooperation Guidelines focus more extensively on the creation of a joint purchasing company or organisation in which many firms have non-controlling stakes, and on contractual joint buying agreements. Nonetheless, the principles explained in the Guidelines concerning joint purchasing are, in general, applicable to joint ventures formed for this purpose as well.[152]

The Commission considers that purchasing joint ventures are usually procompetitive, because they provide firms with buying power which can lead to lower prices or better quality products for consumers.[153] On the other hand, it acknowledges that these joint ventures may give rise to restrictive effects on competition in purchasing markets or downstream selling markets. One main anticompetitive concern with regard to purchasing markets is the foreclosure of competing purchasers to efficient suppliers, particularly if there are a limited number of suppliers and, if there are barriers to entry on the supply side of the upstream market. Furthermore, the parties with buying power may restrict competition through forcing suppliers to reduce the range or quality of products, by such means as quality reductions, lessening of innovation efforts, or ultimately sub-optimal supply.[154]

Purchasing joint ventures are however viewed to raise more serious anticompetitive concerns regarding downstream selling markets, especially through facilitating coordination between the parties in these markets. The Guidelines provide that such a collusive outcome may arise, subject to the parties having market power and the presence of the market characteristics conducive to coordination, if the parties achieve a high degree of commonality of costs through joint purchasing.[155] There may be also a risk of coordination, if the cooperation requires the exchange of commercially sensitive information, such as purchase prices and volumes. The

[152] New Cooperation Guidelines (n 2) para 194.
[153] ibid paras 194 and 217. See also Chapter 2/III/B/2/d above.
[154] New Cooperation Guidelines (n 2) para 202-03.
[155] ibid paras 201 and 214.

Commission nonetheless states that this risk may be minimised, if the information is used only by the joint venture and is not passed on to the parents.[156]

The Guidelines provide that a purchasing joint venture is less likely to result in a restriction of competition within the sense of Article 101(1), if the parties do not have market power in the selling market.[157] In this regard, purchasing cooperation between firms which are not active in the same selling market is unlikely to have restrictive effects on competition, unless the parties have a strong position in the purchasing markets that may harm the competitive position of other players in their respective selling markets.[158] Furthermore, the Guidelines set out that purchasing cooperation between firms that have a combined market share of 15 % in any purchasing or selling market does not normally infringe Article 101(1) or, in any event, it fulfils the criteria of Article 101(3). Purchasing joint ventures which do not fall within this safe harbour, on the other hand, require a detailed assessment of their effects on the market, based on factors such as concentration levels and the possible countervailing power of strong suppliers.[159] The higher the market power of the parties, particularly in selling markets, the less likely the lower purchase prices achieved by the joint venture will be passed on to consumers and, therefore, the less likely it is that it will meet the conditions laid out in Article101(3).[160]

D- Sales Joint Ventures

The Commission normally approaches sales joint ventures more negatively compared to other categories of joint ventures.[161] The Cooperation Guidelines provide that joint selling collaborations are, in general, likely to restrict competition by their object, particularly if they contain the joint determination of the sales prices or volume to be jointly sold, or if they amount to market sharing between the parents.[162] This principle apparently applies to sales joint ventures which do not

[156] ibid para 215-16.
[157] ibid para 204.
[158] ibid para 212.
[159] ibid para 208-09.
[160] ibid paras 201 and 219. For more information about the assessment of purchasing joint ventures, see Faull and Nikpay (n 34) 718-30; Van Bael and Bellis (n 8) 472-482.
[161] See Chapter 2/III/B/2/c above.
[162] New Cooperation Guidelines (n 2) paras 234-36.

bring about substantial integration.[163] These joint ventures are unlikely to result in any efficiency being passed on to consumers and therefore they are unlikely to satisfy the criteria of Article 101(3).[164] Nevertheless, the Commission acknowledges that price fixing can be justified if it is indispensable for the integration of other marketing functions, and if this integration will generate substantial efficiencies to an extent that outweighs the negative effects on consumers.[165]

The Commission, in principle, does not consider sales joint ventures between non-competitors as having an anticompetitive object.[166] It even recognises that they are normally unlikely to fall under Article 101(1), 'if it is objectively necessary to allow one party to enter a market it could not have entered individually or with a more limited number of parties than are effectively taking part in the co-operation, for example, because of the costs involved'.[167]

If a sales joint venture does not include the joint setting of prices or output or market allocation, it is analysed whether it restricts competition by its effect. These joint ventures may lead to restrictive effects on competition, particularly if they give rise to a risk of coordination by means of an exchange of strategic information or commonality of costs.[168] However, for these anticompetitive effects to arise, the parties, in any case, must have some degree of market power. The Guidelines establish that if the parties have a combined market share that does not exceed 15 %, the sales joint venture is unlikely to fall under Article 101(1) and, in any event, it is likely to fulfil the conditions of Article 101(3).[169] If the parties' combined market share exceeds 15 %, the joint venture will be subject to an individual assessment.

---

[163] ibid para 255.
[164] See eg *Floral* (Case IV/29.672) Commission Decision 80/182/EEC [1980] OJ L39/51.
[165] New Cooperation Guidelines (n 2) para 246. See eg *LH/SAS* (Case IV/35.545) Commission Decision 96/180/EC [1996] OJ L54/28; *AuA/LH* (Case COMP/37.730) Commission Decision 2002/746/EC [2002] OJ L242/25.
[166] New Cooperation Guidelines (n 2) para 237.
[167] ibid. However, if the parties are potential competitors, the sales joint venture may be deemed to restrict competition even if it brings a new product to the market. See eg *Cekacan* (Case IV/32.681) Commission Decision 90/535/EEC [1990] OJ L299/64.
[168] New Cooperation Guidelines (n 2) paras 233 and 242-45.
[169] ibid para 240.

The Commission acknowledges that joint distribution may generate significant efficiencies, stemming from economies of scale or scope, especially for smaller producers.[170] To be taken into account in the assessment under Article 101(3), any efficiency must result from the integration of economic activities.[171] In this respect, cost savings through reduced duplication of resources and facilities may be accepted.[172] However, cost savings resulting only from the elimination of costs that are inherently part of competition are not regarded as efficiency gains within the meaning of Article 101(3).[173] In particular, if the joint venture is just a sales agency without any investment, it is likely to be treated as a disguised cartel and as such, is unlikely to fulfil the conditions of Article 101(3).[174]

VI. Assessment of the Conduct and Operation of Partial Function Joint Ventures

Because, unlike full-function joint ventures, partial function joint ventures are deemed to be agreements between two independent firms, decisions concerning price, output, product variety and other competitive parameters in respect of their operations are also normally qualified as multiple entity conduct, ie an agreement within the sense of Article 101.[175] However, if these decisions amount to an ancillary restraint, they are not analysed separately, but in conjunction with the overall effects of the joint venture. In other words, if the formation of a joint venture does not lead to a restriction of competition in accordance with Article 101(1), or it fulfils the conditions of Article 101(3), ancillary restraints also benefit from this negative clearance or exemption.[176]

In EU competition law, the concept of ancillary restraint is defined as any restriction which is directly related to, and necessary for, the implementation of a main

[170] ibid para 246. See also Faull and Nikpay (n 34) 709-10.
[171] New Cooperation Guidelines (n 2) para 247. See also *Floral* (n 164) 58.
[172] New Cooperation Guidelines (n 2) para 248.
[173] ibid para 247.
[174] ibid para 248.
[175] See eg *Mitchell Cotts/Sofiltra* (n 133). Although a contrary principle was set out in the original draft of the Cooperation Guidelines, it was removed in the final draft. See 139 above.
[176] *Métropole Télévision (M6) and others* (n 33) paras 115-116. See also Guidelines on the application of Article 101(3) (n 32) paras 29 and 31.

operation.[177] The term 'directly related' in this definition means that any restraint is subordinate to the implementation of that operation, and has an evident link with it. The condition of necessity however requires that the restraint is objectively necessary for the implementation of the main operation, and is proportionate to it.[178] This may be the case if, on the basis of objective factors, it can be concluded that without the restraint it would be difficult or impossible to implement the main operation.[179] If a restraint is objectively necessary to implement a main operation, it must also be examined whether it is proportionate to it, that it to say, its duration, and material and geographic scope do not exceed that necessary for such an implementation.[180]

However, if a restraint is not necessary or proportionate, it will be assessed separately under Article 101(3).[181] For instance, in *Métropole Télévision (M6) and others*, the General Court held that even if the exclusivity clause in relation to the broadcasting of the parent's channels by the joint venture for an initial period of ten years was directly related to the operation of the joint venture, it was not necessary for it, or in any case, it was disproportionate. The Court concluded that the fact that the exclusivity clause would be necessary to allow the joint venture to establish itself on a long-term basis in that market is not relevant to the classification of that clause as an ancillary restraint and, therefore, can only be taken into account in the framework of Article 101(3).[182]

According to these principles, the parties to a partial function joint venture should put forward evidence that decisions on the pricing and output and other competitive strategies of the joint venture are directly related to and necessary for its operation. This may actually put partial function joint ventures in a relatively worse position compared to full-function joint ventures.[183]

---

[177] *Métropole Télévision (M6) and others* (n 33) para 104.
[178] ibid paras 105-06. See also Guidelines on the application of Article 101(3) (n 32) para 29.
[179] Case 42/84 *Remia BV and others v Commission* [1985] ECR 2545, para 19; *Métropole Télévision (M6) and others* (n 33) para 109. See also Guidelines on the application of Article 101(3) (n 32) para 31.
[180] *Métropole Télévision (M6) and others* (n 33) para 113.
[181] ibid.
[182] ibid paras 118-136.
[183] See Chapter 3/VI above.

Furthermore, as mentioned in Chapter 3 above, although it is controversial, a full-function joint venture may be considered to form a single economic unit with its parents within the meaning of Article 101.[184] Therefore, there is a possibility that an agreement between a full-function joint venture and its parents, such as the exclusivity clause discussed in *Métropole Télévision (M6) and others*, may be regarded as unilateral conduct and fall outside Article 101(1). Considering that these advantages indicate relatively more flexible treatment in the future, firms may prefer to establish a full-function joint venture instead of a partial function joint venture for the same project.

VII. Concluding Remarks

Following the abolition of the notification mechanism by Regulation 1/2003, firms have been burdened with making their own assessments regarding the application of Article 101(1) and (3) to their agreements. This creates legal uncertainties particularly with regard to partial function joint ventures including substantial sunk investments. The Commission's guidelines have been primary and useful tools from the perspective of firms in reducing these uncertainties.

The new Cooperation Guidelines have improved this role particularly by explaining more extensively the general principles applicable to the appraisal of joint ventures under Article 101. Therein, the Commission clearly states that there is not a significant gap between the effects of partial function joint ventures and those of full-function joint ventures. Hence, it sets out the principles for the assessment of partial function joint ventures which are similar to those provided for the analysis of full-function joint ventures. The Guidelines, especially, indicate that the Commission may require market power sought for the existence of a non-coordinated effect under the Horizontal Merger Guidelines, in order for a partial function joint venture to fall under Article 101(1). They also reveal that the analysis of the risk of coordination in partial function joint venture cases is quite similar to that in full-function joint venture cases.

[184] ibid.

On the other hand, the chapters of the Guidelines on the specific application of Article 101 to different types of joint ventures indicate that such an overlap with the appraisal of full-function joint ventures, in fact, exists only in relation to partial function production joint ventures. The Commission approaches R&D joint ventures more positively, whilst taking a more suspicious approach to purchasing and sales joint ventures. In particular, sales joint ventures are subject to stricter rules as they are likely to be regarded as having an anticompetitive object.

Moreover, in the same way as before the adoption of Regulation 1/2003, the Commission may automatically consider that the joint venture restricts competition appreciably within the sense of Article 101, if the market share thresholds establishing safe harbours are slightly exceeded. In such cases, the parties would be burdened with proving efficiencies which are indispensable and which outweigh the harm to consumers, according to Article 101(3). This would mean a stricter test, in particular for purchasing and sales joint ventures, considering that they are subject to a safe harbour with a relatively low market share threshold of 15 %. In any case, unlike clearance given to full-function joint ventures according to the Merger Regulation, an exemption granted to a joint venture under Article 101(3) may apply for a limited duration.

Finally, it should be borne in mind that the Guidelines reflect only the Commission's position as to the appraisal of partial function joint ventures. However, because national competition authorities and national courts also have the power to enforce Article 101(1) and (3), they may take a different approach to such appraisals. Therefore, even if it is accepted that the appraisal of partial function joint ventures is substantially similar to that of full-function joint ventures as far as the Commission's practice is concerned, such a distinction between joint ventures may still result in significant differences from a substantive viewpoint.

CHAPTER 5
THE ASSESSMENT OF JOINT VENTURES UNDER US COMPETITION LAW

I. Introduction

This chapter explains how joint ventures are analysed in US competition jurisprudence in order to provide a comparative perspective to the EU regime. This comparison is particularly important in order to show the alternative approaches to the understanding of the economic nature of joint ventures and to their analysis under the merger control rules, which can be relied on in examining the suitability of the current EU merger control approach. In this respect, the chapter principally aims to reveal how the US regime approaches the three main issues which are focused on in Chapter 6 in suggesting a new approach to joint ventures under the EU merger control regime. These issues are: (i) which criterion is used in the US to distinguish joint ventures for merger control purposes; (ii) how the US courts and authorities incorporate the fact that the parents retain some independent activities outside the joint venture, into traditional merger analysis; and (iii) how the US courts and authorities treat the conduct and operation of joint ventures.

In the US, joint ventures have been 'an important and increasingly popular form of business organisation'.[1] Despite this popularity as a business model, the analysis of joint ventures is also regarded as one of the most uncertain and controversial areas in US competition law.[2] In addition to the intricate economic nature of joint ventures, the complexity of the US competition law enforcement system seems to be a contributing factor to this confusion. Therefore, this chapter firstly gives a brief

[1] *Texaco, Inc v Dagher*, 547 US 1, 5 (2006). See also Howard H Chang, David S Evans and Richard Schmalensee, 'Some Economic Principles for Guiding Antitrust Policy towards Joint Ventures' (1998) 1998 *Columbia Business Law Review* 223, 228-29; Thomas A Piraino, 'The Antitrust Analysis of Joint Ventures after the Supreme Court's Dagher Decision' (2008) 57 *Emory Law Journal* 735, 735.

[2] Robert Pitofsky, 'A Framework for Antitrust Analysis of Joint Ventures' (1985) 54 *Antitrust Law Journal* 893, 893; Chang and others (n 1) 225, Charles D Weller, 'A "New" Rule of Reason from Justice Brandeis' "Concentric Circles" and Other Changes in Law' (1999) 44 *Antitrust Bulletin* 881, 881; Piraino, 'The Supreme Court's Dagher Decision' (n 1) 738.

description of this system to help to make a proper comparison between US and EU competition law.

In the US, section 1 of the Sherman Act, which renders anticompetitive agreements illegal,[3] and section 7 of the Clayton Act, which is specifically directed at mergers,[4] are the main statutes that may apply to joint ventures.[5] In the second part of this chapter, the legal tests under these two statutes are examined to show the extent to which they overlap with each other. This facilitates a comprehensive understanding of US jurisprudence on joint ventures and, thus, the drawing of the correct conclusions regarding EU competition law.

After presenting these fundamental characteristics of the US competition law regime, this chapter evaluates how the US courts and enforcement authorities approach the formation of joint ventures. Because the centre of gravity of this thesis is the analysis of joint ventures in the EU merger control regime, for comparison purposes, this part primarily focuses on the treatment of joint ventures as mergers in the US. Finally, the chapter discusses the US approach to the assessment of the conduct of joint ventures, which includes significant ambiguities.

II. Overview of Procedural Issues in the US

Compared to the EU regime, the US competition enforcement regime has two distinct features. First, unlike the former, it is judicially enforced, ie the enforcement authorities only act as investigators and bring an action in court which decides the applicability of competition rules and the prohibition of the collaboration litigated. Second, it is characterised by a complex system of decentralised enforcement. Federal competition enforcement is the responsibility of both the DOJ and the FTC whose authorities significantly overlap.[6] Besides these federal enforcers, state

[3] 15 USC secs 1-2.
[4] 15 USC secs 12-27.
[5] Section 2 of the Sherman Act, which forbids monopolisation and attempt to monopolise, and section 5 of the FTC Act, which prohibits unfair methods of competition (15 USC sec 45), may also apply to joint ventures. However, the discussion instead focuses on the applicability of section 1 of the Sherman Act and section 7 of the Clayton Act.
[6] The DOJ has the power to enforce the Sherman Act civilly and criminally, while the FTC has the responsibility of enforcing section 5 of the FTC Act which is considered to encompass conducts

attorneys general and private parties can also bring a suit against anticompetitive practices.[7]

These two characteristics of the US enforcement regime normally apply not only to agreements but also to mergers, notwithstanding that the Hart-Scott-Rodino Antitrust Improvements Act of 1976 (H-S-R Act)[8] establishes a pre-merger notification regime. According to this regime, mergers that meet the three criteria set forth in the H-S-R Act must be notified to the DOJ and the FTC before their consummation. In the same way as the EU Merger Regulation, the H-S-R Act sets out certain time limits during which the transaction is suspended. In order to permanently prevent the transaction, however, the authorities must challenge the merger in court within those time periods and obtain preliminary injunctions. This notification system does not however eliminate the power of state attorneys general and private parties to challenge the merger in court, according to section 7 of the Clayton Act.[9] Given also the fact that the parties may request the DOJ to write a business review letter in which it declares its enforcement intention on the application of the Sherman Act,[10] it is difficult to state that there is a significant difference between the procedural rules applicable to mergers and agreements in the US.

---

falling within the Sherman Act and a few more practices. Both authorities, nonetheless, have concurrent jurisdiction over the enforcement of the Clayton Act. They have established a coordination mechanism to share these enforcement efforts. See n 7 below.

[7] For more information about the US competition enforcement regime and its comparison with the EU regime, see William E Kovacic, 'Downsizing Antitrust: Is It Time to End Dual Federal Enforcement?' (1996) 41 *Antitrust Bulletin* 505; Eleanor M Fox, 'US and EU Competition Law: A Comparison' in Edward M Graham and J David Richardson (eds), *Global Competition Policy* (Institute for International Economics 1997) 339-54; Barry E Hawk and Laraine L Laudati, 'Antitrust Federalism in the United States and Decentralization of Competition Law Enforcement in the European Union: A Comparison' (1997) 20 *Fordham International Law Journal* 18; Douglas H Ginsburg, 'Comparing Antitrust Enforcement in the United States and Europe' (2005) 1 *Journal of Competition Law and Economics* 427; ABA, *Antitrust Law Developments* (6th edn, ABA Publishing vol 1 2007) 643-732; Philip E Areeda and Herbert Hovenkamp, *Antitrust Law: An Analysis of Antitrust Principles and Their Application*, vol II (3rd edn, Aspen Publishers 2007); Maher M Dabbah, *International and Comparative Competition Law* (Cambridge University Press 2010) 229-237; Herbert Hovenkamp, *Federal Antitrust Policy*: *The Law of Competition and Its Practice* (4th edn, West Publishing 2011) 642-51.

[8] 15 USC sec 18a.

[9] For more detailed information about this pre-merger notification system and enforcement by private parties and state attorneys general, see ABA, *Antitrust Law Developments* (n 7) 387-424.

[10] See ibid 719-21. The parties may also request the FTC to give an advisory opinion about the legality of their proposed practice. See ibid 687-88.

This unique structure of the US enforcement regime generally has two important implications with regard to the assessment of joint ventures. Firstly, from a procedural viewpoint, whether or not a collaboration is treated as a merger seems to be of less significance in the US, compared to the EU where, as mentioned above, mergers and agreements are subject to quite different procedural rules. This may be one of the reasons why, contrary to the EU, there is no sharp statutory distinction between joint ventures for merger control purposes in the US. The second implication is closely linked to the first and also to the litigation-oriented character of the system. Considering the broad language of US competition statutes, judicial interpretation does not often provide clear and coherent guidance on their application to certain situations. Guidelines published by the DOJ and the FTC, in this regard, may only help to clarify the position of these authorities. They do not, however, eliminate many ambiguities in the application of the statutes, because state attorneys general and private parties may also bring claims and, in any case, courts retain the power to give the final decision on these claims.[11] As a result, compared to EU competition law, US jurisprudence includes serious uncertainties and debates as to which statutes and substantive rules apply to which types of joint ventures.

III. Legal Tests under Section 1 of the Sherman Act and Section 7 of the Clayton Act

Section 1 of the Sherman Act stipulates that '[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce […] is declared to be illegal'. A literal interpretation of this provision may lead to the prohibition of almost all agreements, because every agreement somehow restrains trade.[12] The case law, nevertheless, establishes that Section 1 prohibits only agreements which restrict competition 'unreasonably'.[13]

---

[11] Fox (n 7) 341. State attorneys general, for example, have jointly published their own merger guidelines which, to some extent, differ from those of the federal authorities. See ABA, *Antitrust Law Developments* (n 7) 423-424; Hovenkamp, *Federal Antitrust Policy* (n 7) 648-50.

[12] S Chesterfield Oppenheim, Glen E Weston and J Thomas McCarthy, *Federal Antitrust Laws: Cases, Text, and Commentary* (4th edn, West Publishing 1981) 14; ABA, *Antitrust Law Developments* (n 7) 1.

[13] *Standard Oil Co of New Jersey* v *United States*, 221 US 1 (1911); *Chicago Board of Trade v United States*, 246 US 231, 238 (1918); *Northwest Whole Stationers Inc v Pacific Stationery and Printing Co*, 472 US 284, 289 (1985).

In deciding whether an agreement results in an unreasonable restraint of competition, two different rules are traditionally used by the courts and authorities depending on the nature of the agreement concerned.[14] Certain agreements which have a 'pernicious effect on competition and lack […] any redeeming virtue'[15] or are 'manifestly anticompetitive'[16] are deemed as per se illegal and prohibited without any elaborate assessment.[17] Price fixing, market sharing and bid rigging are the principal examples of per se illegal restraints.[18]

Apart from those subject to the per se rule, all agreements are judged according to the rule of reason which is the presumptive standard under section 1. According to this approach, the question of whether a restraint is reasonable is answered by evaluating its precise impact on competition. In this evaluation, courts take into account all relevant facts, including market characteristics, the nature of the agreement and historical evidence.[19] If this analysis reveals that the procompetitive effects of the agreement offset its anticompetitive effects, it is regarded to be legal.[20]

Section 1 also renders 'combinations in restraint of trade' illegal. This wording includes mergers as well.[21] Indeed, some of the early successful Sherman Act cases were horizontal merger cases.[22] However, because of concerns regarding the

[14] It should be noted that these two standards are also generally used in the application of other rules of US competition law.
[15] See *Northern Pacific R Co v United States*, 356 US 1, 5 (1958).
[16] See *Continental TV, Inc v GTE Sylvania, Inc*, 433 US 36, 49-50 (1977).
[17] See *Broadcast Music, Inc v CBS, Inc*, 441 US 1, 8 (1979).
[18] ABA, *Antitrust Law Developments* (n 7) 55; Dabbah (n 7) 241.
[19] See *Chicago Board of Trade* (n 13) 238.
[20] For more information on the application of the per se rule and the rule of reason in section 1 cases, see Jerrold G Van Cise, 'The Future of Per Se in Antitrust Law' (1964) 50 *Virginia Law Review* 1165; Robert H Bork, 'The Rule of Reason and the Per Se Concept: Price Fixing and Market Division' (1966) 75 *Yale Law Journal* 373; ABA, 'The Per Se Rule' (1969) 38 *Antitrust Law Journal* 731; Thomas G Krattenmaker, 'Per Se Violations in Antitrust Law: Confusing Offenses with Defenses' (1989) 77 *Georgetown Law Journal* 165; Thomas A Piraino, 'Reconciling the Per Se and Rule of Reason Approaches to Antitrust Analysis' (1991) 64 *Southern California Law Review* 685; William C Wood, 'Costs and Benefits of Per Se Rules in Antitrust Enforcement' (1993) 38 *Antitrust Bulletin* 887; ABA, *Antitrust Law Developments* (n 7) 46-78, Andrew I Gavil, 'Moving Beyond Caricature and Characterization: The Modern Rule of Reason in Practice' (2012) 85 *Southern California Law Review* 733.
[21] Phillip E Areeda, Herbert Hovenkamp and John L Solow, *Antitrust Law: An Analysis of Antitrust Principles and Their Application*, vol IV (2nd edn, Aspen Publishers 2006) 14.
[22] *Northern Securities Co v United States*, 193 US 197 (1904); *Standard Oil* (n 13); *United States v American Tobacco Co*, 221 US 106 (1911).

effectiveness of the application of the Sherman Act to mergers, Congress, in 1914, enacted the Clayton Act, whose Section 7 was specifically directed towards those transactions.[23] Currently section 7 of the Clayton Act is the main US competition statute that applies to mergers, although the Sherman Act is theoretically still applicable to them.[24]

The key question under section 7 is whether the effect of a merger may be substantially to lessen competition. The legislative history shows that the purpose of section 7 has been 'to cope with monopolistic tendencies in their incipiency and well before they have attained such effects as would justify a Sherman Act proceeding'.[25] In this regard, the word 'may' is used in section 7 to allow the prohibition of a merger where there is a reasonable probability that its effect will be substantially to lessen competition. Based on this feature, some early court decisions provided that the required standard of proof under section 7 was lower than that under section 1 of the Sherman Act test which requires certainty in restraint of trade.[26] However, it is difficult to state that the subsequent case law supports this approach.[27] In *United States v First National Bank of Lexington*,[28] the Supreme Court used the standard of section 7 in a Sherman Act case. Similarly, some lower courts regarded the standard under the Clayton Act to be the same as that under the Sherman Act.[29]

---

[23] The original version of section 7 prohibited only anticompetitive acquisitions of 'the stock of or other share capital of another corporation'. Since this original text did not cover the acquisition of assets, courts continued to apply the Sherman Act test to these acquisitions. To repair this failure, in 1950, Congress amended section 7 to include acquisitions of assets as well. In 1980, section 7 was again amended to include acquisitions by or from 'persons' and to apply to those whose parties were engaged 'in any activity affecting commerce'. For more information about the legislative history of the Clayton Act, see Ralstone R Irvine, 'The Uncertainties of Section 7 of the Clayton Act' (1929) 14 *Cornell Law Quarterly* 28; 'Section 7 of the Clayton Act: A Legislative History' (1952) 52 *Columbia Law Review* 766; Gene Terry, 'Clayton Act Section 7: History and Amendment' (1956) 24 *University of Kansas City Law Review* 177; William A Carter, 'The Clayton Act, Original Section 7: Re-Examination and Reappraisal' (1963) 8 *Antitrust Bulletin* 187; Oppenheim and others (n 12) 417-30.

[24] Section 5 of the FTC Act also theoretically applies to mergers. See DOJ and FTC, 'Horizontal Merger Guidelines' (2010) <http://www.justice.gov/atr/public/guidelines/hmg-2010.pdf> accessed 05 April 2013, sec 1.

[25] See Senate Report No 1775, 81st Cong, 2d Sess (1950).

[26] See eg *Brown Shoe Co v United States*, 370 US 294, 328-29 (1962); *United States v Penn-Olin*, 378 US 158, 170-71 (1964); *Intern Tel & Tel Corp v AT&T*, 481 F Supp 399, 404 (SDNY 1979).

[27] See ABA, *Antitrust Law Developments* (n 7) 325-26.

[28] 376 US 665 (1964).

[29] See eg *McCaw Personal Communications, Inc v Pacific Telesis Group*, 645 F Supp 1166, 1173 (NDCal 1986); *United States v Rockford Memorial Corp*, 898 F 2d 1278, 1281-83 (7th Cir 1990).

Areeda, Hovenkamp and Solow claim that there is no difference between the standards under section 7 and section 1.[30] They explain that:

> [B]oth statutes ask the courts to devise the wisest approach they can manage in order to forestall anticompetitive threats while facilitating procompetitive arrangements and interfering as little as practicable with natural practices […] [O]nce a court's analysis of a problem has shown it is the best way to resolve that problem, no difference in result is mandated by the section 1 concept of unreasonable restraint as compared with section 7's concept of probable substantial lessening of competition.[31]

Accordingly, it appears that there is significant overlap between the legal tests under section 1 and section 7, particularly compared to the overlap between the tests under Article 101 TFEU and Article 2(3) of the Merger Regulation. Indeed, the US courts and authorities generally adopt a strict or lenient approach to a collaboration according to its nature and purpose, but not to the statute- section 7 or section 1- under which they are analysed. In this regard, the treatment of mergers differs from those of agreements to the extent that the competitive effect of the former is considered to be different from that of the latter. As seen below, the discussion with respect to the appraisal of joint ventures also mainly concentrates on which competition law approach should apply to the joint venture in question, rather than which statute applies to it.

IV. Assessment of the Formation of Joint Ventures

Despite not providing a clear statutory distinction between joint ventures as in the EU, US competition law also acknowledges that some joint ventures are to be treated as mergers. On various occasions, the Supreme Court and lower courts have analysed a joint venture as being analogous to a merger under section 7 of the Clayton Act. Similarly, in the Collaboration Guidelines,[32] the FTC and the DOJ set out some criteria to distinguish joint ventures to be reviewed as mergers. In this respect, this part firstly examines the treatment of these merger-like joint ventures, by focusing on

[30] Areeda and others, *Antitrust law*, vol IV (n 21) 44.
[31] ibid.
[32] DOJ and FTC, 'Antitrust Guidelines for Collaborations Among Competitors' 64 Fed Reg 54483 (1999) <http://www.ftc.gov/os/1999/10/jointventureguidelines.htm> accessed 05 April 2013.

judicial and enforcement approaches in different subparts.[33] Secondly, it explains the analysis of joint ventures as agreements in order to comprehend the difference between these two modes of treatment. Thirdly, this part explores the assessment of partial acquisitions by the courts and authorities to discuss the applicability of these rules to joint ventures. Finally, it shows how the courts and authorities approach the risk of coordination between the parent firms in relation to markets other than those of the joint venture.

A- Merger Review

1. Judicial Approach

In *United States v Penn-Olin*,[34] the Supreme Court, for the first time, analysed the legality of a joint venture as analogous to a merger under section 7 of the Clayton Act.[35] Therein, Pennsalt and Olin formed the Penn-Olin joint venture in order to produce and distribute sodium chlorate in the Southeastern US where neither parent was engaged in the production of sodium chlorate. The DOJ challenged the joint

[33] This chapter seeks to explain merger analysis in the US to the extent that it relates to the assessment of joint ventures. For more detailed information about merger review in the US, see 2010 Horizontal Merger Guidelines (n 24); DOJ and FTC, 'Non-Horizontal Merger Guidelines' (1984) <http://www.justice.gov/atr/public/guidelines/2614.htm> accessed 05 April 2013 (US Non-Horizontal Merger Guidelines). See also Michael H Riordan and Steven C Salop, 'Evaluating Vertical Mergers: A Post-Chicago Approach' (1995) 63 *Antitrust Law Journal* 513; Thomas C Willcox, 'Behavioural Remedies in A Post Chicago World: It is Time to Revise the Vertical Merger Guidelines' (1995) 40 *Antitrust Bulletin* 227; William J Kolasky, 'Conglomerate Mergers and Range Effect: It's a Long Way from Chicago to Brussels' (2002) 10 *George Mason Law Review* 533; Areeda and others, *Antitrust law*, vol IV (n 21); Phillip E Areeda and Herbert Hovenkamp, *Antitrust Law: An Analysis of Antitrust Principles and Their Application*, vol V (Aspen Publishers 2003); Phillip E Areeda, Herbert Hovenkamp and John L Solow, *Antitrust Law: An Analysis of Antitrust Principles and Their Application*, vol IVa (Aspen Publishers 2006); James Langenfeld and Gregory G Wrobel, 'Upward Pricing Pressure Analysis under the 2010 Horizontal Merger Guidelines' (2010) 25 *Antitrust* 21; M Sean Royall and Adam J Di Vincenzo, 'Evaluating Mergers between Potential Competitors under the New Horizontal Merger Guidelines' (2010) 25 *Antitrust* 33; Carl Shapiro, 'The 2010 Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years' (2010) 77 *Antitrust Law Journal* 49; James A Keyte and Kenneth B Schwartz, '"Tally-Ho!": UPP and the 2010 Horizontal Merger Guidelines' (2011) 77 *Antitrust Law Journal* 587; Hovenkamp, *Federal Antitrust Policy* (n 7) 411-33, 540-620.

[34] See n 26.

[35] In the year preceding *Penn-Olin*, the Court mentioned the possibility of the application of section 7 to a joint venture in *United States v Pan American World Airways*, which was a section 2 of the Sherman Act case. 371 US 296 (1963). However, the Court did not give any guidance about this application.

venture under section 7.[36] Its primary attack was that Penn-Olin would substantially lessen competition in the Sousteastern sodium chlorate market, on the grounds that Pennsalt and Olin each had the necessary financial resources and other capabilities to compete on an individual basis in the market.[37] The defendants argued that section 7 could not apply to Penn-Olin because it was not 'engaged in commerce'. Without discussing this defence, the district court rejected the DOJ's claim on the basis that it failed to provide sufficient evidence that both parents would have entered the relevant market independently in the absence of the joint venture, and that such loss of potential competition due to the joint venture would result in substantial lessening of competition.[38]

The Supreme Court, however, discussed whether the phrase 'engaged in commerce' prevented the application of section 7 to the joint venture, which was established as a new corporation by two independent firms.[39] It came to conclusion that section 7 applied to the joint venture, because 'the formation of a joint venture and purchase by the organizers of its stock would substantially lessen competition -indeed foreclose it- as between them, both being engaged in commerce'.[40] On the other hand, the Court did not provide any criteria to distinguish joint ventures which were to be treated as mergers. Without doing so, it explained how the doctrine under section 7 would apply to joint ventures. The Court stated that even though both

[36] The DOJ also challenged the joint venture under section 1 of the Sherman Act. However, the district court stated that 'the Sherman Act challenge [would] ... be disregarded, for the anticompetitive standard imposed by Section 7 of the Clayton Act [was] less stringent than that of the Sherman Act'. *United States v Penn-Olin*, 217 F Supp 110, 116-17 (D Del 1963). The Supreme Court also did not analyse the joint venture in accordance with the Sherman Act.

[37] In addition to this attack based on potential competition concerns, the DOJ claimed that: (i) the joint venture would make Olin a captive buyer of sodium chlorate from Penn-Olin, and deprive other firms of dealing business with Olin; (ii) by combining the financial resources of its parents, the joint venture would have competitive advantages that could ultimately lead to market domination by it; and (iii) the joint venture would facilitate coordination between the parents with respect to the non-chlorate markets. ibid.

[38] ibid.

[39] Some commentators also discussed the applicability of section 7 to a newly established entity from the same perspective. See eg Charles J Porter, 'Joint Subsidiaries and Section 7 of the Clayton Act' (1962) 39 *University of Detroit Law Journal* 223, 226-28; 'Joint Ventures and Section 7 of the Clayton Act' (1962) 14 *Stanford Law Review* 777, 779-82; Patricia Hassett, 'Clayton Act Section 7 Applies to Joint Ventures' (1965) 16 *Syracuse Law Review* 101; George A Vandeman, 'The Joint Venture Meets Section 7 of the Clayton Act: Technical Capability, Reasonable Probability and Business Reality' (1965) 38 *Southern California Law Review* 104, 108-09.

[40] *Penn-Olin* (n 26) 169.

mergers and joint ventures may result in similar anticompetitive effects,[41] they differed as '[t]he merger eliminate[d] one of the participating corporations from the market while a joint venture create[d] a new competitive force therein'.[42]

The decision set forth some factors that must be considered specifically in the analysis of joint ventures under section 7.[43] Incorporation of these factors into the analysis were interpreted to mean that the Court proposed a more lenient and qualitative standard to the treatment of joint ventures, compared to the strict standard applied in the early merger decisions,[44] which merely relied on quantitative factors, including market shares and concentration levels.[45] In particular, the consideration of 'the reasons and necessities for [the joint venture]'s existence' led some commentators to claim that, besides the failing firm defence, additional economic justifications, such as the pooling of capital and the sharing of risks, could be accepted by the courts to allow a joint venture which otherwise would be illegal.[46] Nonetheless, in the last decades, in merger cases, both the courts and the authorities have shifted to a more sophisticated economic analysis based on both qualitative and quantitative evidence.[47] Therefore, even if *Penn-Olin* could be regarded as making a distinction between the treatment of joint ventures and mergers under section 7 in that sense, this hardly applies to today's situation.

---

[41] ibid.

[42] ibid 170. This difference can actually arise only in relation to joint ventures which, like Penn-Olin, are established to enter a new market, or which arise as a new enterprise by, for example, creating new production capacity in the market where the parents are active. Based on this approach, some commentators mentioned the creation of a new product or capacity or entry into new markets as a condition for an entity to be called a joint venture for competition law purposes. See eg Joseph F Brodley, 'Joint Ventures and Antitrust Policy' (1982) 95 *Harvard Law Review* 1521, 1526; Seymour D Lewis, 'Joint Ventures and Section 7 of the Clayton Act, Including International Patent Licencing' (1985) 16 *University of Toledo Law Review* 919, 919-20 and fn.7. However, this approach seems to disregard joint ventures which integrate all the operations of the parents in the market and, therefore, eliminate one of the market players.

[43] *Penn-Olin* (n 26) 177.

[44] See *Brown Shoe* (n 26); *United States v Philadelphia National Bank*, 374 US 321 (1963). See also Richard A Posner, 'Antitrust Policy and the Supreme Court: An Analysis of the Restricted Distribution, Horizontal Merger and Potential Competition Decisions' (1975) 75 *Columbia Law Review* 282, 299-313.

[45] 'Joint Ventures and Section 7 of the Clayton Act' (n 39) 797; Joseph F Brodley, 'The Legal Status of Joint Ventures under the Antitrust Laws: A Summary Assessment' (1976) 21 *Antitrust Bulletin* 453, 472-73; Lynn E Eccleston, 'Antitrust Implications of a Joint Venture: Is an Efficiencies Justification Justifiable?' (1985) 31 *Wayne Law Review* 1219, 1229-30.

[46] 'Joint Ventures and Section 7 of the Clayton Act' (n 39) 796; 'Clayton Act Section 7 Applicable to Corporate Joint Ventures' (1965) 49 *Minnesota Law Review* 325, 333.

[47] See Shaprio, '2010 Horizontal Merger Guidelines' (n 33).

In the same decade as *Penn-Olin*, *Northern Natural Gas Co v Federal Power Commission*[48] was another case where section 7 was applied to a joint venture. Therein, American Natural and Trans-Canada, two large gas firms, established a joint venture to construct and operate a pipeline in an area covering Michigan-Wisconsin where American Natural enjoyed a monopoly position. The Federal Power Commission (FPC) permitted the joint venture under the public interest test without giving sufficient consideration to its anticompetitive effect. However, the court of appeal concluded that the joint venture was anticompetitive with reference to section 7, because it 'appear[ed] to have effectively prevented competition from arising among natural gas suppliers selling to distributors in Michigan and Wisconsin, and between the supplier of Canadian gas and those suppliers seeking to market domestic gas'.[49] Therefore, the court remanded the case to the FPC for further consideration.

The setting of *Northern Natural* was different from that of *Penn-Olin* as the joint venture in the former case was formed to operate in a market where one of the parents intended to retain its business activities. The court held that this was not of significance for the application of section 7, by referring to *Penn-Olin*'s dictum that 'realistically, the parents would not compete with their progeny'.[50]

Another early court decision that should be considered in relation to the merger-like treatment of joint ventures is *Citizen Publishing Company v United States*[51] in which the Supreme Court examined the joint venture as an agreement under the Sherman Act. In 1940, Star Publishing and Citizen Publishing, the only newspapers in Tucson, set up a joint venture, TNI, in order to integrate all the departments of their publishing businesses, except for the news and editorial departments. The term of the joint venture was twenty-five years, but this was extended to 1990 in 1953. According to the joint operating agreement, almost all the assets held by Star and Citizen in relation to producing and advertising their newspaper were transferred to TNI. In 1965, the shareholders of Citizen formed a company, Arden Publishing, to

[48] 399 F 2d 953 (DC Cir 1968).
[49] ibid 963.
[50] ibid 967.
[51] 394 US 131 (1969).

acquire Star. The DOJ brought an action against the 1940 operating agreement under sections 1 and 2 of the Sherman Act and against the acquisition of Star by Arden under section 7 of the Clayton Act. The district court found that the 1940 operating agreement was per se illegal under section 1, and that the acquisition of Star by Arden was a violation of section 7. The Supreme Court affirmed the decision of the district court.

Citizen Publishing does not discuss why section 7 was not applied to the formation of TNI, which was intended to last for a long term and integrated almost all the business activities of the parents in the market. Keeping news and editorial departments separate and/or the definite duration of the joint venture may have been consequential in this regard. Nevertheless, in *Texaco Inc. v Dagher*,[52] the Court implicitly approved the application of section 7 to a similar joint venture between Texaco and Shell.[53] Therefore, it is questionable whether *Citizen Publishing* is applicable in determining joint ventures that are to be treated as mergers under section 7.[54]

There has been an increase in the number of lower court decisions which apply section 7 to joint ventures since the enactment of the H-S-R Act. In these cases, joint ventures were essentially analysed by courts under the same standard as that applied in merger cases.[55] In *United States v Ivaco*, the defendants asserted, by referring to *Penn-Olin*, that the analysis of joint ventures under section 7 was different from merger analysis. Nonetheless, the district court concluded that '[t]he analysis of whether the proposed transaction [would] injure competition [did] not differ

[52] See n 1.
[53] James A Keyte, 'Dagher and "Inside" Joint Venture Restraints' (2006) 20 *Antitrust* 44, 44-45; Jeffrey L Kessler, David G Feher, and Robin L Moore, 'The Supreme Court's Decision in Dagher: Canary in A Coal Mine or Antitrust Business as Usual?' (2006) 21 *Antitrust* 40, 41; James H Holden, 'Joint Ventures and the Supreme Court's Decision in Texaco, Inc. v. Dagher: A Win for Substance over Form' (2007) 62 *Business Lawyer* 1467, 1474-75
[54] It should be borne in mind that the primary question in both *Citizen Publishing* and *Dagher* is which standard applies to the analysis of the conduct of joint ventures. See V/A below.
[55] See eg *Yamaha Motor Co v FTC*, 657 F 2d 971 (8th Cir 1981); *FTC v Warner Communications, Inc*, 742 F 2d 1156 (9th Cir 1984); *Phototron Corp v Eastman Kodak Co*, 842 F 2d 95 (5th Cir 1988); *United States v Loew's Incorporated*, 705 F Supp 878 (SDNY 1988); *United States v Ivaco*, 704 F Supp 1409 (WDMich 1989); *FTC v Harbour Group Investments*, 1990 WL 198819 (DDC 1990); *United States v Franklin Electric Co*, 130 F Supp 2d 1025 (WDWis 2000).

materially when the transaction [was] characterized as a joint venture rather than as a merger'.[56]

In brief, the case law provides that joint ventures are generally examined in accordance with the rule of reason.[57] In this regard, the real question seems to be whether this rule of reason analysis is different from the assessment of mergers under section 7. The more recent decisions indicate that joint ventures leading to a full-integration of the parents' activities in a given market are essentially analysed as analogous to mergers under section 7. Nonetheless, the case law fails to give clear guidance on the applicability of the merger standard to joint ventures which partially integrate the activities of the parent firms in the market.

2. US Authorities' Approach

Through their practice from *Penn-Olin* to 2000, the DOJ and the FTC challenged various joint ventures under section 7 of the Clayton Act. Most of these joint ventures were intended to substantially integrate the business operations of the parents in the market of the joint venture, and were treated by the authorities as analogous to mergers.[58] However, in two cases, the authorities seem to have embraced a less strict approach in applying section 7 to joint ventures which lead to a partial integration of the parents.

The first case is *Alcan Aluminium*.[59] Therein, Atlantic Richfield agreed to sell its newly-completed aluminium rolling plant, designed to produce can stock, to Alcan Aluminium which was the largest aluminium producer in the world. The DOJ challenged this acquisition under section 7. The parties and the DOJ issued a consent

[56] *Ivaco* (n 55) 1414.
[57] In *Dagher*, the Supreme Court stipulated that '[h]ad respondents challenged Equilon itself, they would have been required to show that its creation was anticompetitive under the rule of reason'. *Dagher* (n 1) fn 1.
[58] See eg *In re Phillips Petroleum Co*, 70 FTC 456 (1966); *In re Continental Oil Company*, 72 FTC 850 (1967); *Westinghouse Electric Corp*, 54 Fed Reg 8839 (1989); *United States v USAir Group, Inc*, 58 Fed Reg 36996 (1993); *United States v MCI Communications Corporation*, 59 Fed Reg 33009 (1994); *In re Montedison SPA*, 119 FTC 676 (1995); *United States v Sprint Corporation and Joint Venture Co*, 60 Fed Reg 44049 (1996); *In re Shell Oil Company*, 125 FTC 769 (1998); *In re Exxon Corporation*, 126 FTC 631 (1998); *In re Monier Lifetitle LLC*, 127 FTC 751 (1999).
[59] *United States v Alcan Aluminium Limited*, 49 Fed Reg 40454 (1984). See also *United States v Alcan Aluminium Limited*, 605 F Supp 619 (WDKy 1985).

decree that reorganised the acquisition as a production joint venture in which Alcan had only 45 % ownership. According to the consent decree, the parties could utilise the capacity of the plant in proportion to their ownership. The decree also included a variety of safeguards to ensure that the parents remained independent in determining their own pricing and output strategies.[60] This consent decree indicates that the DOJ can approach joint ventures more permissively than one hundred per cent acquisition.[61]

The more controversial case regarding the application of section 7 to joint ventures is, however, *in re General Motors Corporation*, which relates to a production joint venture, formed by General Motors and Toyota to manufacture new automobiles that would be designed by Toyota in consultation with General Motors and sold exclusively to the latter.[62] The FTC investigated the joint venture under section 7 and, by a 3-2 vote, permitted it upon some modification and with some limitations. Although deciding on the application of section 7 to the joint venture, the majority concluded that the review of the joint venture should not be the same as traditional merger analysis. They stated: 'The ... venture [was] a limited production joint venture, not a merger of GM and Toyota. The extent of continuing competition between the companies dwarf[ed] the limited area of cooperation represented by the venture.'[63] Thus, the majority did not apply the HHI used in merger analysis. Instead, they analysed the joint venture under a more flexible rule of reason by identifying its procompetitive effects and balancing them with its anticompetitive effects.[64] In the end, the FTC approved the joint venture by a consent decree including safeguards designed to limit the scope and duration of the joint venture, and to prevent the

[60] ibid.
[61] ABA, *Mergers and Acquisitions: Understanding the Antitrust Issues* (3rd edn, ABA Publishing 2008) 354-55.
[62] 103 FTC 374 (1984).
[63] ibid 11.
[64] One dissenting commissioner indicated that according to the HHI, the relevant market was a concentrated market, and entry barriers to this market were quite high. Based on these findings, the commissioner stated that 'this [was] a market which [was] prone to effective collusion, and a collaboration between two major competitors resemble[d] a partial merger more than a true joint venture'. ibid.

exchange of competitively sensitive information between the parents that may facilitate coordination outside the joint venture.[65]

These two decisions, particularly *in re General Motors-Toyota*, demonstrate that the authorities can utilise a more lenient standard than the merger standard to analyse joint ventures that lead to a partial integration of the parties. This approach is seemingly reflected in the Collaboration Guidelines. These guidelines recognise that a joint venture may basically differ from a merger on the basis of two factors. Firstly, most mergers end all competition between the merging parties in the relevant market, while most joint ventures retain some competition among the participants. They stipulate that '[t]his remaining competition may reduce competitive concerns, but also may raise questions about whether participants have agreed to anticompetitive restraints on the remaining competition'.[66] Secondly, the authorities acknowledge that mergers are designed to be permanent, whilst most joint ventures have limited duration. The Guidelines conclude that this poses 'the potential for future competition between participants [which] requires antitrust scrutiny different from that required for mergers'.[67] They, however, provide that fully-integrated joint ventures involving an efficiency enhancing integration which eliminates all competition among the parents in the relevant market are normally identical to mergers in terms of their anticompetitive effects, and are to be analysed under the Horizontal Merger Guidelines.[68]

Accordingly, for a joint venture to be treated as a merger, it first of all must not be a simple agreement with the purpose of eliminating competition between the participants with regard to price or output, ie a sham venture.[69] Secondly, it must encompass 'the integration of the entirety of the participants' operations in a particular line of business, including manufacturing, distribution, marketing, and

---

[65] For discussion of the *in re General Motors-Toyota* decision, see David A Clanton, 'Horiontal Agreements, the Rule of Reason, and the General Motors-Toyota Joint Venture' (1984) 30 *Wayne Law Review* 1239; Janusz A Ordover and Carl Shapiro, 'The General Motors-Toyota Joint Venture: An Economic Assessment' (1985) 31 *Wayne Law Review* 1167.
[66] Collaboration Guidelines (n 32) sec 1.3.
[67] ibid.
[68] ibid. The Collaboration Guidelines refer to the 1992 Horizontal Merger Guidelines which were in force at that time. Since the 2010 Horizontal Merger Guidelines have replaced the 1992 Guidelines, it should be understood that the analysis is made according to this new set of guidelines.
[69] See ibid Examples 6 and 7.

sales'.[70] This implies that joint ventures involving integration of only production, distribution or marketing operations are also unlikely to be reviewed under the merger standard.[71] For example, in its business review with regard to the joint marketing agreement between Olympus and Bard,[72] the DOJ refused the application of the merger standard to the agreement, on the grounds that it would not eliminate all competition between the parents as they would retain the independent design and manufacture of the product concerned.[73] Pursuant to this definition, even joint ventures which have their own market presence in the market may not be treated as mergers, if the parents retain business activities in the same market as the joint venture.[74]

With regard to the applicability of the Horizontal Merger Guidelines, the Collaboration Guidelines also require that the joint venture is designed to continue for a sufficiently long period. The authorities generally consider a ten-year term as sufficient to treat a joint venture as a merger.[75] However, it is recognised that this term is prone to change according to industry-specific circumstances, such as technology life cycles.[76]

It should be borne in mind that the conditions set forth in the Guidelines do not limit the types of joint ventures that may be analysed under section 7. Rather, they are used to determine whether a joint venture will be evaluated under the Horizontal Merger Guidelines or the Collaboration Guidelines. Hence, the FTC and the DOJ still may challenge partially integrated joint ventures, like the General Motors-Toyota joint venture, pursuant to section 7, through using the principles in the Collaboration Guidelines. Indeed, the Collaboration Guidelines note that these

---

[70] ABA, *Joint Ventures: Antitrust Analysis of Collaborations among Competitors* (ABA Publishing 2006) 7-8; ABA, *Mergers and Acquisitions* (n 61) 337.
[71] Collaboration Guidelines (n 32) Example 4.
[72] *Olympus America Inc*, Business News Letter, 01-435, 2001 WL 1564271 (DOJ).
[73] <http://www.justice.gov/atr/public/busreview/8971.htm> accessed 05 April 2013.
[74] See however the analysis of partial acquisitions in IV/C below.
[75] Collaboration Guidelines (n 32) fn 10.
[76] ibid. The Collaboration Guidelines do not explicitly set forth joint control as a condition to apply the Horizontal Merger Guidelines. In practice, however, the authorities usually refer to joint control in evaluating a joint venture under the same standard as that used in merger analysis. Control is taken into account as being a significant factor in analysing partial acquisitions. See IV/C below.

conditions do not determine the obligations arising under the H-S-R Act.[77] In any case, those guidelines are not binding, but only guiding so that the authorities may adopt a different approach in challenging a specific joint venture.[78] Nonetheless, since the adoption of the Collaboration Guidelines, to date, the authorities have not challenged any joint venture that does not fall into the category of fully-integrated joint ventures under section 7.[79]

B- Agreement-Like Treatment

In *Timken Roller Bearing Co v United States*,[80] the Supreme Court held that 'agreements between legally separate persons and companies to suppress competition among themselves and others [could not] be justified by labelling the project a "joint venture"'.[81] In various cases, lower courts have also rendered some so-called joint ventures per se illegal, because they did not provide any meaningful integration or were simply utilised to shield price-fixing or customer allocation.[82] Unless it is sham, however, the formation of a joint venture is normally examined under the rule of reason.[83]

Following *Penn-Olin*, when courts began to apply section 7 of the Clayton Act to joint ventures, there have not been many court decisions concerning the application

[77] Collaboration Guidelines (n 32) fn 11. See also ABA, *Joint ventures* (n 70) 64.
[78] Collaboration Guidelines (n 32) fn 3.
[79] For joint ventures which were analysed by the authorities under the Horizontal Merger Guidelines, see eg *In re Novartis AG*, Docket No C-3979 (2000); *United States v SBC Communications Inc*, 65 Fed Reg 56926-01 (2000); *in re the Boeing Company*, C-4188 File 051-0165 (2007); *Air Canada, the Austrian Group, British Midland Airways Ltd, Continental Airlines, Inc, Deutsche Lufthansa AG, Polskie Linie Lotniecze Lot SA, Scandinavian Airlines System, Swiss International Air Lines Ltd, TAP Air Portugal and United Air Lines*, Docket OST-2008-0234 (2009); *American Airlines, Inc, British Airways PLC, Iberia Lineas Aereas De Espana, SA Finnair OYJ, and Royal Jordanian Airlines*, OST-2008-0252 (2009).
[80] 341 US 593 (1951).
[81] ibid 598. See also David A Balto, 'The Rule of Reason: Tension in the Law of Joint Ventures' (2006) 1526 *Practice Law Institute / Corporate Law and Practice Course Handbook Series* 181, 183; Robert H Wood, 'Something Radical is Afoot: Texaco, In. v. Dagher and the Revolutionary Treatment of Price Fixing in the Joint Venture Context' (2007) 8 *Barry Law Review* 1,5; Holden (n 53) 1472, 1474; Ernest N Reddick, 'Joint Ventures and Other Competitor Collaborations as Single Entity "Undertakings" under US Law' (2012) 8 *European Competition Journal* 333, 336-37.
[82] See ABA, *Mergers and Acquisitions* (n 61) 324-25.
[83] Nonetheless, some restraints collateral to the joint venture may be per se illegal. This is explained in Part V below.

of section 1 of the Sherman Act to the formation of a joint venture.[84] Under the Sherman Act, courts generally treat joint ventures in the same way as trade or professional associations, sports leagues, network firms or non-profit organisations, which are not effectively under the joint control of their members within the sense of this thesis. Nonetheless, precedents relating to those collaborations do not also provide valuable guidance for the analysis of the formation of partially integrated joint ventures, because their dicta are essentially limited only to the application of section 1 to restraints collateral to the main collaboration.

In the Collaboration Guidelines, on the other hand, the FTC and the DOJ give comprehensive and elaborate guidance for the evaluation of the legality of joint ventures under the rule of reason standard, which mainly includes the *General Motors-Toyota* principles. The Guidelines do not clarify whether this rule of reason analysis is made under section 1 of the Sherman Act or under section 7 of the Clayton. The wording and the precedents referred to in the Guidelines imply that section 1 is the fundamental competition statute in this regard. Given the fact that the same rules are applied by the authorities to the joint venture in either case, this question is not normally so crucial.[85] As mentioned above, the authorities may challenge the legality of the joint venture under both statutes.

The Guidelines state that such a rule of reason analysis focuses on the likelihood that the joint venture harms competition 'by increasing the ability or incentive profitably to raise prices above or reduce output, quality, service, or innovation below what likely would prevail in the absence of the relevant agreement'.[86] Under this analysis, the authorities firstly consider the nature of the joint venture. The Guidelines specifically explain possible types of harm to competition that may arise from

---

[84] However, prior to *Penn-Olin*, the formation of joint ventures in various cases had been analysed under the Sherman Act test. See eg *United States v General Dyestuff Corp*, 57 F Supp 642 (SDNY 1944); *United States v National Lead*, 63 F Supp 513 (SDNY 1945), *modified and affirmed* (1947); *United States v Paramount Pictures*, 334 US 131 (1948); *United States v Minnesota Mining & Mfg Co*, 92 F Supp 947 (D Mass 1950); *Timken Roller Bearing* (n 80); *United States v Imperial Chemical Industries*, 100 F Supp 504 (SDNY 1951); *Consolidated Gas v Pennsylvania W & P Co*, 194 F 2d 89 (4th Cir 1952).

[85] Michael A Rabkin, 'Tactical Interdependence and Institutionalized Trust: The Unrecognized Risks of Joint Ventures among Competitors' (2009) 7 *DePaul Business and Commercial Law Journal* 63, 101.

[86] Collaboration Guidelines (n 32) sec 2.2.

production, marketing (sales), purchasing and R&D joint ventures. It is recognised that though these joint ventures are often procompetitive,[87] they may create or increase market power or facilitate its exercise by limiting independent decision making or by combining the key assets or financial interests of their parents, or by facilitating the exchange of information between them.[88]

If the preliminary examination of the nature of the joint venture indicates some anticompetitive effects, the authorities will carry out a detailed market analysis in order to decide whether or not it should challenge it.[89] The Guidelines propose a methodology for this analysis which is similar to that used in merger analysis. Accordingly, the analysis will normally begin with market definition.[90] However, like the 2010 Horizontal Merger Guidelines, the Guidelines note that in some cases it may not be necessary to define any particular relevant market.[91] The authorities use market shares and concentration levels as initial indicators of market power.[92] In this respect, the Guidelines refer to the principles set out in the Horizontal Merger Guidelines in relation to the evaluation of anticompetitive unilateral and coordinated effects, on the basis of market shares, concentration levels and other relevant factors.[93]

If this assessment, identical to merger analysis, reveals that the joint venture is unlikely to lead to any anticompetitive harm, the authorities will normally permit it. If, however, it indicates the likelihood of an anticompetitive effect, this will not automatically result in the joint venture being challenged. Because partially integrated joint ventures do not end all competition between the parents, the authorities will also examine whether the parents are likely to compete with each

[87] The Guidelines imply that marketing joint ventures are less often procompetitive in comparison with other types of joint ventures. ibid sec 3.31(a).
[88] ibid.
[89] ibid sec 3.30.
[90] ibid sec 3.32. The Guidelines provide that in addition to good markets, it may be necessary to define relevant technology and innovation markets in order to analyse potential harm to competition.
[91] ibid sec 3.32.
[92] ibid sec 3.33.
[93] ibid. The Collaboration Guidelines actually refer to the 1992 Horizontal Merger Guidelines. It should be accepted that this analysis will be based on the principles provided in the 2010 Horizontal Guidelines which have replaced the 1992 Guidelines. However, Skitol claims that it is not clear whether the new aspects of the 2010 Horizontal Merger Guidelines, including the use of the UPP test, will, or should, apply to the assessment of joint ventures under the Collaboration Guidelines. Robert A Skitol, 'Are the Competitor Collaboration Guidelines Ripe for Revision' (2010) 25 *Antitrust* 55, 57.

other and the joint venture. The Guidelines, therefore, seem to apply a rule of reason standard that is more lenient than that applied to mergers.[94] They list six factors to be taken into account in evaluating whether the parents and the joint venture have the ability and incentive to compete. These are: (i) the extent to which the relevant agreement is non-exclusive in that participants are likely to continue to compete independently outside the collaboration in the market in which the collaboration operates; (ii) the extent to which participants retain independent control of the assets necessary to compete; (iii) the nature and extent of participants' financial interests in the collaboration or in each other; (iv) the control of the collaboration's competitively significant decision-making; (v) the likelihood of anticompetitive information sharing; and (vi) the duration of the collaboration.[95]

The Guidelines state that consideration of each factor may reduce or increase competition depending on the facts of each case.[96] However, in general, a joint venture would raise less serious competition concerns, if the combination of the participants' financial interest, control over significant assets and independent decision-making is relatively small, and if anticompetitive information sharing among them is unlikely.[97]

---

[94] Some commentators also claim that a joint venture should be more permissible than a merger between the parents in the same market, because it may not end all competition between the parents. See eg Carl Shapiro and Robert D Wilig, 'On the Antitrust Treatment of Joint Ventures' (1990) 4 *Journal of Economic Perspectives* 113, 127-28; Thomas A Piraino, 'Beyond Per Se, Rule of Reason or Merger Analysis: A New Antitrust Standard for Joint Ventures' (1992) 76 *Minnesota Law Review* 1, 24; Richard Schmalensee, 'Agreement Between Competitors' in Thomas M Jorde and David J Teece, *Antitrust, Innovation and Competitiveness* (Oxford University Press 1992) 113; Michael S McFalls, 'The Role and Assessment of Classical Market Power in Joint Venture Analysis' (1998) 66 *Antitrust Law Journal* 651, 694; Helbert Hovenkamp, *Antitrust Law: An Analysis of Antitrust Principles and Their Application*, vol XIII *(*Aspen Law & Business 1999) 126.

[95] Collaboration Guidelines (n 32) sec 3.34. In the EU, the new Cooperation Guidelines appear to use the criteria presented in the Collaboration Guidelines, for the analysis of partial function joint ventures. See Chapter 4/IV/A/2 above.

[96] In addition to these factors, the authorities may also consider factual evidence about the actual conduct of participants, if the assessment is made after the formation of the joint venture. ibid.

[97] The Guidelines recognise that the fact that partially integrated joint ventures often do not end all competition between the participants and are designed to last for a limited duration may make the analysis of ease of entry in the joint venture context different from that in merger cases. They state that 'the extent to which an agreement creates and enables identification of opportunities that would induce entry and the conditions under which ease of entry may deter or counteract anticompetitive harms may be more complex and less direct than for mergers and will vary somewhat according to the nature of the relevant agreement'. ibid sec 3.35.

If, in the end, it appears that the joint venture is likely to cause anticompetitive effects, the authorities will examine whether the joint venture is likely to produce procompetitive effects offsetting these adverse effects. The Guidelines recognise that joint ventures usually combine participants' complementary technologies, expertise and other assets which may result in cheaper products through the more efficient use of those assets, or improved or new products brought to the market faster than would be possible in the absence of the joint venture.[98] As in merger cases, efficiencies stemming from a joint venture must be cognisable to be considered by the authorities. Therefore, efficiency claims are taken into account, only if they are not vague and speculative and can be verified by reasonable means.[99] The Guidelines note that cost savings resulting from anticompetitive output or service reductions are not viewed as cognisable efficiency.[100]

For efficiencies to be considered, secondly, the joint venture must be reasonably necessary for achieving these cognisable efficiencies, ie there must not be less restrictive alternatives that could create the same efficiencies.[101] Actually, the discussion on the assessment of this condition focuses on the necessity of specific restraints collateral in the joint venture agreement, rather than that of the formation of the joint venture.[102] Therefore, the formation of a partially integrated joint venture may be allowed upon the removal of restraints which are not reasonable related to its procompetitive effects.[103]

In the final stage, the authorities will determine whether likely cognisable efficiencies arising out of the joint venture are of sufficient magnitude to outweigh its anticompetitive effect. The greater the anticompetitive effect the greater the cognisable efficiencies must be, in order that the joint venture is not considered as anticompetitive overall.[104]

---

[98] ibid secs 2.1 and 3.36.
[99] ibid sec 3.36(a).
[100] ibid.
[101] ibid sec 3.36(b).
[102] ibid Example 10.
[103] See V/B below.
[104] Collaboration Guidelines (n 32) sec 3.37.

Considering partially integrated joint ventures as often procompetitive, the DOJ and the FTC provide safety zones to encourage them. The Guidelines set out two kinds of safety zones, one for general and one specifically for R&D joint ventures. According to the general safety zone, the authorities will not normally challenge a joint venture, if the combined market share of the joint venture and the parents is no more than 20 % in each relevant market.[105] The second safety zone provides that the authorities, in principle, will not challenge an R&D joint venture due to its effect on competition in an innovation market, if three or more independently controlled research efforts in addition to those of the joint venture possess the required specialized assets or characteristics and the incentive to engage in a close substitute R&D.[106] The Guidelines note that neither type of safety zone applies to either agreements viewed as per se illegal or to fully-integrated joint ventures.[107]

C- Partial Acquisitions

US competition law includes some specific rules for the assessment of partial acquisitions which do not grant the acquiring firm sole control over the acquired firm. Given the fact that the concept of partial acquisition overlaps with joint ventures in certain aspects, it is necessary to evaluate how the courts and the authorities approach them.

In *United States v E I du Pont,*[108] the Supreme Court found that the acquisition of 23 % stock interest in General Motors by du Pont was a violation of section 7. Based on this decision, the district court ordered that du Pont could retain its ownership in General Motors, provided that the voting rights deriving from its stocks were stripped and distributed *pro rata* to du Pont shareholders, and that du Pont directors did not serve on the General Motors' board.[109] The Supreme Court, however, held that these remedies were not sufficient to prevent a section 7 violation, because du

[105] ibid sec 4.2.
[106] In determining such substitutability, the authorities take into account, among other things, the nature, scope, and magnitude of the R&D efforts; their access to financial support, or intellectual property, skilled personnel, or other specialized assets; their timing; and their ability, either acting alone or through others, to successfully commercialize innovations. ibid sec 4.3.
[107] ibid sec 4.1.
[108] 351 US 377 (1956).
[109] *United States v E I du Pont*, 177 F Supp 1, 51-52 (ND III 1959).

Pont shareholders could act as a group in using the voting rights, and its mere ownership in General Motors could be used by du Pont to retain its special relationship with General Motors and deter its competitors from dealing with General Motors.[110]

The *Du Pont* decision related to a partial acquisition between vertically related firms. In *United States v Dairy Farmers*,[111] however, the Sixth Circuit applied the *du Pont* dictum to a partial acquisition between competitors. The Sixth Circuit found that the district court erred in holding that the ability to exercise some control over the business decisions of the acquired firm is necessary for a Section 7 violation.[112] The court stated that '[t]his logic ignores the possibility that there may be a mechanism that causes anticompetitive behavior other than control'.[113] The court concluded that the firms in question had 'closely aligned interests to maximize profits via anticompetitive behavior'.[114] However, the court failed to clarify how a partial acquisition may substantially lessen competition by the way of the alignment of the interests of the firms in question.[115]

Besides *Dairy Farmers*, the DOJ and FTC have challenged various partial acquisitions under section 7[116] and, finally, have included partial acquisitions in the 2010 Horizontal Merger Guidelines.[117] These guidelines generally reflect the existing practice of the authorities. They recognise that partial acquisitions may have three principal anticompetitive effects.[118]

Firstly, a partial acquisition may give the acquiring firm the ability to influence the competitive conduct of the target firm through, for example, voting rights or the right

[110] *United States v E I du Pont*, 366 US 316, 331-32 (1961).
[111] 426 F 3d 850 (6th Cir 2005).
[112] ibid 859.
[113] ibid 862.
[114] ibid.
[115] Brendan J Reed, 'Private Equity Partial Acquisitions: Towards A New Antitrust Paradigm' (2010) 5 *Virginia Law and Business Review* 303, 320.
[116] See eg *in re Nippon Sheet Glass Company*, 114 FTC 568 (1991); *United States v AT&T Corp*, 65 Fed Reg 38,584 (2000); *United States v Northwest Airlines Corp*, Civil A No 98-74611 (2000); *United States v Clear Channel Commun, Inc*, 66 Fed Reg. 12,544 (2001); *in re TC Group LLC*, File No 061 01 97, Docket No C-4183 (2007).
[117] 2010 Horizontal Merger Guidelines (n 33) sec 13.
[118] See Laura A Wilkinson and Jeff L White, 'Private Equity: Antitrust Concerns with Partial Acquisitions' (2007) 21 *Antitrust* 28, 29.

to appoint members to the board of directors. The Guidelines note that '[s]uch influence can lessen competition because the acquiring firm can use its influence to induce the target firm to compete less aggressively or to coordinate its conduct with that of the acquiring firm'.[119]

The Guidelines provide that, secondly, partial acquisitions may decrease the incentive of the acquiring firm to compete against the target firm, since it would share any losses incurred by the latter because of aggressive competition. Accordingly, this anticompetitive effect may be the case even if the acquiring firm has no influence on the conduct of the target firm. However, the Guidelines acknowledge that a unilateral effect is less likely to arise in partial acquisition cases compared to full-merger cases, because the ownership in the former is only partial.[120]

Thirdly, the authorities recognise that partial acquisitions may cause adverse unilateral or coordinated effects by providing the acquiring firm with access to non-public and competitively sensitive information from the acquired firm. The Guidelines explain that a partial acquisition may enable the firms 'to coordinate their behavior, and make other accommodating responses faster and more targeted.' This risk increases where the acquisition also gives the acquired firm access to competitively sensitive information belonging to the acquiring firm.[121]

The authorities examine the likelihood of these anticompetitive effects according to the specific facts of each case. Areeda and Hovenkamp argue that because partial acquisitions are unlikely to produce any efficiency, they may be considered as anticompetitive, even if a complete acquisition involving the same parties would be allowed according to section 7.[122] The 2010 Horizontal Merger Guidelines also recognise that partial acquisitions do not usually have the ability to create most efficiencies that mergers may lead to.[123] Nonetheless, the authorities generally posit

[119] 2010 Horizontal Merger Guidelines (n 33) sec 13.
[120] ibid.
[121] ibid.
[122] Areeda and Hovenkamp, *Antitrust Law*, vol V (33) 283-84.
[123] 2010 Horizontal Merger Guidelines (n 33) sec 13. Some commentators, nevertheless, argue that partial acquisitions also result in some efficiencies. See eg Wilkinson and White (n 118) 29; Reed (n 115) 332-40.

that a partial acquisition is likely to be allowed if a full-merger of the same firms would not be challenged.[124]

Given the fact that partial acquisitions resulting in joint control basically constitute a joint venture, a question arises about which set of principles apply to them. The 2010 Horizontal Merger Guidelines note that partial acquisitions leading to effective control are analysed in almost the same way as mergers.[125] In this respect, these joint ventures should be normally treated as full-merger because they also confer effective control. Nonetheless, the authorities may need to analyse whether the joint venture and the parent firm are likely to compete in the relevant market, based on the principles applicable to partial acquisitions.[126] Besides these two approaches set out in the Horizontal Merger Guidelines, the rule of reason standard under the Collaboration Guidelines may also apply to these joint ventures. These guidelines actually state that: 'The Agencies also assess direct equity investments between or among the participants. Such investments may reduce the incentives of the participants to compete with each other.'[127] This uncertainty with regard to the applicable guidelines may not be very consequential to the substantive appraisal of those collaborations, because almost identical considerations apply to them under either set of guidelines. Nevertheless, the Collaboration Guidelines may be revised by the authorities to increase clarity in this respect.

D- Assessment of the Risk of Coordination in Markets Other than those of the Joint Venture

Compared to the EU regime, the US regime seems to give less consideration to the possibility that joint ventures may facilitate coordination between the parent firms in markets where they do not integrate their business activities. This possibility was

[124] Wilkinson and White (n 118) 29.
[125] 2010 Horizontal Merger Guidelines (n 33) sec 13.
[126] For example, the DOJ analysed the partial acquisition of the Hispanic Broadcasting Corporation by Univision Communications under the principles similar to those provided for partial acquisitions in the 2010 Horizontal Merger Guidelines, even if the acquisition appeared to result in joint control over Hispanic. *United States v Univision Commun Inc*, Civil A No 1:03CV00758 (2003). Some joint ventures analysed as mergers by the authorities also included a partial acquisition of one parent by the other parent, in addition to establishing a new entity jointly controlled by the parents. See eg *MCI Communications Corporation* (n 58); *Sprint Corporation and Joint Venture Co* (n 58).
[127] Collaboration Guidelines (n 32) sec 3.34. See also Reed (n 115) 315.

discussed in *Penn-Olin*. Therein, although integrating all of their operations in the sodium chlorate market into the joint venture, Pennsalt and Olin would continue to compete in the sale of five nonchlorates including calcium hypochlorite. The DOJ asserted that discussions between these two firms' representatives in joint venture meetings inevitably would spill over into the nonchlorate markets where they competed with each other, because chlorate and nonchlorate price policies, marketing areas, distribution systems and customers coincide or overlap.[128] The DOJ claimed that it would 'defy human nature' for the parents to maintain an unfaltering zeal to compete in the nonchlorates markets, while cooperating in the sodium chlorate market through Penn-Olin.[129]

The district court selected calcium hypochlorite among the nonchlorates as a 'guinea pig' in analysing the likelihood of spill-over effects.[130] Pennsalt and Olin together had 88.8 % of the calcium hypochlorite market in 1959, and 76.6 % in 1960. Despite these high levels of market share, the court rejected the DOJ's claim, since there was no evidence showing either actual or threatened collusion between the parents as to their nonchlorate operations within the meaning of Section 1 of the Sherman Act.[131] The court also concluded that there was no sign that the parents' activities in relation to the joint venture would substantially lessen competition.[132]

The impact of the joint venture on competition in the sale of nonchlorates was not raised before the Supreme Court.[133] Therefore, the Court did not find the opportunity to set a precedent for the analysis of the risk of coordination. Since *Penn-Olin*, neither the Supreme Court nor the lower courts have extensively discussed whether the mere formation of a joint venture may constitute a violation of section 7 of the

[128] *Penn-Olin* (D Del) (n 36) 155-56.
[129] See John C Berghoff, 'Antitrust Aspects of Joint Ventures' (1964) 9 *Antitrust Bulletin* 231, 249.
[130] *Penn-Olin* (D Del) (n 36) fn 3.
[131] ibid 156. This approach of the district court primarily relied on *Maple Flooring Manufacturers' Association v United States*. In this case, it was claimed that the trade association of competing flooring manufacturers must be enjoined as a violation of section 1 of the Sherman Act, on the grounds that association meetings could lead to discussions and information exchange between members about prices and production. The Supreme Court held that because there was no proof of an anticompetitive agreement or concerted action which had actually been reached or attempted, association meetings did not constitute an unreasonable restraint under section 1. 268 US 563 (1925).
[132] *Penn-Olin* (D Del) (n 36) 156-57.
[133] ibid 162.

Clayton Act or section 1 of the Sherman Act, because it harms competition in markets where the joint venture is not intended to operate.

Following *Penn-Olin*, the DOJ continued to recognise that the formation of a joint venture may have anticompetitive effects in other markets in which the parents are in competition. In its Guidelines on International Operations of 1988,[134] which were replaced by the Collaboration Guidelines, the DOJ provided that it would analyse whether the joint venture or its ancillary restraints were likely to lead to an anticompetitive effect in other markets in which the parents competed or would compete.[135] However, these guidelines explained that in most cases this analysis would not be necessary because a threat of spill-over effects may be minimised by some procedural or operational safeguards.[136]

The Collaboration Guidelines also recognise that participation in a joint venture, on its own, may change participants' behaviours in additional markets where they are competitors 'by altering incentives and available information, or by providing an opportunity to form additional agreements among participants'.[137] However, they do not give sufficient guidance about how this analysis should be carried out.[138] The Guidelines seem to primarily focus on whether the joint venture will facilitate coordination in the joint venture's market. Therefore, the principles set forth in the Guidelines are generally not useful in analysing the risk of coordination in relation to markets other than those of the joint venture.

V. Assessment of the Conduct and Operation of Joint Ventures

In the US regime, the analysis of restraints associated with the operation of joint ventures appears to be even more complicated and debatable than the analysis of the formation of joint ventures. The difficulty arises especially from the 'substance over

[134] DOJ, Antitrust Guidelines for International Operations, 53 Fed Reg 21584 (1988).
[135] ibid 21591.
[136] ibid.
[137] Collaboration Guidelines (n 32) fn 41. See also ibid sec 2.2.
[138] Rabkin (n 85) 110 fn 237.

form' approach,[139] under which courts, the enforcement authorities and commentators apply the same rules to joint ventures and a very broad range of collaborations, including sports leagues, credit card networks, professional associations and non-profit organisations.[140]

Considering the case law, particularly the *Dagher* and *American Needle* decisions, it is possible to analyse restraints collateral to the operation of joint ventures, by dividing them into two groups according to whether they relate to venture or nonventure activities. Accordingly, this part firstly explains the assessment of the core (venture) activities of joint ventures based on *Dagher*. Secondly, it discusses how the ancillary restraint theory applies to non-venture activities.

A- Core Activities of Joint Ventures: the *Dagher* Decision

In *Dagher,* the Supreme Court discussed how to approach price unification by a fully integrated joint venture with regard to its two products, under section 1 of the Sherman Act. The decision relates to the Equilon joint venture, formed between Texaco and Shell to refine and sell gasoline in the Western US by retaining their original brand names. The joint venture ended all competition between Shell and Texaco in the market of refining and marketing gasoline in the Western US.[141] The FTC evaluated Equilon's formation in the same way as a merger under section 7 of the Clayton Act, and approved it by consent decree providing some modification to the originally proposed joint venture.[142] After starting the operation, Equilon set the same price for gasoline sold under the Texaco and Shell brands. As a response, a

[139] See *United States v Yellow Cab Co*, 332 US 218, 227 (1947); *Copperweld Corp v Independence Tube Corp*, 467 US 752, 760 (1984). See also James A Keyte, 'Copperweld Corp. v. Independence Tube Corp.: Has the Supreme Court Pulled the Plug on the "Bathtub Conspiracy?"' (1985) 18 *Loyola of Los Angeles Law Review* 857; Holden (n 53); Judd E Stone and Joshua D Wright, 'Antitrust Formalism is Dead! Long Live Antitrust Formalism! Some Implications of American Needle v NFL' (2010) *2009-2010 Cato Supreme Court Review* 369; Chris Sagers, 'Why Copperweld was Actually Kind of Dumb: Sound, Fury, and the Once and Still Missing Antitrust Theory of the Firm' (2011) 18 *Villanova Sports and Entertainment Law Journal* 377; Reddick (n 81).

[140] See Chang and others (n 1) 225; Reddick (n 81) 342.

[141] They, however, remained competitors in the refining and marketing of gasoline outside the US and in upstream markets both inside and outside the US.

[142] *In re Shell Oil Company* (n 58). The formation of Equilon was also approved by the state attorneys general of California, Hawaii, Oregon and Washington.

class of 23,000 gas station owners brought an action alleging that this price unification policy was price-fixing and, therefore, per se illegal under section 1.

The district court held that the rule of reason, rather than the per se rule, applied to the pricing unification, and made no further consideration because the plaintiffs failed to claim the rule of reason analysis. The Ninth Circuit reversed the decision by applying the ancillary restraint theory, and found that the pricing unification was per se illegal on the grounds that it was not necessary to achieve the efficiencies resulting from the joint venture.[143]

The Supreme Court, nevertheless, concluded that the price unification did not fall into the per se category.[144] The Court provided that:

> [T]he pricing policy challenged here amount[ed] to little more than price setting by a single entity—albeit within the context of a joint venture—and not a pricing agreement between competing entities with respect to their competing products. Throughout Equilon's existence, Texaco and Shell Oil shared in the profits of Equilon's activities in their role as investors, not competitors.[145]

The Court added that '[a]s a single entity, a joint venture, like any other firm, must have the discretion to determine the prices of the products that it [sold], including the discretion to sell a product under two different brands at a single, unified price'.[146] Furthermore, the Court did not agree with the Ninth Circuit's application of the ancillary restraint doctrine to the pricing decision of Equilon. It explained that 'the ancillary restraint doctrine ha[d] no application here, where the business practice being challenged involve[d] the core activity of the joint venture itself—namely, the pricing of the very goods produced and sold by Equilon'.[147]

---

[143] *Dagher v Saudi Refining, Inc*, 369 F 3d 1108 (9th Cir 2004).
[144] Because the plaintiffs did not challenge the legality of the joint venture itself, the Supreme Court did not analyse whether the venture should be examined under section 7. It states that '[w]e presume for purposes of these cases that Equilon is a lawful joint venture. Its formation has been approved by federal and state regulators, and there is no contention here that it is a sham'. *Dagher* (n 1) fn 1.
[145] ibid 6.
[146] ibid 7.
[147] ibid 7-8.

Through establishing that the per se rule does not apply to the core activities of joint ventures, *Dagher* forms a significant departure from *Citizen Publishing*,[148] in which the Court rendered price unification by a similar joint venture per se illegal.[149] However, it fails to clarify whether such activities are immune from section 1 at all. Because the plaintiffs did not claim the illegality of the pricing unification under the rule of reason, the Court did not assess the defendants' alternative argument that section 1 did not apply to the joint venture's decisions.[150]

The silence of the Supreme Court on this matter has led to a great debate among commentators. According to some commentators, *Dagher* implies that section 1 is inapplicable to the internal activities of fully-integrated joint ventures, since they constitute unilateral conduct by a single entity, rather than a concerted activity of two or more firms.[151] To support this claim, these commentators refer to *Copperweld v Independence Tube*,[152] in which the Supreme Court held that there was no justification to apply section 1 to the coordinated activity of a parent and its wholly subsidiary, since they were considered as a single enterprise with a complete unity of interest and common objectives. Keyte goes further by claiming that the dictum of *Dagher* is equally applicable to legitimate partially integrated joint ventures, including sports leagues.[153]

On the other hand, some commentators assert that *Dagher* does not clearly exempt the core activities of joint ventures from section 1. Rather it requires the application of the rule of reason, instead of the per se rule, to them.[154] Piraino states that this dictum may result in the application of a more restrictive rule of reason test to the internal activities of a joint venture than the ancillary restraint doctrine applicable to their nonventure activities. Therefore, he suggests that in future cases, the Supreme Court and the lower courts will be likely to, and should, accept that internal joint

[148] See n 51 above.
[149] Gregory J Werden, 'The Ancillary Restraints Doctrine after Dagher' (2007) 8 *Sedona Conference Journal* 17, 26-27.
[150] *Dagher* (n 1) fn 2.
[151] See eg Keyte, 'Dagher and "Inside" Joint Venture Restraints' (n 53) 44; Holden (n 53) 1471; Kessler and others (n 53) 41.
[152] See n 139.
[153] Keyte, 'Dagher and "Inside" Joint Venture Restraints' (n 53) 45-46.
[154] See eg Piraino, 'The Supreme Court's Dagher Decision' (n 1) 753; Reddick (n 81) 346-47.

venture rules are immune from section 1 scrutiny.[155] The commentator supports the application of the single entity doctrine to the core activities of partially integrated joint ventures as well.[156]

Given the fact that the Supreme Court treated Equilon as a single entity and recognised that 'though Equilon's pricing policy may be price fixing in a literal sense, it [was] not price fixing in the antitrust sense', it may be claimed that section 1 does not apply to the pricing policy of Equilon at all. However, the decisions referred to by the Court in this respect[157] actually suggest the application of the rule of reason analysis to the restraints concerned, rather than exempting them from the section 1 prohibition. Moreover, the Court stated that 'if Equilon's price unification policy [was] anticompetitive, then respondents should have challenged it pursuant to the rule of reason'.[158] Therefore, *Dagher* does not seem to close all doors for the application of section 1 to the core activities of joint ventures including fully-integrated joint ventures. Nonetheless, as predicted by the commentators, it is more likely that in future cases, courts will exempt the core activities of fully-integrated joint ventures from section 1.

It is difficult to put forward the same argument for partially integrated joint ventures. Indeed, in a very recent decision, *American Needle, Inc v NFL*,[159] the Supreme Court signals that the internal activities of partially integrated joint ventures are subject to section 1. In 1963, NFL teams established NFLP to develop, license and market their intellectual property. In 2000, NFLP granted a ten-year exclusive licence to Reebok International to produce and sell the trademarked headwear of all teams. American Needle, which previously had a non-exclusive licence on these intellectual properties, challenged NFLP's decision to give an exclusive license to Reebok, under sections 1 and 2 of the Sherman Act. The district court found that such a decision by NFLP was immune from section 1, because 'with regard to the facet of their

[155] ibid 753-54. Wood also states that *Dagher* does not exempt the internal activities of fully-integrated joint ventures from section 1. However, unlike Piraino, he supports the Ninth Circuit's approach. Wood 'Something Radical is Afoot' (n 81).
[156] Piraino, 'The Supreme Court's Dagher Decision' (n 1) 759-60.
[157] *Broadcast Music* (n 17); *Arizona v Maricopa County Med Society*, 457 US 332 (1982).
[158] ibid 7.
[159] 130 S Ct 2201 (2010).

operations respecting exploitation of intellectual property rights, the NFL and its 32 teams [were], in the jargon of antitrust law, acting as a single entity'.[160] The Seventh Circuit affirmed the decision.[161]

The Supreme Court, however, concluded that section 1 applied to decisions by NFL teams to license intellectual property collectively, because '[t]he NFL teams [did] not possess either the unitary decision making quality or the single aggregation of economic power characteristic of independent action'.[162] By giving reference to *Copperweld*, the Court found that the teams still competed in the market for intellectual property, and that they each acted as 'separate economic actors pursuing separate economic interests', rather than pursuing the common interests of the league.[163] The Court provided that the rule of reason would apply to the decision regarding the licence in question under section 1.[164] This implies that restraints collateral to a joint venture will be subject to section 1, if the parents remain actual or potential competitors in the joint venture's market and pursue separate economic goals.[165]

The Collaboration Guidelines do not make any explicit distinction between the activities of joint ventures for the purpose of the applicability of section 1. However, since fully integrated joint ventures are considered as mergers, the FTC and the DOJ may treat the internal activities of these joint ventures in the same way as those of the merged entity, and exempt them from section 1.[166] Restraints associated with the

---

[160] *American Needle, Inc v New Orleans La Saints*, 496 F Supp 2d 941, 943 (ND III 2007).
[161] *American Needle, Inc v NFL*, 538 F 3d 736 (7th Cir 2008).
[162] *American Needle* (n 159) 2212.
[163] ibid 2213.
[164] ibid 2216.
[165] *American Needle* has also raised many debates. See eg Chris Sagers, 'American Needle, Dagher, and the Evolving Antitrust Theory of the Firm: What Will Become of Section 1?' (2009) 8 *Antitrust Source* 1; Herbert Hovenkamp, 'American Needle and the Boundaries of the Firm in Antitrust Law' (2010) <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1616625> accessed 05 April 2013; James A Keyte, 'American Needle: A New Quick Look for Joint Ventures' (2010) 25 *Antitrust* 48; Stone and Wright (n 139); Gregory J Werden, 'Initial Thoughts on the American Needle Decision' (2010) 9 *Antitrust Source* 1; Alan Devlin and Michael Jacobs, 'Joint Venture Analysis after American Needle' (2011) 7 *Journal of Competition Law and Economics* 543; Eric H Grush and Claire M Korenblit, 'American Needle and A "Positive" Quick Look Approach in Challenges to Joint Ventures' (2011) 25 *Antitrust* 55; Sagers, 'Why Copperweld was Actually Kind of Dump' (n 139).
[166] Some opinions given in relation to drafting the Collaboration Guidelines were in favour of immunising the internal activities of joint ventures from section 1. See eg Charles A James, 'Testimony on the behalf of the US Chamber of Commerce' (December 4, 1997)

core activities of partially integrated joint ventures are usually examined by the authorities in conjunction with the formation of the joint ventures. If they have approved the formation of the joint venture, it is unlikely that they would challenge those restraints under section 1.

B- Ancillary Restraints

In the US, apart from the exception provided in *Dagher*, restraints collateral to joint ventures are generally classified by courts as 'naked' and 'ancillary' under section 1 scrutiny. Naked restraints are normally considered as per se illegal, whereas ancillary restraints are analysed under the rule of reason.[167] Ancillary restraints are generally defined as those 'subordinate or collateral to another transaction and necessary to make that transaction effective'.[168] In this regard, a restraint is regarded to be ancillary and subject to the rule of reason, if it is 'reasonably related to and no broader than necessary to effectuate' the procompetitive effects of the joint venture.[169] Under this test, the courts require that there is not any less restrictive alternative to achieve these procompetitive effects.[170] This test is very similar to that adopted in the Collaboration Guidelines by the FTC and the DOJ.[171]

Ancillary restraints are in principle subject to a full rule of reason. Nonetheless, in some cases, the Supreme Court and lower courts adopt a quick look approach in condemning restraints associated with the main collaboration.[172] *American Needle*,

---

<http://www.ftc.gov/opp/jointvent/testim~1.shtm> accessed 05 April 2013. Reddick claims that the *Dagher* and *American Needle* decisions call for an update in this respect. Reddick (n 81) 354-55.

[167] ABA, *Joint Ventures* (n 70) 91.

[168] Robert H Bork, 'Ancillary Restraints and the Sherman Act' (1959) 15 *ABA Antitrust Section* 211, 211. See also *Rothery Storage & Van Co v Atlas Van Lines, Inc*, 792 F 2d 210 (DC Cir 1986). Werden provides that 'a restraint collateral to the formation of a legitimate joint venture is "ancillary" only if it has an "organic connection" to the venture's operations and serves to make the venture operate more efficiently or effectively'. Werden, 'The Ancillary Restraints Doctrine after Dagher' (n 149) 22.

[169] ABA, *Joint Ventures* (n 70) 91.

[170] *Sullivan v NFL*, 34 F 3d 1091, 1103 (1st Cir 1994).

[171] See 196 above.

[172] For the application of this negative quick look approach by the Supreme Court, see *Board of Regents v NCAA*, 468 US 85 (1984); *FTC v Indiana Federation of Dentists*, 479 US 447 (1986); *California Dental Association v FTC*, 526 US 756 (1999). For criticisms regarding this approach, see Jay P Yancey, 'Is the Quick Look Too Quick? Potential Problems with the Quick Look Analysis of Antitrust Litigation' (1996) 44 *University of Kansas Law Review* 671; Alan J Messe, 'Farewell to the Quick Look: Redefining the Scope and Content of the Rule of Reason' (2001) 68 *Antitrust Law*

however, suggests that the quick look approach may also be used positively to allow an ancillary restraint without a detailed market analysis. The Court states that:

> When 'restraints on competition are essential if the product is to be available at all,' *per se* rules of illegality are inapplicable, and instead the restraint must be judged according to the flexible Rule of Reason. ... In such instances, the agreement is likely to survive the Rule of Reason. ... And depending upon the concerted activity in question, the Rule of Reason may not require a detailed analysis; it 'can sometimes be applied in the twinkling of an eye'.[173]

Under the dictum of *Dagher*, only nonventure activities of fully-integrated joint ventures are subject to the ancillary restraint doctrine. In most cases, it is very difficult to show that a nonventure restraint is reasonably necessary for the procompetitive effects of these joint ventures. Therefore, these restraints are likely to be treated as naked restraints. In *Yamaha*, for example, the Ninth Circuit found that a territorial restraint related to nonventure products could not be termed 'reasonably necessary' for the purpose of the joint venture.[174]

Pursuant to the Collaboration Guidelines, the authorities will most likely incorporate ancillary restraints into the analysis of the legality of the joint venture as a factor affecting its competitive effects.[175] If ancillary restraints are analysed separately, they will be normally subject to the rule of reason as explained above.

VI. Concluding Remarks

The assessment of joint ventures is one of the most controversial areas in US competition law. The debate mainly arises from the fact that, unlike the EU regime, the US regime does not provide any statutory definition to identify joint ventures that are treated as mergers. The absence of such a definition may be attributable to the litigation-oriented and complex decentralised character of the US enforcement regime that does not make a significant distinction between the procedural rules

---

Journal 461; Edward Brunet, 'Antitrust Summary Judgement and the Quick Look Approach' (2009) 62 *SMU Law Review* 493.

[173] *American Needle* (n 159) 2216-17. See also Keyte, 'American Needle' (n 165) 51; Grush and Korenblit (n 165).

[174] *Yamaha* (n 55) 981.

[175] Werden, 'The Ancillary Restraints' (n 149) 19.

applicable to mergers and agreements, compared to the EU regime. The fact that the judicial interpretation does not indicate an important gap between the legal tests under the Sherman Act and the Clayton Act may also be a factor downplaying the need for a sharp categorisation to determine the applicability of these statutes to joint ventures. Nevertheless, considering that the US courts and enforcement authorities approach mergers and agreements differently, the question of which types of joint ventures are to be reviewed in the same way as mergers is still of great importance.

Although, on various occasions, they have analysed a joint venture as analogous to a merger, courts seem to fail to give a clear answer to this question. In the Collaboration Guidelines, however, the DOJ and the FTC introduce a clearer distinction between joint ventures based on the level of integration between their parent firms. Accordingly, fully-integrated joint ventures which integrate the entire operations of their parents in the market are treated as mergers. Partially integrated joint ventures, on the other hand, are analysed under the rule of reason standard provided in the Guidelines. Given the fact that these joint ventures do not end all competition between the participants in the market, the authorities normally consider the likelihood of future competition between the parents and the joint venture as a mitigating factor, in analysing their anticompetitive effects. In this context, procompetitive partial function joint ventures can be allowed upon the formation of safeguards ensuring future competition between the parents and the joint venture. This appears to make the standard of the Guidelines more lenient than the merger standard under the Horizontal Merger Guidelines.

Being a fully-integrated joint venture, nonetheless, may lead to a more permissive approach in relation to the assessment of restraints associated with the joint venture. *Dagher* sets out that the per se rule cannot apply to the core activities of fully-integrated joint ventures, including even the fixing of the prices of their products. However, it is not explicit whether section 1 is inapplicable to the internal activities of fully integrated joint ventures at all.

All the restraints related to partially-integrated joint ventures, however, are analysed as ancillary restraints under the rule of reason, provided that they are reasonably

necessary for achieving the procompetitive effects of the joint venture. *American Needle* dictates that some ancillary restraints may be subject to a positive quick look approach which does not require a detailed market analysis to permit a restraint. Despite these decisions, the analysis of restraints collateral to the operation of joint ventures in the US still includes many uncertainties and debates, particularly due to the general tendency of both the courts and the authorities to regard joint ventures in the same way as a variety of different collaborations, such as sports leagues, credit card networks, professional associations and non-profit organisations.

These findings from the analysis of the US regime provide significant grounds for exposing the problematic aspects of the current EU approach to joint ventures and for putting forward solutions that can address them. In this respect, Chapter 6 discusses whether a criterion which, as in the US, relies on the extent to which the joint venture integrates its parents' activities is more compatible with the economic nature of joint ventures and thus is more appropriate for classifying them for the purposes of merger control, than the full-functionality criterion. Moreover, it examines how such a criterion should be formulated and adopted in EU merger control. In this examination, it is particularly borne in mind that, unlike the EU regime, the US regime does not present an important difference between mergers and agreements in terms of applicable enforcement rules and substantive statutes, and that the distinction between fully-integrated and partially integrated joint ventures is neither conclusive nor binding.

The analysis of the US regime also helps to take into account, in Chapter 6, that, if the parents retain some independent activities in the joint venture's market, it may be, from an economic viewpoint, more reasonable to incorporate this fact, into traditional merger analysis, as a mitigating factor, rather than an aggravating factor, as is currently the case in the EU.

The analysis in this chapter, lastly, reveals that the treatment of the conduct and operation of joint ventures under the US regime is more problematic than that under the EU regime. This finding indicates that in proposing solutions to improve the EU

approach in this respect, its praiseworthy aspects should be retained to avoid the appearance of the problems in the US.

CHAPTER 6
IMPLICATIONS AND RECOMMENDATIONS

I. Introduction

This chapter primarily aims to expose the main implications of the analysis of the current EU merger control approach to joint ventures, to discuss some alternative approaches, and to recommend solutions based on these implications and discussions. In this regard, the chapter particularly takes into account the alternative approaches adopted in the US regime, explained in Chapter 5, for the purpose of identifying which joint ventures should be be treated as mergers, and for the purpose of the analysis of the formation and operation of these joint ventures.

This chapter includes three substantive parts. The first part presents the need for a reform of the criterion to identify joint ventures falling within the Merger Regulation, and proposes an alternative criterion for this purpose. The second part, however, points out the problems with the current approach to the analysis of joint ventures under the Merger Regulation, and offers solutions that may preclude these problems. In addition to these two parts addressing the central questions of this thesis, the third part of the chapter reveals the implications of the application of the single economic unit doctrine under Article 101 TFEU in relation to the operation of joint ventures, and proposes a solution that would increase clarity in this respect. Thus, the chapter, in general, intends to offer an integrated approach, which provides the consistency of the principles applicable to joint ventures under the Merger Regulation with each other and the other principles of EU competition law, and also with economic theories.

II. Need for a Reform of the EU Merger Control Criterion to Classify Joint Ventures

As elaborately explained in Chapter 3 above,[1] the concept of full-functionality is the current EU merger control criterion to identify which joint ventures will be treated as

[1] See Chapter 3/III/B above.

mergers. Although it significantly clarifies the scope of the Merger Regulation, the application of this criterion seems to lead to some inconsistencies and complications, which render it unsuitable for making such a sharp distinction between joint ventures. In this respect, this part suggests a reform of the current criterion to classify joint ventures for merger control purposes. It firstly explores these problematic aspects of the full-functionality criterion. Secondly, it explains the relevance of the chosen criterion to the appraisal of joint ventures, in order to establish a need for reform from a substantive viewpoint. Thirdly, the part discusses possible alternatives to the current policy and, finally, presents the proposed approach.

A- Problems with the Full-Functionality Criterion

1. Ambiguity about the Autonomy of Joint Ventures

One problematic aspect of the full-functionality criterion is that it uses the ambiguous notion of commercial autonomy as its central element. This does not mean that it is uncertain what conditions are required for a joint venture to be considered as having autonomous character and as being full-function. As described in Chapter 3 above, the Jurisdictional Notice[2] and the existing practice of the Commission significantly clarify the criteria used by the Commission, in assuming that a joint venture will perform all the functions of an autonomous entity on the market. The question herein is rather whether it is proper to require joint ventures to act autonomously of their parents for the purpose of merger control. It is true that the self-sufficiency element helps to determine joint ventures which, having their own personnel and assets, are structurally separable from their parents. However, expecting the joint venture to have autonomy in determining its own commercial policy, ie to act independently of its parents in dealing with third parties and with the parents themselves, contradicts the approaches taken in relation to the autonomy of joint ventures in other areas of competition analysis.

[2] Commission Consolidated Jurisdictional Notice under Council Regulation (EU) No 139/2004 on the control of concentrations between undertakings [2008] OJ C 95/1.

The first obvious contradiction arises with respect to the joint control requirement. It is highly questionable to assume that a joint venture would be independent of its parents regarding its commercial decisions, while the latter exercise decisive influence over the former.[3] In the Jurisdictional Notice, the Commission, through giving reference to the *Cementbouw* decision,[4] discusses the relationship between the concepts of autonomous character and joint control. As the General Court recognised in the aforementioned decision,[5] the Commission explains that the fact that a joint venture is full-function means that it is economically autonomous from an operational viewpoint, but not that it has autonomy as to the adoption of its strategic decisions.[6] The Jurisdictional Notice indicates that such operational autonomy may exist in principle, if the joint venture has independence in determining its selling and purchasing relations with third parties and if it deals with its parents on an arm's length basis.[7] Nevertheless, these explanations are far from resolving the ambiguity resulting from the autonomy element.

First of all, *Cementbouw* does not provide that a full-function joint venture can determine its operational commercial policies without the decisive influence of its parents, if the power of the parents is limited to blocking its strategic decisions. In contrast, the General Court recognises that the fact that the decision-making bodies of the joint venture are not composed of the direct representatives of the parent firms does not preclude the possibility that the parent firms exercise decisive influence over the joint venture. To arrive at this conclusion, the Court relies on its finding that the members of these bodies are appointed by the parents as shareholders and, therefore, will have to take the parents' views into account in performing their given duties.[8] This finding may actually be used to support the argument that the parent firms may also be able to affect the commercial decisions of a full-function joint venture, which are assumed to be taken by the joint venture autonomously of its parents.

---

[3] See Laurent Nouvel, 'The New European Treatment of Joint Ventures: A Shift Towards A More Economic Approach' (2002) 2002 *International Business Law Journal* 511, 519.
[4] Case T-282/02 [2006] ECR II-319.
[5] ibid para 62.
[6] Jurisdictional Notice (n 2) para 93.
[7] See Chapter 3/III/B/1/b above.
[8] *Cementbouw* (n 4) paras 70-74.

This approach, raising question about the autonomy of full-function joint ventures, is more apparent in *El du Pont* and *Dow Chemical*.[9] In these decisions, the General Court affirmed the Commission's finding that the parent firms had exercised decisive influence on the joint venture's participation in a cartel. It emphasised that the decision-making body, which was responsible for appointing and dismissing the board members and officers of the joint venture and for some other important operational decisions, did consist of the representatives of the parent firms.[10] Based on this fact, the Court rejected the parents' allegations that the joint venture was acting autonomously, and that they were not aware of its participation in the cartel.[11] These decisions show that joint control may even give the parents the capacity to exercise decisive influence over the commercial decisions of the full-function joint venture on its very day-to-day operations, including pricing and output policies. In this regard, if the ECJ approves this approach in the appeal, it would be much more controversial to insist on the assumption that full-function joint ventures are autonomous in dealing with third parties and their parent firms.

Indeed, it is not realistic, from an economic viewpoint, to expect a joint venture to determine its commercial policy independently of its parents. As explained in Chapter 2 above, firms usually set up a joint venture in order to achieve some specific objectives, such as overcoming industry-specific problems, and, for this reason, they forgo some operational autonomy and control over their assets, capital and expertise. Having regard to these aspects of the formation of joint ventures, the parent firms should normally be expected to monitor and influence the operation of the joint venture in order to achieve these objectives. It is correct that, in some cases, having veto rights in relation to some strategic decisions, such as those on the budget or the general business plan, may not enable the parent to influence the day–to-day

[9] Case T-76/08 *EI du Pont and others v Commission* [2012] ECR II-0000; Case T-77/08 *Dow Chemical v Commission* [2012] ECR II-0000.

[10] The Court particularly considered the fact that this body took the decision to close one of the production plants of the joint venture, as an indication that the parents had exercised decisive influence over the joint venture's conduct. *EI du Pont and others* (n 9) para 71; *Dow Chemical* (n 9) para 86.

[11] See Chapter 3/VI above.

operations of the joint venture.[12] However, in these cases, the majority shareholder may have the ability to direct these operations of the joint venture. Such dependence on one of the parents alone can also harm the autonomy of the joint venture.

Moreover, even though the parent firms, at the beginning, intend not to influence the day-to-day decisions of the joint venture, and structure it in a way that it can act autonomously of its parents, they may change this policy later on, through using their joint control over the joint venture. For example, suppose that two firms established a full-function joint venture which would sell its products to third parties and would deal with the parents at arm's length. Subsequently these firms may find it profitable to force the joint venture to sell exclusively, or give preferential treatment, to them. The Commission does not monitor whether the parents comply with their submitted plans on the operation of the joint venture in the future. This practice should not be surprising, because these plans cannot be considered as commitments within the meaning of Article 8(2) of the Merger Regulation.[13] In any case, considering that the parents even have the power to terminate the joint venture, it would not be logical to limit their ability to change the way the joint venture operates.

On the other hand, it should be asked whether in the case of such a change in its operation, the joint venture would lose its autonomy and ultimately its full-function character, and, if so, whether it would be treated as a partial function joint venture afterwards. If the answers to these questions are no, this could call into question the rationale behind requiring the joint venture to act autonomously of its parents in the first place. If the answers are yes, this would grant national authorities and national courts the power to apply Article 101 to the joint venture. Given the fact that such changes, concerning the sales from the joint venture to its parents and third parties, are essentially behavioural, it may be very difficult for firms to predict precisely

[12] Veto rights on those issues are however considered to confer joint control. See Chapter 3/III/A above.

[13] According to the Merger Regulation, the parties may offer some commitments that eliminate competition concerns resulting from the concentration, and, based on these commitments, the Commission may render the concentration compatible with the common market. See Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings [2004] OJ L24/1, recital 30. Recital 31 provides that the Commission must ensure the fulfilment of the commitments by the parties. Conditions for a joint venture to be full-function cannot be treated as commitments, because they relate to the existence of a concentration, rather than the compatibility of a concentration with the common market.

when the joint venture ceases to be autonomous. Therefore, it does not appear reasonable to attach such importance to these behavioural changes, which would give rise to significant uncertainties with regard to the legality of the joint venture. In short, the autonomy-based criterion seems problematic, having regard to the parents' discretion on the continuity of the autonomy of the joint venture.

Furthermore, assuming that full-function joint ventures are autonomous of their parents may contradict the Commission's practice in which it presumes that the joint venture and the parents would not compete against each other.[14] The Commission usually aggregates the market share of the joint venture with those of the parent firms, as if they belong to the same undertaking.[15] It may be claimed that the autonomy element is not in conflict with this policy, on the grounds that the latter relies on a presumption that each parent would individually abstain from competing with their own joint venture, in order not to suffer any loss as an investor in the joint venture. However, it is reasonable to expect that in such cases, the parents would also use their control over the joint venture in order to prevent it from competing against them.[16] This is supported by the Commission's policy not to analyse the risk of coordination if only one parent remains active in the joint venture's market, because the parent would act as the industrial leader of the joint venture.[17]

In conclusion, the autonomy element of the full-functionality criterion appears inconsistent with the joint control requirement and with the general approach of treating full-function joint ventures and their parents as a single undertaking in merger analysis. In any case, it is usually not practicable to draw a clear line between decisions that the joint venture takes autonomously and those that are decisively influenced by the parent firms thanks to their control over the joint venture. Therefore, it seems problematic to rely on any assumption about the autonomy of joint ventures, in order to properly identify those that lead to a lasting change in the structure of the parties and which, hence, are to be treated as mergers.

[14] Nouvel (n 3) 519.
[15] See Chapter 3/V/A/3 above.
[16] See III/B/2 below.
[17] See Chapter 3/V/B/1 above.

Furthermore, such confusion about the autonomy of full-function joint ventures gives rise to uncertainties for firms with regard to the legal interpretation of their relationship with their joint ventures. Having regard to the assumed autonomous character of full-function joint ventures, firms may perceive that they do not form a single economic unit with the joint venture within the meaning of Article 101, and they may refrain from influencing the operations of the joint venture, in order not to harm its autonomy. However, *El du Pont* and *Dow Chemical* show that these parents can still be considered as forming a single economic unit with the joint venture, and they can be held responsible for its infringement of competition rules. This makes it difficult for firms to predict and adopt the safest policy from a competition law perspective in dealing with their full-function joint ventures.

2. Limiting the Range of Operations that should Fall within the Merger Regulation

Recital 20 of the Merger Regulation defines concentrations as operations which lead to a lasting change in the control of the undertakings concerned and, thereby, in the structure of the market. It continues that, to be consistent with this definition, it is appropriate to include, in the scope of the Merger Regulation, all joint ventures performing on a lasting basis all the functions of an autonomous economic entity. However, such inclusion of the full-functionality criterion in Article 3(4) rather seems to limit the scope of Article 3(1)(b) of the Merger Regulation, which provides that a concentration arises where one or more undertakings acquire direct or indirect control of the whole or parts of another undertaking.

The reading together of these two provisions, which both relate to operations resulting in joint control, creates confusion regarding in which situations the creation of joint control falls under Article 3(1) and is exempted from the full-functionality test. In the Jurisdictional Notice, the Commission makes its approach clear on this issue, by applying Article 3(1) only to those in which two or more undertakings acquire joint control of another undertaking or parts of another undertaking from

'third parties'.[18] In other situations, however, it requires the joint venture to be designed to have full-function character in the future.

This interpretation of the Commission has been subject to strong criticisms, particularly on the basis that it makes a distinction between acquisitions of joint control over the whole or parts of a third undertaking and those over the parts of the parent undertakings. In their article published before the issue of the Jurisdictional Notice, Radicati di Brozolo and Gustafsson argued that such a distinction based on the historical position of the joint venture was not justifiable, given the structural and forward-looking approach of merger control.[19] They claimed that the term 'creation of a joint venture' used in Article 3(4), in economic terms, was not different from 'acquisition of joint control' within the meaning of Article 3(1)(b). In this regard, to eliminate any inconsistency and uncertainties, the commentators proposed that in all situations involving the acquisition of joint control, it must be verified whether the entity concerned would have full-function status.[20]

The adoption of this proposal would, nevertheless, give rise to an unjustifiable distinction between acquisitions of sole control and those of joint control. Rudolf and Leupold explain that in both types of acquisitions, at least one party will acquire (sole or joint) control of an undertaking, thereby bringing about a lasting change in the structure of the market for the purpose of merger control.[21] They assert that Article 3(4) does not limit the scope of Article 3(1)(b); on the contrary, it broadens it by including the creation of full-function joint ventures, to which the parent firms contribute their pre-existing assets that do not constitute an 'undertaking'. However, if an 'undertaking' is contributed to a joint venture, according to the commentators, it should not be necessary to assess whether or not it will retain its full-function character in the future.[22] For this purpose, they suggest that the Commission should

[18] See Chapter 3/III/B/3 above.
[19] Luca G Radicati di Brozolo and Magnus Gustafsson, 'Full-Function Joint Ventures under the Merger Regulation: The Need for Clarification' (2003) 24 *European Competition Law Review* 574, 578.
[20] ibid.
[21] Lars-Peter Rudolf and Bettina Leupold, 'Joint Ventures – The Relevance of the Full-Functionality Criterion under the EU Merger Regulation', 3 *Journal of European Competition Law and Practice* 439, 447.
[22] ibid.

remove ‘from third parties’ from the last sentence of paragraph 91 of the Jurisdictional Notice, and add at the end: ‘and irrespective of whether the whole or parts of the undertaking is/are contributed by one of the joint venture partners or acquired from a third party.’[23]

Although Rudolf and Leupold properly address the inconsistency resulting from the distinction between acquisitions of sole and those of joint control, their suggestion does not seem very helpful. It is uncertain what they mean by the term ‘undertaking’. According to the settled case law, a group of companies under common control constitutes a single undertaking within the meaning of Article 101.[24] This principle also essentially applies in merger control.[25] Therefore, it does not appear appropriate to use the term ‘undertaking’ to refer to the contribution of pre-existing assets, including subsidiaries, by one parent to the joint venture. This is, in fact, clearly acknowledged in paragraph 139 of the Jurisdictional Notice.

Nonetheless, the commentators may actually mean that it should not be necessary to verify the full-function nature of the joint venture, if one of the parents contributes its pre-existing assets that form a business with a market presence within the sense of paragraph 24 of the Jurisdictional Notice. Such a policy could permit the application of similar rules to acquisitions of joint control and those of sole control. For instance, if one parent transferred its production capacity constituting a business to a production joint venture, this joint venture could be considered as a concentration in accordance with Article 3(1), even though it would not meet the full-functionality criterion.[26] Under this policy, the fulfilment of the full-functionality criterion would be required only if the joint venture was established as a greenfield operation, or if assets were contributed to it such that an acquisition of sole control over them would not also fall under Article 3(1).

Such a distinction between joint ventures which would operate in the same way could also result in some inconsistencies and uncertainties, particularly considering

[23] ibid 448.
[24] See 138 above.
[25] Jurisdictional Notice (n 2) para 135.
[26] In *Vattenfall/Elsam and E2 Assets*, for example, the Commission regarded the acquisition of sole control over the generation capacity as a concentration. Case COMP/M.3867 [2005].

the differences between the backward-looking approach of the concept of 'business with a market presence' and the forward-looking approach of the concept of full-functionality. For example, suppose that firm A acquires from firm B the production facilities of its subsidiary to which a market turnover can be clearly attributed. If these production facilities form the main assets of the subsidiary, the acquisition by firm A will be considered as an acquisition of a business with a market presence within the meaning of paragraph 24 of the Jurisdictional Notice, even though the sales assets and personnel of the subsidiary are not transferred to firm A. In other words, the transfer of sales operations is not crucial in the application of the criterion for 'business with a market presence',[27] because, with the transfer of the main assets, eg production facilities, intellectual property rights etc, the acquirer will effectively own the market presence of the acquired business.[28] Therefore, it is doubtful that the concept of full-functionality, which concentrates on sales to third parties in relation to the existence of a market presence, could be viewed as being exactly analogous to the concept of 'business with a market presence'.

To sum up, the inclusion of Article 3(4) does not expand the boundaries of Article 3(1)(b), as proposed in recital 20 of the Merger Regulation. In contrast, the narrow interpretation of Article 3(1) in the Jurisdictional Notice appears to unjustifiably exclude some operations, particularly partial function production joint ventures, which affect the structure of the undertakings concerned in almost the same way as those which are currently subject to the Merger Regulation. Some scholarly suggestions addressing this inconsistent policy do not seem sufficient to solve all the problems with the current wording of Article 3.

[27] It is herein assumed that these sales assets and personnel do not constitute the main assets of the business in question. If they do, however, it may not be possible to consider the transfer of other assets as an acquisition of the business.

[28] See eg *Microsoft/Yahoo! Search Business* (Case COMP/M.5727) [2010] paras 12-19; *Lotte Group/Artenius UK* (Case COMP/M.5760) [2010] para 5; *Whirlpool/Privileg Rights* (Case COMP/M.5859) [2010] paras 5-8.

3. Relying on Conditions relevant to the Substantive Analysis for Jurisdictional Purposes

As mentioned above, for a joint venture to have autonomous character, it is in principle required to have its own management and to deal with third parties. Irrespective of whether these requirements actually enable the joint venture to act autonomously of its parents, they may be highly relevant to the substantive analysis. In general, if the management of the joint venture is autonomous in deciding commercial terms with the parent firms and with third parties, this may eliminate possible foreclosure concerns and information exchange among the parents, which increases the risk of coordination outside the joint venture. In this context, a partial function joint venture that would lead to foreclosure of competitors or a collusive outcome may be allowed under Article 101(3), upon certain conditions that require the establishment of a more independent management,[29] or the ending of the exclusive or preferential supply relationship between the parents and the joint venture.[30] With these conditions, the partial function joint venture in question may effectively turn into a full-function joint venture.[31] This raises the question of whether such a joint venture would fall under the Merger Regulation in the light of paragraph 109 of the Jurisdictional Notice.[32]

If a joint venture gains full-function character due to such conditions, imposed under Article 101(3), it might be abnormal to make it also subject to the Merger Regulation. On the other hand, the opposite approach would also be questionable, because national competition authorities or national courts may claim the power to enforce Article 101 or their national laws against the joint venture, which in fact constitutes a concentration within the meaning of the Merger Regulation.

---

[29] This condition may be to end any interlocking directorates between the joint venture and the parents.

[30] For instance, in *TPS*, the Commission required limiting the exclusive rights given by the parent firm to the joint venture. Case IV/36.237 Commission Decision 1999/242/EC [1999] OJ L90/6. Obviously, a similar condition may be imposed by the Commission, if such an exclusive right is provided by a joint venture to its parents.

[31] A joint venture may also turn into a full-function joint venture, if a national competition authority imposes the conditions explained above.

[32] See Chapter 3/III/B/3 above.

In brief, it seems more reasonable to take into account whether these joint ventures have an independent management and deal with third parties, in the substantive appraisal under the Merger Regulation, rather than in determining the jurisdiction of the Regulation. Actually, the *Areva/Urenco* case indicates that the Commission may consider those conditions, not in relation to the full-function status of the joint venture but in relation to the assessment of its anticompetitive effects. In this case, according to the initial shareholders' agreement, neither parent would be able to purchase from the joint venture without the unanimous approval of the joint venture's board, which would be composed of an equal number of members appointed by both parents. Despite this veto right of the parents, which would limit the commercial autonomy of the joint venture, the Commission held that the full-functionality criterion was satisfied. Nonetheless, it decided that such a veto right would lead to coordination between the parents in the downstream market. To eliminate this concern, the parties submitted some commitments including: (i) leaving decisions on entering into new supply agreements with the parents to the executives, rather than the board of the joint venture; and (ii) providing an independent management structure to prevent information flow between the parents.[33] Given the conditions set forth by the Commission for a joint venture to have commercial autonomy,[34] this joint venture should normally have been considered to gain a full-function character once these commitments had been fulfilled. The Commission, however, appeared to take a more flexible approach in applying the full-functionality test to the joint venture. Nonetheless, having regard to contrary decisions,[35] it is very difficult to state that *Areva/Urenco* represents the general practice of the Commission on this issue.

B- Importance of the Chosen Criterion from a Substantive Point of View

The suitability of the current criterion for identifying joint ventures falling under the Merger Regulation is more often debated from a procedural perspective, because there are significant differences between the enforcement regimes of the Merger

[33] *Areva/Urenco/ETC* (Case COMP/M.3099) [2004] paras 226-44.
[34] See Chapter 3/III/B/1/b above.
[35] For example, in *American Express/Fortis/Alpha Card*, which was taken after *Areva/Urenco*, a similar veto right was considered to put into question the full-function character of the joint venture. Case COMP/M.5241 [2008] paras 12.

Regulation and Regulation 1/2003.[36] On the other hand, much less emphasis is placed on its outcomes in relation to the substantive assessment. Considering that this thesis focuses on substantive issues, it is necessary to establish the importance of the criterion to classify joint ventures from a substantive viewpoint.

In the 1966 Memorandum,[37] the Commission emphasised that the test under Article 101 was too strict to apply to mergers which had to be prohibited only if they resulted in excessive market power. Based on this approach that transformed into the dominance test under Regulation 4064/89,[38] it could be stated that joint ventures treated as mergers were subject to a more lenient test than that applied to other joint ventures under Article 101. This also seemed to be the Commission's practice, notwithstanding that the Notice on cooperative joint ventures[39] stipulated that the distinction between cooperative and concentrative joint ventures had only procedural results.[40]

In fact, the Commission acknowledges that the degree of market power required for the finding of an infringement under Article 101(1) is less than that required for a finding of dominance under Article 102. Therefore, Article 101 may require the parties to prove the fulfilment of the four cumulative conditions of Article 101(3), even though there would not be a dominance situation. This obviously suggests that the test under Article 101 is stricter than the dominance test. However, it can be argued that the shifting from the dominance test to the SIEC test has closed the gap between Article 101 and Article 2(3) of the Merger Regulation.[41] The new Cooperation Guidelines[42] explicitly state that there is often a fine line between the effects on competition of partial function and full-function joint ventures, and imply

[36] Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty [2003] OJ L1/1.
[37] See Commission, 'The Problem of Industrial Concentration in the Common Market', Competition Series No 3 (1966), reprinted in Frank L Fine, *Mergers and Joint Ventures in Europe: The Law and Policy of the EEC* (2nd edn, Graham &Trotman/MartinusNijhoff 1994) 691-713.
[38] Council Regulation (EEC) No 4064/89 of 21 December 1989 on the control of concentrations between undertakings [1989] OJ L395/1, corrected version [1990] OJ L257/13.
[39] Commission Notice concerning the assessment of cooperative joint ventures pursuant Article 85 of the EEC Treaty [1993] OJ C43/2.
[40] ibid para 11.
[41] See Chapter 3/V/A/1 above.
[42] Commission Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements [2010] OJ C11/1, para 21.

that the Commission may seek proof of the degree of market power required under the SIEC test, in order to find that a partial function joint venture infringes Article 101(1).[43]

Nonetheless, due to the paucity of the Commission's decisions since the adoption of Regulation 1/2003, it is difficult to conclude that the Commission would, in practice, apply the same standard to a joint venture under both Article 101(1) and Article 2(3). The practice of the Commission before Regulation 1/2003 indicates that it may find an infringement under Article 101(1), if the market threshold set forth in the Cooperation Guidelines is slightly exceeded. Even if the general practice of the Commission would be in line with the approach suggested in the Guidelines, Article 101(1) would allow the Commission to take a different approach in some specific cases, and to rely on market power lower than that required under the SIEC test, in order to decide that the joint venture infringes Article 101(1). In such cases, pursuant to Article 101(3), the parties would be under the burden of showing the economic benefits of the formation of the joint venture and its indispensability to attain these benefits. In any case, even if the joint venture was granted an exemption, this would not ensure absolute legal certainty for the parties, because, unlike clearance decisions in merger cases, any exemption given under Article 101(3) may be withdrawn by the Commission in the future.[44] These may form the reasons to conclude that the test under Article 101 is stricter than the SIEC test.

Having said that, this conclusion may, at first glance, appear inconsistent with the Commission's interpretation, in the Horizontal Merger Guidelines, of the condition that efficiencies must be merger-specific to be considered in merger analysis.[45] Therein, the Commission implies that partial function (cooperative) joint ventures are in general less restrictive than mergers.[46] However, it is doubtful that this assumption applies with respect to full-function joint ventures. If the extent of integration is the same in both cases, a full-function joint venture may be even less restrictive than a

[43] See Chapter 4/IV/A/3 above.
[44] See Chapter 4/IV/B above.
[45] Commission Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings [2004] OJ C31/5, para 85.
[46] Nicole Tyson, 'Joint Venture Regulation under European Competition Laws: An Update' (2007) 13 *European Law Journal* 408, 422.

partial function joint venture, because, as discussed above, the requirements of having full-function character may eliminate some anticompetitive effects that a partial function joint venture may have. Furthermore, it should be borne in mind that the efficiency considerations may only be an issue, if the operation in question has been deemed to result in an anticompetitive effect. The Commission's practice shows that this is less likely to happen in merger cases compared to Article 101 cases, since, as mentioned above, Article 101(1) is generally applied more strictly than the SIEC test. Therefore, the interpretation of the merger-specific requirement in the Horizontal Merger Guidelines does not seem consequential as to the comparison of these two tests.

Lastly, it should be remembered that national competition authorities and national courts are also empowered to fully enforce Article 101 or their national competition legislation against joint ventures falling outside the Merger Regulation. Using this power, national authorities may adopt a different approach from those of the Commission and of each other, in analysing these joint ventures under Article 101. Considering that national competition legislation may differ from EU competition rules, the gap between the approaches of the national authorities and the Commission may become greater. For example, as happened in relation to the BHP Billiton/Rio Tinto production joint venture, a partial function joint venture may be reviewed as a concentration by some national authorities, whereas it is analysed under Article 101 by the Commission and other national authorities.[47]

It is true that within the European Competition Network, national authorities and the Commission may achieve a significant degree of convergence and consistency. However, the fact that private parties can also challenge partial function joint ventures in national courts may still lead to some divergence among national and Union level competition law enforcement. Indeed, national courts are not normally

[47] Therein, while the Commission found that the joint venture was subject to Article 101, Austrian and German competition authorities analysed it in accordance with their merger rules. Since the parties quit the transaction, these authorities did not need to give their final decisions on it. See John Kallaugher and Andreas Weitbrecht, 'Developments under Articles 101 and 102 TFEU in 2010' (2011) 32 *European Competition Law Review* 333, 335. See also <http://www.bundeskartellamt.de/wEnglisch/download/pdf/Fallberichte/B01-010-10-english.pdf> accessed 05 April 2013.

bound by the decisions and guidelines of the Commission and national authorities, and, therefore, they may follow a different approach in relation to the assessment of joint ventures. Even if this may not seem to pose an immediate risk, due to the small number of private actions in the EU,[48] the situation may change thanks to the efforts to promote the private enforcement of EU competition law.[49] Accordingly, the decentralised enforcement of Article 101, at least in theory, downplays the value of any guidance given by the Commission about the assessment of partial function joint ventures and, hence, increases uncertainty about their legality.

To sum up, the Horizontal Cooperation Guidelines seems to substantially approximate the test under Article 101 with that under Article 2(3). However, whether or not a joint venture falls under the Merger Regulation still has important substantive implications, given the fact that Article 101, in theory, allows the Commission to apply a stricter approach and that national competition authorities and national courts may adopt a different policy in applying Article 101 or their national legislations. These make it difficult to ensure the aligned hermeneutical application of Article 101 and Article 2(3). In this context, due to the problems explained above, the full-functionality criterion does not seem to properly delineate the boundaries of the Merger Regulation and, therefore, it can lead to the application of different substantive rules to operations which have similar effects on the structure of the undertakings concerned and prevent adopting a unified approach to them in this respect.

In any event, even if the full-functionality criterion, along with its application by the Commission, could be viewed appropriate to determine the scope of the Merger Regulation, its autonomy element leads to some terminological problems that have

---

[48] See Ashurst, 'Comparative Report: Study on the Conditions of Claims for Damages in Case of Infringement of EC Competition Rules' (2004) <http://ec.europa.eu/competition/antitrust/actionsdamages/comparative_report_clean_en.pdf> accessed 05 April 2013, 1-9; Centre for European Policy Studies, Erasmus University Rotterdam and Luiss Guido Carli, 'Making Antitrust Damages Actions More Effective in the EU: Welfare Impact and Potential Scenarios, Final Report' (2007) <http://ec.europa.eu/competition/antitrust/actionsdamages/files_white_paper/impact_study.pdf> accessed 05 April 2013, 39-44.

[49] Commission, 'Green Paper on damages actions for breach of EU antitrust rules' COM (2005) 672 final; Commission, 'White Paper on Damages actions for breach of the EC antitrust rules' COM (2008) 165 final.

some repercussions on the appraisal of the formation and operation of full-function joint ventures under the Merger Regulation and Article 101. Therefore, from a substantive point of view, it is necessary to adopt a more suitable criterion to determine the boundaries of the Merger Regulation, as far as joint ventures are concerned.

C- Possible Alternatives

Considering these problems resulting from the application of the full-functionality criterion, it should be discussed which alternative approaches may serve better for the purpose of identifying which joint ventures should be treated as mergers. In this regard, two options stand out: (i) shifting to an integration-based criterion and (ii) including partial function production joint ventures in the scope of the Merger Regulation. Below these two alternatives are analysed in more depth.

1. Shift to an Integration-Based Criterion

One possible alternative to the full-functionality criterion may be to take the degree of economic integration between the parties as the central criterion. Such an integration-based criterion is actually used in the US.[50] In that regime, fully integrated joint ventures which involve an efficiency enhancing integration of economic activity, that eliminates all competition among participants in a given market, are treated in the same way as mergers under the US Horizontal Merger Guidelines, whilst partially integrated joint ventures are analysed in accordance with the Collaboration Guidelines.[51]

However, as explained in Chapter 5 above, such classification in the US does not have significant substantive and procedural consequences, as the distinction between full-function and partial function joint ventures has in the EU. First of all, it does not determine whether section 7 of the Clayton Act or section 1 of the Sherman Act

[50] Chapter 5/IV/A above.
[51] DOJ and FTC, 'Antitrust Guidelines for Collaborations Among Competitors' 64 Fed Reg 54483 (1999) <http://www.ftc.gov/os/1999/10/jointventureguidelines.htm> accessed 05 April 2013, sec 1.3.

applies to the joint venture.[52] Indeed, in the US, besides section 7, section 1 also theoretically applies to mergers, and the design of these two provisions allows the enforcement authorities and courts to apply the same standard under both statutes.[53]

Secondly, this distinction does not necessarily affect the procedural rules applicable to joint ventures in the US. The Collaboration Guidelines explicitly state that such distinction does not serve determining the obligations arising from the H-S-R Act.[54] Furthermore, unlike in the EU, in the US, mergers are also subject to a decentralised enforcement system, in which, besides the federal authorities, state attorneys general and private parties may challenge a merger in court. In any case, the court will give the final decision on the legality of the challenged merger.[55] Therefore, this distinction made by the US enforcement authorities, in practice, may not be decisive for the application of both procedural and substantive rules to joint ventures.

Without taking into account these distinctive characteristics of US competition law, any discussion on the suitability of such a full-integration criterion for EU merger control may lead to erroneous conclusions. The use of this criterion would actually significantly narrow the categories of joint ventures that fall under the Merger Regulation and, thereby, resurrect debates regarding the old categorisation that disqualified joint ventures as concentrations if the parents were to remain competitors in the joint venture's market.[56] In this respect, although the full-integration of the participants in the market may be an essential factor for the substantive analysis of joint ventures,[57] it does not seem appropriate to use this factor for making a sharp distinction between joint ventures for the purpose of merger control, which would have important substantive and procedural outcomes.

However, it is worth discussing whether an integration-based criterion, which does not necessarily require a full-integration of the parties in the market, should replace the current autonomy-based criterion for the purpose of merger control. Integration is

[52] See Chapter 5/IV/A/2 above.
[53] See Chapter 5/III above.
[54] Collaboration Guidelines (n 51) fn 11.
[55] See Chapter 5/II above.
[56] See Chapter 3/II/B above.
[57] See III/A/2 and B/2 below.

in fact considered under the full-functionality criterion as well, but to the extent that it relates to the autonomy of the joint venture.[58] Having all the necessary human and material resources to be self-sufficient naturally indicates some integration of the parents' economic activities.[59] In addition, the Commission usually considers integration, leading to the permanent withdrawal of the parents from the joint venture's market, as evidence of the autonomous character of the joint venture.[60] Integration is also emphasised by the Commission in respect of the extension of the activities of the joint venture into new product or geographical markets. The Jurisdictional Notice acknowledges that a new concentration may arise, if the joint venture is provided with significant additional tangible or intangible assets, which constitute the basis or nucleus of the extension, and if it carries out these extended activities on a full-function basis.[61]

However, the requirement of having commercial independence shifts the centre of gravity of the full-functionality criterion to the autonomy of the joint venture. Therefore, even if the contribution by the parent firms to the joint venture remains substantially the same, the absence of such autonomy normally disqualifies the joint venture as being full-function. The use of integration as the key element may ensure that the Merger Regulation catches these situations as well. To that effect, the new criterion may be designed to essentially address whether the joint venture involves any integration that significantly affects the control of the parent firms over their economic activities in the market.

It seems that such a reform could particularly make a difference in respect of partial function production joint ventures. These joint ventures usually include substantial investments, and form the most important part of the parents' economic activities in the market, which significantly affects the price and output of their products. Indeed, they determine the output and price of products to be supplied to the parents, thereby basically setting the minimum sale price for the parents' products. Hence, there is, in fact, no significant difference between such production joint ventures and operations

[58] Barry E Hawk, 'Joint Ventures under EEC Law' (1992) 15 *Fordham International Law Journal* 303, 316.
[59] See Chapter 3/III/B/1/a above.
[60] See 94 above.
[61] Jurisdictional Notice (n 2) para 107.

which currently fall within the Merger Regulation, in terms of their effect on the economic activities of the parties.

The production joint venture between BHP Billiton and Rio Tinto constitutes a very good example in this respect. With the formation of this joint venture, the parties intended to combine approximately 90 % of their competition-relevant production in the iron ore markets, which would amount to approximately 90 % of their total costs. This joint venture would be expected to eliminate all meaningful competition between the parents, even though they would continue conducting their marketing activities separately. However, the Commission treated it as a partial function joint venture, because it was to supply only to its parents.[62]

Another example of how partial function production joint ventures affect the structure of the parties can be the Norf joint venture, formed between Alcan and VAW in order to build and operate an aluminium rolling plant. In analysing the anticompetitive effect of the notified merger between Alcan and Alusuisse, the Commission concluded that the existence of the Norf joint venture would result in the alignment of the competitive strategies of the merged firm and VAW.[63]

The shift to such an integration-based criterion would allow expanding the scope of the Merger Regulation to these production joint ventures. This criterion could catch not only production joint ventures, like the BHP Billiton-Rio Tinto and Norf joint ventures, which concern products forming a significant portion of the parties' total costs in the market, but also those which constitute a relatively small input for their final products. In such cases, the input market ought to be viewed as being separate from those of the final products. In this context, the production joint venture should be considered to lead to a significant integration of the parties in the input market. For example, in the *Areva/Urenco* case, the joint venture engaged in the development and manufacturing of centrifuges, which were used by the parents independently in their activities for uranium enrichment. The Commission defined two different markets, one for centrifuge technology equipment and one for enriched uranium, and

[62] See 227 above.
[63] *Alcan/Alusuisse* (Case COMP/M.1663) [2000] paras 58-84.

analysed the effects of the joint venture on competition in these markets separately. This approach of the Commission can be guiding for this purpose.[64]

Nonetheless, such an integration-based criterion may not substantially change the current position with respect to other types of joint ventures. Notwithstanding that R&D joint ventures, including the joint production of the results, could be treated in the same way as production joint ventures, pure R&D joint ventures would be unlikely to be classified as concentrations even under this criterion, because they normally concern a specific project that lasts for a short period. Therefore, they do not significantly affect the parents' control of their economic activities in the market. The only exception to this could be joint ventures which are not targeted only at a specific project and integrate the R&D activities of the parties on a lasting basis. This could happen particularly in the high-technology industries, such as computer software, in which innovation constitutes the main input to the parties' products. In such cases, the joint venture may be considered to significantly affect the parties' control over their economic activities in the innovation market, and, therefore, may be treated as analogous to production joint ventures.

With respect to sales joint ventures, the conditions required by the Commission under the full-functionality criterion would essentially continue to be relevant under this integration-based criterion. Accordingly, if a sales joint venture adds only a little value to the product supplied from the parent firms, it would be difficult to claim that this joint venture involves a significant integration of the parents' economic activities in the market. In this situation, the change in the position of the parents does not result from integration, but from a contractual agreement between them. If, however, such a joint venture acts as a trade company, as described in the Jurisdictional Notice, it may be possible to consider it as a significant integration of the parents in the trade market.[65]

A similar approach would also generally apply to purchasing joint ventures. If a joint venture constitutes a wholesale company which has the necessary resources to

[64] See eg *Areva/Urenco* (n 33).
[65] See Chapter 3/III/B/1/b above.

operate in the wholesale market, it could be considered to result in a significant integration of the parents in this market. In this context, the Commission could take into account whether the parents also integrate their marketing activities in the wholesale market, ie whether the joint venture is also provided with the necessary capabilities to supply to third parties. Other purchasing joint ventures, however, would not be viewed as leading to significant integration among the parents and therefore, they would be treated as agreements.

To conclude, shifting the focus from the autonomy of the joint venture to the integration of the parents' economic activities in the market may extend the scope of the Merger Regulation particularly to partial function production joint ventures, and may preclude the terminological ambiguity arising from the application of the full-functionality criterion, explained above.

2. Including Partial Function Production Joint Ventures in the Scope of the Merger Regulation

As is apparent from the discussion above, one fundamental problem with regard to the application of the full-functionality criterion appears to be the exclusion of partial function production joint ventures from the scope of the Merger Regulation. In this context, another alternative to the current policy may be to include partial function production joint ventures in the Merger Regulation, through simply making an addition to the end of Article 3(4) to that effect.

In fact, including partial function production joint ventures in the Merger Regulation was also discussed by the Commission. Although it envisaged such a reform in the White Paper on modernisation, mainly on procedural grounds,[66] the Commission changed its mind on this issue, in the Green Paper on the review of Regulation

[66] Commission, 'White Paper on modernisation of the rules implementing Articles 85 and 86 of the EC Treaty' COM (99) 101 final, paras 14 and 79-81. See also Commission, 'White Paper on Reform of Regulation 17: Summary of the Observations' (2000) <http://ec.europa.eu/competition/antitrust/others/wp_on_modernisation/summary_observations.pdf> accessed 05 April 2013, part 4.2.

4064/89.[67] The Green Paper gives some substantive and procedural reasons for abandoning this proposal.

It firstly states that 'it would be very difficult to find an unambiguous legal definition of the concept of a partial function production joint venture, particularly in to the context of service markets'.[68] Even if it is accepted that there would be such a difficulty, it is doubtful that it could not be eliminated through further decisions and guidelines, given the example of how the Commission has dealt with the concept of autonomous entity, which can be hardly considered less ambiguous.

Secondly, the Green Paper argues that, besides partial function production joint ventures, some other operations such as R&D joint ventures may also involve large-scale investments, and, thus, it is not justifiable to make a distinction between these operations with respect to their suitability for *ex ante* control.[69] As mentioned above, compared to other types of joint venture, partial function production joint ventures lead to a more significant integration of the parties' economic activities. Hence, they should be more readily regarded as bringing about a lasting change in the structure of the undertakings concerned, and of the market. This may constitute a justification for treating these joint ventures in the same way as full-function joint ventures.

From a substantive viewpoint, however, the Green Paper stipulates that even if partial function production joint ventures are included in the Merger Regulation, the applicable test would remain the same, ie Article 101, considering that, as they would not be active in any market, the only real assessment of such cases would relate to coordination between the parent firms.[70] In the new Cooperation Guidelines, the Commission itself appears to refute this argument, by adopting the principles for the assessment of partial function joint ventures, which are quite similar to those applicable to full-function joint ventures under the Horizontal Merger Guidelines. These guidelines provide that partial function joint ventures, besides the risk of coordination, may also give rise to foreclosure of competitors and/or to direct

[67] Commission, 'Green Paper on the review of Council Regulation (EEC) No 4064/89' COM (2001) 745 final, paras 102 and 120-24.
[68] ibid para 121.
[69] ibid para 122.
[70] ibid.

limitation on competition between the parent firms. These effects apparently correspond to the non-coordinated effects of full-function joint ventures.[71] The relevant chapters of the Guidelines for specific types of joint venture reveal that this similarity emerges especially in relation to partial function production joint ventures.

Indeed, given the decisive effect of partial function production joint ventures on the outputs and prices of the parents' products, the mere fact that the joint venture does not supply these products to third parties is unlikely to lead to a substantial difference between the effects of these joint ventures and those having full-function character. Therefore, having regard to the proper approach of the new Cooperation Guidelines, that substantive argument in the Green Paper does not seem convincing.

Consequently, the extension of the scope of the Merger Regulation to partial function production joint ventures may be viewed as a plausible alternative. This would result in almost the same outcome as the adoption of an integration-based criterion, except to the extent that it would not eliminate the ambiguity arising from the autonomy element of the full-functionality criterion.

D- Proposed Approach

The discussion of the two alternatives above reveals that both solutions would improve the current situation in respect of joint ventures under the EU merger control regime. However, shifting to an integration-based criterion would be a better solution, because it could address all the problems of the current regime more effectively.

Firstly, the integration-based criterion would not require the Commission to make an assumption on whether the joint venture would be autonomous of the parents. This would remove the confusion about the interrelation between the joint control requirement and the autonomy element. It would also enable the Commission, based on the relevant economic principles, to properly analyse the competitive relationship between the parents and the joint venture under both the Merger Regulation and

[71] See Chapter 4/IV/A/2 above.

Article 101, without being at the risk of contradicting any assumption made in the beginning.

Secondly, such a criterion would give the Commission more flexibility in determining the scope of the Merger Regulation. This could provide the adoption of a consistent approach to situations resulting in joint control under Article 3(1) and (4) of the Merger Regulation. It would also ensure that the Commission could consider whether the joint venture has an independent management and supplies to third parties, in appraising its impact on competition under the Merger Regulation, and that it could accept commitments eliminating any anticompetitive effect in this regard. Another obvious positive outcome of determining the scope of the Merger Regulation properly, which is closely linked to those above, would be to apply a unified substantive approach to similar operations under the Merger Regulation. Indeed, the proposed analysis of joint ventures explained in the following part of this chapter would be more compatible with an integration-based criterion, which extends the scope of the Merger Regulation to partial function production joint ventures.

One may ask whether such a shift to an integration-based approach may be provided only with a change in the practice of the Commission, while the wording of Article 3(4) is retained as it is. Actually, as mentioned above, the *Areva/Urenco* decision indicates that the Commission may interpret the current criterion flexibly with regard to how the Merger Regulation applies to a production joint venture whose full-function character is questionable.[72] However, having regard to the Jurisdictional Notice and the general practice of the Commission, *Areva/Urenco* seems to form an exception in this context. In any case, this decision seems to use the same terminology as the Jurisdictional Notice and, therefore, cannot be relied on as evidence for a possible shifting of the centre of gravity of the current criterion.

Indeed, it is very doubtful that the Commission can adopt an integration-based criterion under the current wording of Article 3(4). It is correct that the conditions set out in the Jurisdictional Notice essentially reflect the Commission's approach to the full-functionality criterion. Nonetheless, these conditions have been embraced by the

[72] See II/A/3 above.

General Court as well.[73] More importantly, considering the discussions with regard to moving from the cooperative-concentrative joint venture distinction[74] and to the inclusion of partial function production joint ventures,[75] it can be stated that Article 3(4) is understood by the Council to cover full-function joint ventures as defined by the Commission. Hence, the application of such an integration-based criterion by the Commission may constitute the extension of its power without the permission of the Council.

In sum, the current wording of Article 3(4) does not seem to allow the Commission to move from the current autonomy-based criterion to an integration-based criterion. Therefore, Article 3(4) should be modified to that effect. This would at least prevent any uncertainties and debates that could arise, if the Commission made this shift under the current wording.

The new wording of Article 3(4) should be written in a way that it can be consistent with Article 3(1)(b) and paragraph 24 of the Jurisdictional Notice and with other principles in relation to the concept of concentration. One suggestion in this context may be as follows: 'The creation of a joint venture involving a lasting and significant integration of the economic activities of two or more undertakings in a given market shall constitute a concentration within the meaning of paragraph 1(b)'. In order to provide more clarity, recitals of the Regulation may include more information about the application of the new criterion. Firstly, it can be mentioned that all situations involving an acquisition of joint control over the whole or parts of an undertaking will fall within Article 3(1)(b), regardless of whether such acquisition relates to the part of one of the undertakings concerned. It can also be added that Article 3(4) intends to expand the scope of the Merger Regulation to the creation of joint ventures which do not fall within Article 3(1)(b), but will have the same effects on the economic activities of the parties in the market. In this regard, it should be emphasised that the new criterion is more expansive than the full-functionality criterion, as it particularly catches production joint ventures which did not fall within

[73] See *Cementbouw* (n 4); *El Du Pont* (n 9); *Dow Chemical* (n 9).
[74] Commission, 'Green Paper on the review of the Merger Regulation' COM (96) 19, paras 98-121.
[75] Commission, 'Green Paper on the review of Council Regulation (EEC) No 4064/89' COM (2001) 745 final, paras 120-24.

the Merger Regulation under the latter, due to the reliance of the joint venture on supplies to its parents.

Despite the possible benefits of the proposed integration-based criterion above, such a reform may be opposed, on the ground that it may render obsolete the established practice of the Commission regarding the full-functionality criterion and, therefore, it may give rise to uncertainties for the business community that has been used to such practice. It is true that this reform would result in some departure from the current practice. However, this departure would not be dramatic as it may seem at first glance.

First of all, the conditions provided in the Jurisdictional Notice, with respect to the self-sufficiency element, would also be required under the new criterion, as an indication of significant integration. For example, in respect of production joint ventures, the Commission may require the joint venture to have its own management and personnel, and the necessary production and financial assets, intellectual property rights or licences etc, in order to conclude that the parents actually combine their production activities into a separate entity which is under their joint control. Therefore, the Commission may retain those conditions provided in the current version of the Jurisdictional Notice in drafting new guidelines, by adjusting the terminology to the new criterion and giving some examples as those described above.[76]

Secondly, the new criterion would allow the Commission to consider sales to, and purchases from, third parties, which have been used as an indication of the autonomy of the joint venture under the current criterion, as a factor relevant to the integration of the parties. With regard to sales and purchasing joint ventures, such sales and purchases would be an indicative of a significant integration of the parents in the relevant trade or wholesale markets.[77] Similarly, joint ventures, which are intended to integrate the parents' R&D and marketing activities for a technology on a lasting basis, would be regarded as leading to significant integration in the technology

[76] See 231-33 above.
[77] ibid.

market. Accordingly, the relevant part of the Jurisdiction Notice for sales to and purchases from third parties may be substantially retained in the revised notice in respect of those joint ventures, upon the necessary adjustments to the terminology of the new criterion.

With respect to production joint ventures, however, the new criterion would not require the joint venture to supply to third parties, in order for it to fall under the Merger Regulation. Nevertheless, the projected sales to third parties could be considered as additional, but not necessary, evidence of the presence of significant integration. The revised notice can provide a definition for production joint ventures in a way that it can also apply in relation to service markets. For this purpose, the Commission should particularly focus on whether the joint venture combines the parties' capacities for a product, or a service, to which it adds a significant value through applying certain process. This definition, in any case, should exclude purchasing joint ventures which resell the purchased products to its parents without adding any significant value to them. However, as explained above,[78] joint ventures, which are designed to carry out R&D activities for their parents in the relevant innovation market on a lasting basis, may be treated as analogous to production joint ventures in this sense.

In conclusion, such an integration-based criterion would enable the Commission to adopt a more pragmatic approach in relation to production joint ventures, while essentially retaining the existence approach with regard to other joint ventures. Considering also the problematic aspects of the full-functionality criterion above, the changes brought by the new criterion would rather increase certainty for the business community and other stakeholders. This certainty could be further improved by the guidelines and decisions of the Commission. In this regard, at least from a substantive point of view, the proposed criterion seems to be the most plausible alternative to the current policy.

[78] ibid.

III. Refining the Approach to Joint Ventures under the Merger Regulation

The analysis of joint ventures under the Merger Regulation may be expected to differ from those of amalgamations and acquisitions, due to the fact that, unlike the latter, the former are jointly controlled by two or more firms that remain independent of each other. In this respect, in this thesis, the current approach to the appraisal of joint ventures in EU merger control is mainly examined from the perspective of two questions: (i) how the fact that the parent firms remain competitors in the joint venture's market, or in other markets, affects the approach to the creation of the joint venture; and (ii) how the existence of joint control is incorporated into the analysis of non-horizontal effects.

The Commission's practice and the case law, explored in Chapter 3 above, do not reveal a significant problem with respect to the second issue concerning the assessment of non-horizontal effects. In various decisions, the Commission considered the fact that the entity in question was jointly controlled as a mitigating factor that diminished the incentive for the parent(s) to engage in foreclosure.[79] Although it is difficult to state that the Commission's practice is totally consistent on this issue, these decisions indicate that a more lenient approach can be applied to joint ventures under Article 2(3) of the Merger Regulation, as far as foreclosure effects are concerned. This approach should be generally regarded as appropriate, because it essentially gives the necessary consideration to the peculiar economic nature of joint ventures. Therefore, this part does not provide a further examination of this issue.

With regard to the first issue, however, the current EU policy appears to be more problematic. As explained elaborately in Chapter 3 above, according to Article 2(4) of the Merger Regulation, the risk of coordination between the parents is appraised with reference to Article 101(1) and (3) TFEU. This policy seems to have two negative implications. Firstly, considering that the concept of coordination under Article 2(4) basically refers to the same economic situation as collective dominance, the application of Article 101 to the former seems questionable. Secondly, the

[79] See Chapter 3/V/A/4/b above.

current wording of Article 2(4) and (5), along with the existing practice of the Commission, at least in theory, suggests a stricter approach to partial integration, compared to full-integration. This part firstly explains these problems with the current policy and, secondly, it presents some proposals which would address them.

A- Problems with the Current Policy

1. Two Different Tests for the Same Economic Situation

From an economic point of view, the concept of coordination used under Article 2(4) is quite similar to that described in relation to collective dominance, ie coordinated effect, under the settled case law and the Horizontal Merger Guidelines.[80] As Venit rightly states:

> In both cases the question is whether two or more economically and legally separate entities will be able to collude successfully on a given market. In the case of oligopolistic dominance the parties are (i) the merged entity and (ii) one or more third parties. In the case of a joint venture, the parties are the parents to the joint venture. Seen from this perspective, there is no meaningful analytic or economic difference between "oligopolistic dominance" and "coordination" under Article 2(4).[81]

Given the overlap of the two concepts, it should be asked whether the best policy is to provide Article 101 as the applicable test under Article 2(4). One may support this policy, on the basis that the risk of coordination between the parents refers to the behavioural aspect of joint ventures. As explained in Chapter 1 above,[82] the effects of mergers and agreements on the economic activities of their participants are generally distinguished from each other, such that the former is considered to change the structure of the merging parties, whilst the latter is supposed to affect the competitive behaviour of the parties. On these grounds, it may be argued that the effects of joint ventures on the independent activities of parent firms should be regarded as behavioural, and should be subject to Article 101, which is the applicable test for

[80] See Chapter 3/V/A/4/a/bb above.
[81] James Venit, The Treatment of Joint Ventures under the EC Merger Regulation- Almost through the Thicket' in Barry E Hawk (ed), *Mergers & Acquisitions and Joint Ventures* (Juris Publishing 2004) 534.
[82] See Chapter 1/I above.

agreements. This argument seems to be the main explanation for the adoption of the current policy in the EU.

This reasoning should be, first of all, examined within the historical context of the evolution of the EU merger control system. As described in Chapter 3 above, prior to the 1990s there was no specific rule concerning merger control in the EU, and Article 101 was not considered to be applicable to mergers.[83] At that time, in order to limit the number of anticompetitive operations escaping competition law scrutiny, the Commission needed to establish the applicability of Article 101 to those which led to the risk of coordination between the parties. In this context, the treatment of such effects of joint ventures as behavioural was justifiable at that time to allow more effective competition law enforcement. However, considering that the adoption of the Merger Regulation has addressed these concerns, it is difficult to support the same argument for today's situation.

Indeed, even though the structural-behavioural distinction may help to distinguish the effects of mergers from those of agreements and to apply different tests accordingly, it does not serve the same purpose in relation to the effects of joint ventures treated as mergers. It is, in general, not possible to separate the behavioural aspects of these joint ventures from their structural aspects, because the former usually results from the significant integration of the parties' economic activities, which is the reason to regard these joint ventures as mergers. In other words, the risk of coordination is also a consequence of the change in the structure of the parties and, therefore, it can be essentially deemed structural. From this viewpoint, it is questionable to treat 'coordination' differently from 'collective dominance', as both relate to the impact of a change in the structure of the merging parties on the competitive behaviour of firms that are independent of each other.

Another argument in favour of the current policy may be that the scope of Article 2(4) includes not only tacit coordination, which can be considered identical to collective dominance as explained, but also explicit coordination between the parents. However, this argument also hardly justifies the application of Article 101.

[83] See Chapter 3/II/A above.

If the parents explicitly decide to coordinate outside the joint venture, in any case, this would not fall under Article 2(4) and, therefore, would be analysed according to Article 101 within the framework of Regulation 1/2003, because it is not directly related to, or necessary for, the formation of the joint venture.[84] The fact that information exchange in relation to the operation of the joint venture may enable the parents to implicitly coordinate their independent activities would also not require the application of Article 101. It is true that such information exchange can amount to a concerted practice, if it is assessed on its own. However, in the context of joint ventures, it can be viewed as a factor contributing to tacit coordination and, thus, can be analysed under Article 2(3).

In fact, Article 2(3) already applies to the risk of information exchange with respect to vertical mergers. The Non-Horizontal Merger Guidelines state that '[v]ertical integration may facilitate coordination by increasing the level of market transparency between firms through access to sensitive information on rivals'.[85] This can be the case, for example, if an upstream firm acquires a downstream firm, which is the main distributor for the former's rivals.[86] More importantly, in *Areva/Urenco*, the Commission applied Article 2(3), to analyse the risk of coordination between the parents in a market downstream to that of the joint venture, based on a number of factors, including increased scope for information exchange. These examples show that Article 2(3) can effectively catch all the situations targeted under Article 2(4).

The last argument in favour of the application of Article 101 may be that there may be a risk of coordination between the parents with respect to the joint venture's market, even in the absence of some of the conditions for a finding of collective dominance. The fact that each parent would have an incentive to align its pricing

[84] See 124 above.
[85] Commission Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings [2008] OJ C265/6, para 86.
[86] In the US, the FTC and the DOJ also acknowledge that such vertical mergers may enable the acquiring firm to access sensitive information of its rivals in a way that facilitates coordination. In various cases, the authorities entered into consent agreements including remedies avoiding such a risk. See eg *In re Martin Marietta Corp*, 117 FTC 1039 (1994); *In re Alliant Techsystems*, 119 FTC 440 (1995); *In re Lockheed Corp*, 119 FTC 440 (1995); *TRW Inc*, 63 Fed Reg 1866 (1998); *United States v Lockheed Martin* Corp, No 98-CV-00731 (1998)

policy to that of the joint venture may form a reason for this argument.[87] However, if this argument is accepted, this would mean that a partial integration of the parents is less permissible than their full-integration, and, thereby, would make Article 2(4) even more problematic.[88] In this regard, as explained in the subpart below, such an argument stands in opposition to the current policy, rather than justifying it.

In summary, there is no strong economic or legal justification to make a distinction between 'coordination' within the meaning of Article 2(4) and collective dominance within the sense of Article 2(3), in terms of applicable tests. Venit argues that the traditional application of Article 101 to the risk of coordination may be problematic, because the degree of market power required under Article 101(1) is normally lower than that under Article 2(3). He also adds that requiring the fulfilment of all the conditions of Article 101(3) may result in a very strict approach in this context.[89] The existing practice of the Commission appears to support Venit's argument, at least for some cases. In these cases, the Commission found a risk of coordination within the meaning of Article 2(4) without a detailed assessment such as that made under Article 2(3).[90] However, it cannot be stated that these cases represent the general approach of the Commission, because in some other cases, it extensively analysed the likelihood of coordination based on the same principles as those used in relation to collective dominance. This indicates that the Commission may, in practice, enjoy more discretion in analysing the risk of coordination with reference to Article 101. This approach obviously increases the uncertainty about the legality of joint ventures. In any case, the application of Article 101 seems to lead to some significant problems as to the assessment of coordination in respect of the joint venture's market, as explained below. All these factors call for a new approach under Article 2(4) and (5).

[87] John Temple Lang, 'International Joint Ventures under Community Law' in Barry E Hawk (ed), *Mergers & Acquisitions and Joint Ventures* (Juris Publishing 2004) 325-26.
[88] See III/A/2 and B/2 below.
[89] Venit (n 81) 531.
[90] See Chapter 3/V/B/2 above.

2. The Lesser the Degree of Integration the Stricter the Approach

As emphasised above, the Commission usually assumes that the joint venture and the parent firms form a single economic unit, and it assigns a single market share to them.[91] However, based on the text of Article 2(5) of the Merger Regulation, if at least two firms remain active in the joint venture's market, it also examines whether there would be a risk of coordination between the parent firms with respect to this market. Therefore, in the EU, the fact that the parent firms retain some business activities in the joint venture's market appears to basically function as an aggravating factor, which requires the assessment of the same economic situation under two different tests. This leads to a perception that a partial integration of two firms in a given market is more dangerous for competition, than their full-integration in the same market.

This approach differs from that adopted in the US in relation to partial integration. In the Collaboration Guidelines, the DOJ and the FTC imply that a partially integrated joint venture will be, in principle, permitted, if a full-integration of the parents with respect to the same market would be allowed.[92] The main rationale behind this approach is that if the parents continue to compete with each other or with the joint venture, the ability of the joint venture or the parents to increase prices would be less than in the event of full-integration.[93] In this regard, once the authorities find that a full-integration of the parents would raise anticompetitive concerns, they consider the likelihood of competition between the parents and the joint venture as a mitigating factor, based on the criteria listed in the Guidelines.[94]

---

[91] See Chapter 3/V/A/3 above.
[92] See Chapter 5/IV/B above.
[93] See Carl Shapiro and Robert D Wilig, 'On the Antitrust Treatment of Joint Ventures' (1990) 4 *Journal of Economic Perspectives* 113, 127-28; Thomas A Piraino, 'Beyond Per Se, Rule of Reason or Merger Analysis: A New Antitrust Standard for Joint Ventures' (1992) 76 *Minnesota Law Review* 1, 24; Richard Schmalensee, 'Agreement Between Competitors' in Thomas M Jorde and David J Teece, Antitrust, Innovation and Competitiveness (Oxford University Press 1992) 113; Michael S McFalls, 'The Role and Assessment of Classical Market Power in Joint Venture Analysis' (1998) 66 *Antitrust Law Journal* 651, 694; Helbert Hovenkamp, *Antitrust Law: An Analysis of Antitrust Principles and Their Application*, vol XIII *(*Aspen Law & Business 1999) 126.
[94] Collaboration Guidelines (n 51) sec 3.34. Similar factors are also mentioned by the Commission in the new Cooperation Guidelines. See Chapter 4/IV/A/2 above. However, these guidelines consider the presence of these factors only in order to show potential concerns resulting from horizontal cooperation. Therefore, it is very difficult to claim that they suggest the same analytical framework as

Considering that a partial integration of two firms in a given market cannot normally lead to a higher degree of market power than does their full-integration in the same market, it should not be expected, in principle that the former may raise more serious anticompetitive concerns than the latter. On this basis, the US approach generally seems to make more sense. This conclusion may be challenged, however, on the basis that full-integration may bring about more efficiencies than partial integration, which may make the former more procompetitive than the latter. This can be true, particularly if such a lenient standard is uniformly applied to a broad range of collaborations, including those involving no meaningful integration. This approach, in fact, appears to lead to some complications in the US.[95] Nevertheless, these concerns are unlikely to arise, if such a standard only applies to joint ventures which result in significant integration and are therefore treated as mergers. With regard to these joint ventures, such efficiency considerations can be incorporated into the analysis, as explained in the Horizontal Merger Guidelines, if they give rise to any anticompetitive effect.

Furthermore, it should not be forgotten that, as explained in the part below, any collusion between the parents as to their independent operations in the joint venture's market can also be addressed under Article 101 within the framework of Regulation 1/2003. This *ex post* tool may facilitate ensuring a more competitive market structure in the market than would exist in the case of full-integration. In this context, partial integration should basically lead to a more lenient approach to the formation of the joint venture, but to a stricter approach in relation to the operations of the parents afterwards.

In brief, the application of both Article 2(3) and Article 101 in relation to the markets of the joint venture, at least in theory, suggests a stricter approach to a partial integration of the parents than to their full-integration. This policy may encourage firms to fully integrate their operations in the market, even though the efficiencies in question may also be achieved through partial integration. This outcome is

---

the Collaboration Guidelines, in which the likelihood of competition between the parents and the joint venture is examined as a mitigating factor.

[95] See Chapter 5 above.

undoubtedly less desirable for competition, because in such cases the likelihood of competition between the parents is completely eliminated, while the degree of efficiencies achieved remains the same. Therefore, such a policy contradicts the policy that efficiencies which can be achieved by less restrictive alternatives cannot be taken into account in merger analysis.[96]

In any event, the application of both tests with regard to the joint venture's market often seems puzzling for the Commission, and thus makes it more complicated for the findings of the Commission's decisions to be meaningfully interpreted. Hence, a more pragmatic methodology should be used to analyse the impact of the joint venture on markets where it is intended to operate, based on the aforementioned approach to partial integration.

B- Proposed Approach

1. Applying Article 2(3) to the Risk of Coordination between the Parents

On the basis of the reasons above, the risk of coordination between the parent firms should be subject to the same test as used for the analysis of coordinated effects under Article 2(3). One may suggest that this objective can even be achieved under the current wording of Article 2(4) and (5), if the Commission adopts a clear and consistent approach to that effect. Venit seems to support this suggestion. He argues that 'the test under Article 2(4) should be the same as the test for evaluating oligopolistic dominance under Article 2(1) of the Merger Regulation'.[97] However, he does not clearly propose a change in the current wording of Article 2(4); rather, he posits that as far as Article 2(4) is concerned, Article 101 should apply in the same way as Article 2(3).[98] Actually, in many decisions, the Commission has already analysed the risk of coordination between the parents, based on the same principles applied to collective dominance. This may be considered as an indication that the current wording of Article 2(4) may allow the Commission to adopt the aforementioned approach to sort out the problems of the current policy. However,

[96] Horizontal Merger Guidelines (n 45) para 85.
[97] Venit (n 81) 533.
[98] ibid 533 and 545.

even though such a change in the practice of the Commission could improve the current situation in the EU, it would not completely preclude the need for replacing Article 101 with Article 2(3) as the applicable test under Article 2(4).

First of all, if Article 101 is retained as the applicable test, it is not guaranteed that the risk of coordination between the parent firms will be treated in the same way as coordinated effects. In some specific cases, the Commission may prefer not to do so, in order to oppose the joint venture more easily. Furthermore, the EU courts may take a different position in relation to the application of Article 101, if the clearance decision of the Commission for a joint venture is challenged by third parties.

Secondly, even if Article 101 were to be applied in the same way as Article 2(3), this could lead to some uncertainties and confusion about the application of Article 101 outside Article 2(4). Indeed, the principles adopted in respect of coordination under Article 2(4) could be considered applicable to all Article 101 cases. This could decrease the effectiveness of Article 101 in applying anticompetitive agreements. The reverse is also possible. Article 101 decisions taken within the framework of Regulation 1/2003 may affect the analysis under Article 2(4). In such cases, the Commission may find it difficult to decide how to incorporate these decisions into the analysis of coordination under Article 2(4).

These concerns are actually not trivial, considering that Article 101 may not be suitable to address all of the situations targeted at under Article 2(4). As explained above, Article 101(1) can cover information exchange between the parents through the joint venture, which constitutes a concerted practice.[99] However, as seen in *NC/Canal +/CDPQ/Bank America*,[100] even in the absence of information exchange, a joint venture may induce the parent firms to coordinate, due to its high value compared to those of their overall activities or of their activities in the candidate market for coordination. In such cases, the issue is not whether an agreement restricts competition, but whether there is a possibility that the parents may enter into an

[99] See 244 above.
[100] Case IV/M.1327 [1998].

agreement that would restrict competition.[101] Even though the joint venture agreement itself can be regarded as an agreement in the context of Article 101(1), this does not change the fact that Article 2(3) is inherently a more appropriate test to analyse such a possibility.

Moreover, it does not seem meaningful to apply Article 101(3) to coordination which is found to infringe Article 101(1). Such coordination can hardly bring about any agreement-specific efficiencies that can satisfy the efficiency and the indispensability conditions of Article 101(3). In fact, in various cases, the Commission itself did not find it necessary to make an assessment under Article 101(3), in order to conclude that the joint venture was caught by Article 2(4).[102] One may argue that this finding cannot constitute a basis for opposing the application of Article 101 to the risk of coordination, given the fact that the same practice is also adopted in relation to cartels. However, it should be remembered that, unlike cartels, which restrict competition by their object, the Commission treats the risk of coordination in joint venture cases, as a restriction by effect.[103] This difference may suffice to make such cartel-like treatment very problematic. Therefore, in addition to complicating the analysis of joint ventures under the Merger Regulation, this policy may give rise to confusion about the application of Article 101(3) outside Article 2(4).

All these negative implications of the application of Article 101 call for a legislative change to Article 2 of the Merger Regulation, which would provide Article 2(3) as the only applicable test for the risk of coordination between the parents. For this purpose, one option may be to completely remove paragraphs (4) and (5) from Article 2, and to explain, in recitals of the Regulation, that the risk of coordination between the parents will also be appraised in accordance with Article 2(3). Meanwhile, the Commission should make the necessary amendments to the Horizontal Merger Guidelines. In this context, the Commission can, in particular, extend the definition of horizontal mergers as far as joint ventures are concerned, in

[101] This finding also seems to be accepted by the US district court in the *Penn-Olin* case. In this decision, the court found that there was no evidence showing either actual or threatened collusion between the parents as to their independent operations in the nonchlorate markets, within the meaning of Section 1 of the Sherman Act. See Chapter 5/IV/D above.
[102] See Chapter 3/V/B/3 above.
[103] See 124-25 above.

order to include situations where the parents remain competitors in markets closely related to those of the joint venture.[104] Furthermore, the Guidelines may be improved by including specific considerations with respect to coordination outside the joint venture's market, based on the approach suggested below.[105]

2. A More Lenient Standard for Partial Integration

If the parent firms fully integrate their economic activities in the joint venture's market, the assessment of the joint venture in relation to this market will be essentially the same as that of amalgamations and acquisitions. However, if the joint venture only leads to a partial integration of its parents, this fact should be considered as a mitigating factor- as occurs in the US- rather than as an aggravating factor, as the current policy in the EU implies.

Accordingly, the Commission should firstly examine whether a full-integration of the parent firms in the relevant market would give rise to any coordinated or non-coordinated effect within the meaning of the Horizontal Merger Guidelines. If the answer is no, the Commission should clear the joint venture without any further assessment. If such an analysis reveals an anticompetitive concern, then the Commission should assess whether there would be any meaningful competition between the parents, which could eliminate this concern.

That said, it is acknowledged that the Commission's current practice which disregards any competition between the parents and the full-function joint venture is not completely erroneous. Indeed, in the vast majority of cases, the rational strategy for each parent will be to follow the same pricing policy as the joint venture, in order to avoid reducing the profits of the joint venture.[106] Where each parent fixes its prices

[104] See Chapter 2/III/B/1 above.
[105] See III/B/3 below.
[106] Walter J Mead, 'The Competitive Significance of Joint Ventures' (1967) 12 *Antitrust Bulletin* 819, 830; Edmund W Kitch, 'The Antitrust Economics of Joint Ventures' (1985) 54 *Antitrust Law Journal* 957, 962; Robert Pitofsky, 'A Framework for Antitrust Analysis of Joint Ventures' (1985) 54 *Antitrust Law Journal* 893, 899; Piraino, 'Beyond Per Se, Rule of Reason or Merger Analysis' (n 93) 65; McFalls (n 93) 679.

to those of the joint venture, the pricing policies of both parents will also be the same, even in the absence of any information exchange.[107]

However, the parent firms may be expected to compete against the joint venture as well as each other, only if the revenue generated from the joint venture is relatively small compared to that from their independent activities. In this regard, the larger the operations of the joint venture, the less likely it is that the parents will have the incentive to compete against it.[108] The parents' shareholding in the joint venture may also be a significant factor for the former to decide whether or not to compete against the latter.[109] If the joint venture has a parent which does not operate in the joint venture's market, this parent may block any business policy which is profitable for the parents that remain active in the market, but not for the joint venture itself.[110] Nonetheless, in most cases, if there has been a divergence of the pricing policies of the parent firms and the joint venture, the latter would not be formed in the first place, or would be terminated when the divergence arose.[111] Thus, even if the parents can generate more profits from their independent activities than those from the joint venture, mutual trust between them may prevent them from competing against the joint venture and each other.

If production joint ventures are included in the scope of the Merger Regulation due to a reform of the criterion under Article 3(4), some additional considerations may be taken into account. If the production joint venture amounts to the entire production capacity of the parents, the likelihood of competition between them should normally be ignored, because the joint venture would essentially determine the prices of the products in question.[112] If the parents retain some independent capacities, these would decrease the commonality of costs of the parents and, therefore, may enable them to compete separately in the market. However, in this scenario, mutual trust

[107] Robert Pitofsky, 'Joint Ventures under the Antitrust Laws: Some Reflections on the Significance of Penn-Olin' (1969) 82 *Harvard Law Review* 1007, 1034.
[108] Kitch (n 106) 962; Mead (n 106) 830.
[109] McFalls (n 93) 679.
[110] Joseph F Brodley, 'Joint Ventures and Antitrust Policy' (1982) 95 *Harvard Law Review* 1521, 1544-45.
[111] See Chapter 2/IV/D above.
[112] As mentioned above, if the product in question forms only an input to the final products of the parents, the input market should be viewed as a different market from that of the joint venture. See 232-33 above.

among the parents may decrease their incentive to effectively compete against each other.

Consequently, it may not be wrong to presume that there will be no meaningful competition between the parent firms and between them and the joint venture. Nonetheless, this presumption should be rebuttable based on evidence submitted by the parties and on other relevant economic factors. In this respect, the commitments given by the parties to increase the likelihood of competition, such as the setting up of firewalls between the parents and the joint venture, may play an important role in the rebuttal of the presumption.

It should be noted that even if evidence and commitments submitted by the parties indicates some likelihood of competition, this may not suffice to preclude the initial anticompetitive concern. In particular, if the market is conducive to coordination, it is unlikely that any likelihood of competition can prevent the parties being treated as collectively dominant in the market.

To sum up, partial integration deserves more lenient treatment than that currently applied in EU merger control. Therefore, even if the test under Article 2(4) is not changed, the risk of coordination in respect of the joint venture's market should be definitely excluded from the scope of Article 2(4) and (5). With respect to this market, instead of using the risk of coordination as an aggravating factor, the Commission should consider the likelihood of competition as a mitigating factor. Hence, partial integration can be, at least in theory, treated more permissively than full-integration.

3. A Familiar Approach to Coordination outside the Joint Venture's Market

As explained above, Article 2(3) should be the applicable test to the risk of coordination between the parent firms. In this context, coordination outside the joint venture's market should also be appraised according to the criteria for the analysis of collective dominance. With respect to these markets, coordination may become more

likely or stable, not as a result of a decrease in the number of players, but as a result of the creation of structural links between competitors. *Areva/Urenco*, in which the Commission applied Article 2(3) to the risk of coordination in a downstream market, forms a good example in this respect.[113] Below it is explained how the creation of a joint venture may facilitate or sustain coordination, having regard to the conditions for a finding of collective dominance set out in the *Airtours* and *Impala* decisions and in the Horizontal Merger Guidelines.[114]

a) Reaching the Terms of Coordination and Monitoring Deviations

The formation of a joint venture may, first of all, make it easier for firms to reach a common understanding by facilitating information exchange among them. In the Horizontal Merger Guidelines, the Commission also acknowledges that information exchange in the context of joint ventures may help firms to reach the terms of coordination more easily.[115]

In fact, meeting regularly in the decision-making bodies of the joint venture may enable the parents to exchange information in relation to their operations outside the joint venture's market and, thereby, to reach the terms of coordination without the risk of being detected by competition authorities.[116] This concern is more likely to arise if the parent firms and the joint venture have common directors.[117]

Information exchange directly related to the operation of the joint venture may also help firms to arrive at a common understanding, particularly if the parents remain competitors in a downstream or upstream market, and they substantially supply to or buy from the joint venture. In these cases, the parents may learn each other's production costs and output and, thus, may be able to regulate their individual output and price according to those of each other. However, if the supplies to, and purchases

[113] See Chapter 3/V/C above.
[114] See Chapter 3/V/A/4/a/bb above.
[115] Horizontal Merger Guidelines (n 45) para 47.
[116] Michael A Rabkin, 'Tactical Interdependence and Institutionalized Trust: The Unrecognized Risks of Joint Ventures among Competitors' (2009) 7 *DePaul Business and Commercial Law Journal* 63, 66 and 88-89.
[117] Brodley (n 110) 1548-50.

from, the joint venture amounts to a small portion compared to the total supplies and purchases of the parents, such information exchange is less likely to lead to a risk of coordination.

Information exchange among the parents may also increase the transparency of the market, and help the parents to monitor any deviation from the terms of coordination more easily.[118] In *Areva/Urenco*, for instance, the Commission held that the creation of the joint venture would increase transparency between the parents in relation to their independent operations in the downstream market, due to the information flows from the joint venture to its shareholders; and more particularly to the decisive role of ETC's board of directors, which was appointed by the parents.[119]

Its existing practice under Article 2(4) indicates that the Commission views information exchange as the primary concern that may contribute to coordination between the parent firms outside the joint venture's market. In this regard, in various decisions including *Areva/Urenco*, the Commission disregarded the risk of coordination on condition that firewalls were to be established to eliminate information flow between the parents and the joint venture.[120] This practice should generally be considered appropriate, because it allows the creation of procompetitive joint ventures, while removing coordination concerns raised by them. Nevertheless, the difficulty of monitoring the compliance of the parents with these behavioural commitments may still entail a risk that the joint venture could be used in the future for information exchange purposes. Therefore, if other market conditions are conductive to coordination, the Commission should be more careful in accepting and monitoring such commitments.

Besides facilitating information exchange, another way for a joint venture to help the reaching of a common understanding may be to increase the degree of symmetry

---

[118] Brodley (n 110) 1530-31; Pitofsky, 'A Framework for Antitrust Analysis of Joint Ventures' (n 88) 900; Howard H Chang, David S Evans and Richard Schmalensee, 'Some Economic Principles for Guiding Antitrust Policy Towards Joint Ventures' (1998) 1998 *Columbia Business Law Review* 223, 258-59. This risk is also recognised in the Horizontal Merger Guidelines. See Horizontal Merger Guidelines (n 45) para 51.
[119] *Areva/Urenco* (n 33) para 209.
[120] See 127-28 above.

between the parent firms.[121] This mainly occurs when the joint venture approximates the cost structures of the parents to each other, through achieving a significant commonality of costs.[122] In *Areva/Urenco*, the parties claimed that they would not reach a common understanding on the enriched uranium supply, given that they were very different firms such that Areva was an integrated supplier, active at various stages of the nuclear fuel cycle, whilst Urenco was only active in the manufacture of centrifuges and in uranium enrichment. The Commission refused this claim on the ground that the enrichment represented one of the more expensive stages in the nuclear fuel cycle.[123] In *Bertelsmann/Springer*,[124] however, the Commission found that the creation of a joint venture which would engage in the printing business would not result in a significant risk of coordination in the downstream markets for magazine publishing, due to the comparatively limited impact of the printing costs on the price of magazines.[125] This approach may explicitly be acknowledged in the Horizontal Merger Guidelines, as is made in relation to partial function joint ventures under the Cooperation Guidelines.

Lastly, firms may reach a common understanding on the terms of coordination more easily, if they have a sufficient level of mutual trust that leads each party to act according to these terms.[126] The long-term relationship of the parent firms within the context of the joint venture may enable them to know each other's business culture and, thus, to predict the potential behaviour of each other if they were to collude.[127] Moreover, joint ventures may increase the stability of the coordination, through institutionalising trust between the parents.[128] Indeed, in order to decrease the risk of being detected by competition authorities, firms often prefer to limit the number of their officers who are aware of the cartel. When these persons change, the ones who replace them may not be even informed about the on-going cartel or tacit coordination. In this respect, joint ventures may create an institutional memory which

[121] Horizontal Merger Guidelines (n 45) para 47.
[122] Commission Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements [2010] OJ C11/1, paras 35-37.
[123] *Areva/Urenco* (n 33) para 201.
[124] Case COMP/M.3178 [2005].
[125] ibid para 167.
[126] Rabkin (n 116) 74-75.
[127] Broadley (n 110) 1530-31.
[128] Rabkin (n 116) 78-82.

may enable the parents to internalise those competitive strategies, thereby prolonging the life of the coordination.[129] The Horizontal Merger Guidelines recognise that participation in joint ventures may help in aligning incentives among the coordinating firms.[130] The contribution of the joint venture to the trust between the parents may be taken into account in this context. However, given the fact that it is extremely difficult to prove such an effect, this ground alone should seldom be used to find that coordination may become likely.

b) Forming a Punishment Mechanism

Sharing risks and costs which neither parent could bear individually is normally viewed to be a procompetitive aspect of joint ventures. On the other hand, it may also serve as a factor aggravating the risk of coordination between parent firms. In other words, substantial on-going risks and costs inherent in the joint operation may enable the parents to utilise the joint venture as a punishment mechanism, for the purpose of sustaining any coordination outside the market of the joint venture.[131]

The joint venture may be considered as a credible punishment mechanism, if the loss from its failure due to the punishment would make any deviation unprofitable.[132] In this regard, the greater the value of the joint venture to the parents, the more likely it will form a credible punishment threat. Additionally, as pointed out in *Areva/Urenco*, the joint venture may serve as a retaliation tool, if the decisions of the joint venture on its sales to, or purchases from, one parent firm require the consent of the other parent.[133] This may be the case in particular if the management of the joint venture is not sufficiently independent from those of the parents.[134]

The Horizontal Merger Guidelines provide that 'the retaliation could take many forms, including cancellation of joint ventures or […] selling of shares in jointly

[129] ibid 82-83.
[130] Horizontal Merger Guidelines (n 45) para 48.
[131] Rabkin (n 116) 90-92. See also Ian Ayres, 'How Cartels Punish: Structural Theory of Self-Enforcing Collusion' (1987) 87 *Columbia Law Review* 295, 310.
[132] Ayres (n 131) 311; Russell W Cooper and Thomas W Ross, 'Sustaining Cooperation with Joint Ventures' (2009) 25 *Journal of Law, Economics and Organization* 31.
[133] See 224 above.
[134] Rabkin (n 116) 66.

owned companies'.[135] In line with this approach, the Commission should analyse whether the formation of joint ventures may facilitate coordination in other markets by creating a means of retaliation to punish deviations. Actually, the Commission usually considers the high value of the joint venture to the parents in analysing the likelihood of coordination in this sense, under Article 2(4).[136] In *NC/Canal +/CDPQ/Bank America*, for example, it explained that the fact that the success of the joint venture was very crucial to one parent may be used by the other parent as a retaliation mechanism, if the former abstains from coordinating.[137]

Having said that, it may be questionable to presume that if the economic activity of a joint venture is highly valuable to its parents, this is sufficient to constitute a credible punishment tool and, thereby, to sustain the coordination. Considering that the failure of the joint venture may also cause significant loss to the punishing parent as a shareholder,[138] such a punishment may be more costly than responding passively to the deviation. Nevertheless, through participating in a joint venture, firms forgo some control over their activities in favour of other firms, which usually indicates strong trust between them.[139] Vigorous competition between these firms may weaken such trust and, ultimately, may result in the dissolution of the joint venture. If the parents perceive that there is such a risk, this may be sufficient to deter them from competing effectively against each other outside the joint venture's market.

IV. The Application of the Single Economic Unit Doctrine in Joint Venture Cases: More Certainty through More Consistency

As they related to the centre of the gravity of this thesis, the parts above explored the negative implications of the current approach to the formation of joint ventures in EU merger control, and proposed solutions in this respect. However, in order to complement these parts and show the whole picture about joint ventures treated as mergers, this part first presents the uncertainties about the treatment of the operation of legitimately formed joint ventures under Article 101. Second, it proposes an

[135] Horizontal Merger Guidelines (n 45) para 55.
[136] See Chapter 3/V/B/2/a above.
[137] *NC/Canal +/CDPQ/Bank America* (n 100) para 33.
[138] Ayres (n 131) 311 fn 76.
[139] See Chapter 2/IV/D/2 above.

approach which could eliminate these uncertainties and, at the same time, would be consistent with the proposed approaches in the previous parts.

A- Problem: When Are They the Same?

With respect to the operation of legitimately established joint ventures, the application of the single economic unit doctrine leads to two questions: (i) does the conduct of a joint venture amount to unilateral conduct subject to Article 102, or an agreement between its parents within the meaning of Article 101?; and (ii) does a joint venture and its parent(s) form a single economic unit under Article 101 in respect of an agreement between them, and of liability for a competition law infringement?

The current EU policy in relation to the first issue does not appear problematic. As explained above, in the US, it is highly controversial whether the conduct of fully-integrated joint ventures is exempted from section 1 of the Sherman Act.[140] However, in the EU, it is not disputed in principle that the acts and decisions of full-function joint ventures form unilateral conduct and, thereby, fall outside Article 101.[141] This policy creates significant certainty about the legality of the conduct of these joint ventures, particularly compared to the US approach to the conduct of fully-integrated joint ventures.

Furthermore, in the EU, although the conduct of partial function joint ventures essentially falls within Article 101, it is not subject to a separate analysis under Article 101 if it is ancillary to the operation of the joint venture.[142] This approach to partial function joint ventures may be considered to be relatively stricter than the aforementioned approach to full-function joint ventures. However, considering that the acts and decisions of these joint ventures falling within its operational scope normally escape further scrutiny under Article 101, such an approach does not seem to lead to substantial uncertainties for the analysis of their legitimate conduct.

[140] See Chapter 5/V above.
[141] See 138 above.
[142] See Chapter 4/VI above.

In terms of legal certainty, this approach to the conduct of partial function joint ventures in the EU is, in any case, more praiseworthy than the US approach to the conduct of partially integrated joint ventures. The latter is stricter than the former from two perspectives. Firstly, for a restriction to be ancillary, US competition law requires it to be reasonably related to, and necessary for, 'the attainment of the procompetitive effects' of the main operation. In EU competition law, however, it is sufficient if the restriction is only directly related to, and necessary for, 'the implementation' of the main operation. Secondly, as mentioned above, if the main operation is allowed, in the EU, ancillary restraints are exempted from a separate analysis under Article 101, while in the US, they are still subject to a separate rule of reason analysis.

Bearing all these explanations in mind, it is possible to state that the current EU approach with regard to the treatment of the conduct of joint ventures, in general, provides sufficient certainty for the operation of joint ventures, through being consistent with the approach to the formation of joint ventures. Nonetheless, it is difficult to come to the same conclusion in respect of the second issue, ie whether a full-function joint venture forms a single economic unit with its parents (i) in finding the parent firms liable for a competition infringement by the joint venture; and (ii) in determining the applicability of Article 101 to an agreement between the joint venture and its parent(s). Addressing this issue is inherently more challenging, due to the fact that the traditional application of the single economic unit doctrine in relation to wholly-owned subsidiaries does not completely fit the analysis of the relationship between joint ventures and their parents. The contradiction between the joint control requirement and the assumption that full-function joint ventures are autonomous of their parents theoretically seems to aggravate this inherent problem.[143]

As explained in Chapter 3, the Commission's practice so far fails to establish a clear and coherent position in relation to the applicability of the single economic unit doctrine in joint venture cases.[144] In the original draft of the new Cooperation Guidelines, the Commission made a proposal to provide such clarity and coherency;

[143] See II/A/1 above.
[144] See Chapter 3/VI above.

however it did not retain it in the final text, following the 2010 public consultation.[145] The judgements of the General Court in the *El du Pont* and *Dow Chemical* cases give the most recent indications about the applicability of Article 101 to relations between a full-function joint venture and its parents. The judgements posit that the parents may be held liable for an infringement of the competition rules by a full-function joint venture. Nonetheless, it is not certain whether this approach would be approved by the ECJ in the appeal. More importantly, it is very doubtful whether such an approach would also apply with respect to agreements between a full-function joint venture and its parent(s). Therefore, in the EU, there is a need for more clarity and consistency with regard to the question of whether a joint venture and its parents form parts of the same undertaking under Article 101.

Jones, in her very recent article, makes some suggestions addressing this question. She generally opposes the extension of the concept of undertaking to situations of joint control, on the grounds that this could enable firms to use joint ventures as a vehicle to escape Article 101.[146] In this context, she firstly suggests that the conduct of the joint venture or its parents should be considered to fall outside Article 101 only if it is within the scope or core activity of the joint venture, ie inherent to the working and operation of the joint venture.[147] However, considering that this approach could lead to complex debates about what conduct can be viewed as falling within the scope or core activity of the joint venture, she states that '[a] better approach, therefore, may be to accept a narrower theory of an economic unit, confining it to parent/subsidiary relationships where the former has sole control over the latter'.[148]

Jones accepts that such an approach could bring legitimately established joint ventures within the scope of Article 101. However, she claims that this would not be a significant problem, because the fact that such conduct falls under Article 101 does not necessarily mean that it will be prohibited, but that it will be assessed 'in the

[145] ibid.
[146] Alison Jones, 'The Boundaries of an Undertaking in EU Competition Law' (2012) 8 *European Competition Journal* 301, 321-25.
[147] ibid 318, 325 and 329-30.
[148] ibid 330.

legal and economic context in which it occurs including the legitimate goals and objectives pursued by the joint venture'.[149]

Jones's suggestions do not, however, offer clarity about the analysis of the operation of joint ventures in the EU, but rather complicate the current situation further. Her first suggestion seems to be influenced by the debate in the US, which arose after the Supreme Court's *Dagher* and *American Needle* decisions.[150] Nevertheless, the distinction between core and non-core activities is hardly relevant to the above discussion in EU competition jurisprudence, because this distinction mainly concerns the question of whether the conduct of joint ventures is exempted from Article 101, which, as explained above, has been largely settled in the EU. Therefore, the adoption of the first suggestion would unnecessarily bring the uncertainties and debates in the US into the EU. The adoption of the second suggestion, however, would lead to an even more chaotic situation in the EU for the business community as well as the enforcers of Article 101, given that it may empower national competition authorities and national courts to decide the legality of the creation of joint ventures which fall under the Merger Regulation.

The current uncertain legal environment in the EU with regard to the application of the single economic unit doctrine in joint venture cases should be sorted out by the adoption of a general policy, which provides sufficient clarity, while allowing the consideration of the specific facts of each case, and which is consistent in itself and with the rules applicable to the creation of joint ventures. The following subpart proposes an approach based on these considerations.

B- Proposed Approach

As explained above, in EU competition law, the analysis of the conduct of joint ventures does not involve significant problems, and, therefore, does not require a dramatic change. In the case of a shift from the full-functionality criterion, however, such a policy should be extended to other joint ventures falling within the Merger

[149] ibid.
[150] See Chapter 5/V above.

Regulation. Given the lenient treatment of ancillary restraints, this proposal implies only a minor change.

With regard to the issue of whether the joint venture and the parents constitute a single economic unit under Article 101, however, a clearer approach should be achieved by ensuring its consistency with the proposed approaches in the previous parts of this chapter. In this regard, it should be accepted in principle that a joint venture forms a single undertaking with each of its parents, due to the fact that the latter enjoys joint control over the former; in other words, both are under common control in the context of the single economic unit doctrine.[151] The shift from the current autonomy-based criterion to an integration-based criterion would help the application of this principle, through clearly removing the terminological problem about the autonomy of joint ventures.

Nonetheless, it should be noted that, in any case, the parents cannot be considered to belong to the same undertaking, because they are not under common control. Hence, any agreement involving a joint venture and at least two parents should be regarded as subject to Article 101. Agreements involving the joint venture and only one parent, on the other hand, should fall outside Article 101, provided that they do not amount to collusion between the parent firms. Such a policy would be in line with the approach of the Commission to disregard the risk of coordination between the joint venture and one parent, as long as this coordination is not 'an instrument for producing or reinforcing the coordination between the parent firms'.[152] This policy could also substantially eliminate the risk that joint ventures are used by firms to shield any anticompetitive collusion from Article 101 scrutiny. Therefore, it would also justify the adoption of a more lenient approach to partial integration under the Merger Regulation, by providing an *ex post* tool to maintain competition between the parents in the joint venture's market.[153]

The application of such a principle should be determined on a case-by-case basis. For example, a horizontal agreement between a joint venture and one of its parents

[151] See 138 above.
[152] See 86 and 125-26 above.
[153] See III/A/2 above.

should normally be considered to fall within the scope of Article 101, where two parents are competing in the market of the joint venture. However, such an agreement should in principle be treated as unilateral conduct falling within Article 102, if there is no horizontal overlap between the parents in respect of the joint venture's market. This should also be the case in relation to vertical agreements between the joint venture and one of the parents, to the extent that it does not facilitate collusion among the parent firms in markets vertically related to that of the joint venture. This approach is essentially suggested for joint ventures that fall under the Merger Regulation. Nevertheless, it may also apply in the context of other joint ventures, as long as they are structurally separable from their parent firms.

With regard to the liability issue, as emphasised by the General Court in *El du Pont* and *Dow Chemical*, the parent firms should be, in principle, responsible for the anticompetitive behaviours of the joint venture, just as if it was a wholly-owned subsidiary. This should be the case, in particular, if the parent has decisive influence over the appointment of managers or other issues relating to day-to-day operations. On the other hand, if one parent firm has only limited veto rights which give the ability to influence the day-to-day operations of the joint venture to a lesser extent, it may be necessary to make further scrutiny of whether such a parent actually exercised decisive influence over the conduct at issue. This may be the case, for example, if one parent effectively controls the day-to-day operations of the joint venture, while the other parent has only veto rights on decisions concerning the major investments. In such situations, the Commission and the courts should consider more seriously the evidence put forward by the latter parent to show that it did not decisively influence the infringement by the joint venture in question.

V. Concluding Remarks

Based on the implications of the analysis in the previous chapters of the thesis, this chapter identified the problems with the appraisal of joint ventures under the current EU merger control regime, and proposed solutions in order to provide a more coherent and integrated approach to joint ventures, which includes less ambiguities and complications. In this context, the proposed approach firstly provides that, as in

the US, the extent of integration among the parents, instead of the autonomy of the joint venture, constitutes the core element of the criterion which determines joint ventures that will be treated as mergers. However, unlike the full-integration criterion used in the US, the proposed criterion only requires a significant integration of the parties' economic activities in the market, which does not necessarily amount to their full-integration. The adoption of such an integration-based criterion could eliminate the ambiguity regarding the autonomy of joint ventures, and could extend the scope of the Merger Regulation particularly to partial function production joint ventures.

Secondly, the proposed approach refines the appraisal of joint ventures under the Merger Regulation. It suggests that, like coordinated effects, the risk of coordination between the parent firms should be analysed with reference to Article 2(3) of the Merger Regulation, which forms a more suitable test than that under Article 101 for this purpose. In line with this change, if the parents retain some activities in the joint venture's market, according to the proposed approach, this fact is to be considered as a mitigating factor, which, at least in theory, implies a more lenient approach to partial integration than that to full-integration, as is in the US.

Finally, the proposed approach introduces more clarity about the application of the single economic unit doctrine with respect to the operation of legally established joint ventures, while ensuring its consistency with the proposals above. Accordingly, in order for an agreement between a joint venture and its parent to fall outside Article 101, the agreement should not lead to collusion between the parents in respect of their independent activities. As regards liability for the conduct of the joint venture, however, the general rule should be to impute the conduct to the parents, although this may exceptionally be softened according to the scope of the parents' veto rights over the joint venture's operation.

CHAPTER 7
CONCLUSION

This thesis critically examined the substantive approach to joint ventures under the EU merger control regime. The thesis bore in mind that it was dealing with one of the most intricate and least understood fields of competition law. Therefore, it firstly defined the concept of joint venture, to clarify the scope of the research. In addition, it explained the types of joint ventures and their economic role as a business model, in order to provide more information about the nature of this phenomenon, and to show the importance of researching and providing a proper competition law approach in this respect.

With these explanations about the conceptual and economic aspects of joint ventures in mind, this thesis elaborately investigated how full-function joint ventures were defined and appraised in EU merger control. The thesis also exposed the analysis of partial function joint ventures under Article 101 TFEU, in particular, to reveal how this analysis differs from that of full-function joint ventures. Furthermore, given its strong connection with the analysis of the formation of joint ventures, the thesis explained how the conduct and operation of joint ventures were treated in the EU. To give a comparative perspective, the thesis also described the analysis of joint ventures in the US regime.

The overall assessment of all of the aforementioned analyses and explanations indicates some problems with the current approach to joint ventures in EU merger control. That said, it is acknowledged that the complicated nature of joint ventures itself makes them difficult to tackle under competition law. Indeed, it is hardly possible to adopt general rules in relation to joint ventures, which can apply properly to all individual cases. A case-by-case approach, however, has the potential to lead to an uncertain legal environment for these operations, something which is partly the case in the US regime. In any event, it does not seem possible to adopt such a case-by-case approach in the EU with regard to many issues, due to the procedural rules applicable to mergers. Therefore, it is safe to state that whichever approach was

adopted for joint ventures in EU merger control, it would lead to some complications and uncertainties.

Nonetheless, in the EU, the problems inherent to the complicated nature of joint ventures appear to be aggravated, due to inconsistent approaches adopted in relation to the same issue in different contexts. This inconsistency has particularly existed in relation to how to approach the relationship between the joint venture and its parents in the three phases of analysis, which are: (i) determining which joint ventures should be treated as mergers; (ii) appraising the effect of these joint ventures on competition; and (iii) analysing the conduct and operation of legitimately established joint ventures.

In the first phase, for a joint venture to be full-function and fall under the Merger Regulation, it is required to be autonomous of its parents. This condition firstly contradicts the joint control requirement, and also results in unjustifiable differences between the approaches to acquisitions of sole control and those of joint control, in deciding the scope of the Merger Regulation. Secondly, it contradicts the Commission's practice, which presumes that the joint venture and the parents would align their competitive behaviour with each other, in analysing the effects of these joint ventures under the Merger Regulation. Thirdly, the assumed autonomy of full-function joint ventures contradicts, or at least complicates, the application of the single economic unit doctrine in relation to the operation of these joint ventures. In any case, considering that, as also acknowledged in the US, the extent of integration essentially characterises the structural aspects of joint ventures, such an autonomy-based criterion does not seem compatible with their economic nature, and excludes some joint ventures, particularly partial function production joint ventures, from the scope of the Merger Regulation.

Another inconsistency has been observed with respect to the analysis of the risk of coordination between the parent firms under the Merger Regulation. Although 'coordination' under Article 2(4) basically refers to the same economic situation as 'coordinated effect', the former is subject to Article 101, which allows the Commission to apply a stricter approach than is applied to the latter under Article

2(3). Given that Article 101 also applies to the risk of coordination in relation to the joint venture's market, such a policy seems to imply a stricter approach to partial integration than to full-integration. Moreover, it complicates the analysis of joint ventures in a way that makes it difficult to draw the correct conclusions on the general application of Article 101 and Article 2(3), and on their specific application in the context of joint ventures.

This thesis considered all of these aspects of the current EU policy, which contribute to the problems specific to the nature of joint ventures, and aimed to propose a more coherent and integrated policy, which would provide pragmatic solutions based on the principles that would be the most compatible with the economic nature of joint ventures and with the general principles of EU competition law; and which would ensure consistency in the application of these principles in the different phases of analysis mentioned above.

In this regard, the thesis firstly proposed a shift from the autonomy-based full-functionality criterion to an integration-based criterion, which, unlike the criterion used in the US, does not necessarily require a full-integration of the parent firms in the market. This criterion would not require an assumption about whether the joint venture would be autonomous of the parents, and it would therefore eliminate the risk of contradiction in approaching the competitive relationship between the joint venture and the parents under both the Merger Regulation and Article 101. It would also allow the scope of the Merger Regulation to be extended particularly to partial function production joint ventures and, thus, preclude inconsistencies and uncertainties resulting from the current policy in this respect.

Second, the thesis proposed that the risk of coordination between the parent firms should also be analysed under Article 2(3), rather than Article 101. This policy would prevent the application of a stricter test to these effects, which could not be justified given their overlap with coordinated effects. It would also eliminate any confusion regarding the general application of Article 101. Most importantly, such a policy would enable the Commission to approach partial integration more permissively than full-integration, as takes place in the US. In this context, the thesis

suggested that, if the parents retained activities in the joint venture's market, the Commission should consider the likelihood of competition between the parents and the joint venture as a mitigating factor. However, considering that, in most cases, the parents would not compete against each other in the joint venture's market, the thesis posited that it would be a more pragmatic approach to establish a rebuttable presumption in this respect.

In order to produce a more integrated policy, the thesis also proposed an approach to the application of the single economic unit doctrine with regard to the operation of joint ventures which have been cleared under the Merger Regulation. This approach provides that an agreement between a joint venture and one of its parents should fall outside Article 101, if it does not lead to collusion between the parent firms. It also suggests that both parents should be, in principle, held liable for an infringement of competition rules by the joint venture. Such an approach would increase legal certainty about the analysis of the operation of joint ventures treated as mergers, by ensuring its consistency with the proposals above.

In short, the complicated nature of joint ventures makes it impossible to give a perfect answer to the question of how joint ventures should be analysed under the merger control rules. Nevertheless, this thesis showed that the current EU policy in this respect could be improved significantly by adopting a more integrated policy which ensured consistency between the principles applied to joint ventures in different contexts; and also their consistency with the general rules of EU competition law and with economic theories. This proposed policy would offer the best possible solution in relation to the analysis of joint ventures in EU merger control, although this analysis would, in general, continue to be one of the most problematic areas of competition law.

BIBLIOGRAPHY

Books

ABA, *Joint Ventures: Antitrust Analysis of Collaborations among Competitors* (ABA Publishing 2006)

ABA, *Antitrust Law Developments* (6th edn, ABA Publishing vol 1 2007)

ABA, *Mergers and Acquisitions: Understanding the Antitrust Issues* (3rd edn, ABA Publishing 2008)

Areeda PE and Hovenkamp H, *Antitrust Law: An Analysis of Antitrust Principles and Their Application*, vol II (3rd edn, Aspen Publishers 2007)

Areeda PE and Hovenkamp H, *Antitrust Law: An Analysis of Antitrust Principles and Their Application*, vol V (Aspen Publishers 2003)

Areeda PE, Hovenkamp H and Solow JL, *Antitrust Law: An Analysis of Antitrust Principles and Their Application*, vol IV (2nd edn, Aspen Publishers 2006)

Areeda PE, Hovenkamp H and Solow JL, *Antitrust Law: An Analysis of Antitrust Principles and Their Application*, vol IVa (Aspen Publishers 2006)

Bishop S and Walker M, *The Economics of EU Competition Law: Concepts, Application and Measurement* (3rd edn, Sweet & Maxwell 2010)

Cook J and Kerse C, *EC Merger Control* (5th edn, Sweet & Maxwell 2009)

Dabbah MM, *International and Comparative Competition Law* (Cambridge University Press 2010)

Downs MP, *The Notice concerning the Assessment of Cooperative Joint Ventures pursuant to Article 85 of the EEC Treaty: An Assessment* (Leuven University Press 1995)

Ehlerman CD and Atanasiu I (eds), *European Competition Law Annual 2000: The Modernisation of EC Antitrust Policy* (Hart Publishing 2001)

Faull J and Nikpay A (eds), *Faull & Nikpay: The EC Law of Competition* (2nd edn, Oxford University Press 2007)

Fine FL, *Mergers and Joint Ventures in Europe: The Law and Policy of the EEC* (2nd edn, Graham & Trotman/Martinus Nijhoff 1994)

Gavil AI, Kovacic WE and Baker JB, *Antitrust Law in Perspective: Cases, Concepts and Problems in Competition Policy* (Thomson West 2002)

Goyder DG, Goyder J and Albors-Llorens A, *Goyder's EC Competition Law* (5th edn, Oxford University Press 2009

Harrigan KR, *Strategies for Joint Ventures* (Lexington Books 1985)

Hovenkamp H, *Antitrust Law: An Analysis of Antitrust Principles and Their Application*, vol XIII (Aspen Law & Business 1999)

Hovenkamp H, *Federal Antitrust Policy*: *The Law of Competition and Its Practice* (4th edn, West Publishing 2011)

Iatrou K and Oretti M, *Airline Choices for the Future: From Alliances to Mergers* (Ashgate Publishing 2007)

Jansson H, *International Business Strategy in Emerging Country Markets: The Institutional Network Approach* (Edward Elgar Publishing 2008)

Jones A and Sufrin B, *EU Competition Law: Text, Cases, and Materials* (4th edn, Oxford University Press 2011)

Kekelekis M, *The EC Merger Control Regulation: Rights of Defence* (Kluwer Law International 2006)

Kleymann B and Seristo H, *Managing Strategic Airline Alliances* (Ashgate Publishing 2004)

Kokkoris I, *Merger Control in Europe: The Gap in the ECMR and National Merger Legislations* (Routledge 2011)

Korah V, *An Introductory Guide to EC Competition Law and Practice* (9th edn, Hart Publishing 2007)

Lindsay A and Berridge A, *The EU Merger Regulation: Substantive Issues* (3rd edn, Sweet & Maxwell 2009)

Mangum GL, Kim Y and Tallman SB, *Transnational marriages in the Steel Industry: Experience and Lessons for Global Business* (Praeger 1996)

Miller RR, Glen JD, Jaspersen FZ and Karmokolias Y, *International Joint Ventures in Developing Countries: Happy Marriages?* (The World Bank and International Finance Corporation 1996)

Navarro Varona E, Font Galarza A, Folguera Crespo J and Briones Alonso J, *Merger Control in the European Union: Law, Economics and Practice* (2nd edn, Oxford University Press 2005)

Odudu O, *The Boundaries of EC Competition Law: The Scope of Article 81* (Oxford University Press 2006)

OECD**,** *Competition Policy and Joint ventures* (OECD 1986)

Oppenheim SC, Weston GE and McCarthy JT, *Federal Antitrust Laws: Cases, Text, and Commentary* (4th edn, West Publishing 1981)

Ortiz Blanco L (ed), *EC Competition Procedure* (2nd edn, Oxford University Press 2006)

Schwalbe U and Zimmer D, *Law and Economics in European Merger Control* (Oxford University Press 2009)

Stuckey JA, *Vertical Integration and Joint Ventures in the Aluminum Industry* (Harvard University Press 1983)

Van Bael I and Bellis JF, *Competition Law of The European Community* (5th edn, Wolters Kluwer 2010)

Whish R and Bailey D, *Competition Law* (7th edn, Oxford University Press 2012)

Book Chapters

Fox EM, 'US and EU Competition Law: A Comparison' in Edward M Graham and J David Richardson (eds), *Global Competition Policy* (Peterson Institute 1997) 339-54

Hawk BE and Denaeijer N, 'The Development of Articles 81 and 82 EC Treaty: Legal Certainty' in Claus Dieter Ehlerman and Isabela Atanasiu (eds), *European Competition Law Annual 2000: The Modernisation of EC Antitrust Policy* (Hart Publishing 2001)

Hawk BE and Huser HL, '"Controlling" the Shifting Sands: Minority Shareholdings under EEC Competition Law' in Barry E Hawk (ed), *Mergers & Acquisitions and Joint Ventures* (Juris Publishing 2004)

Lang JT, 'International Joint Ventures under Community Law' in Barry E Hawk (ed), *Mergers & Acquisitions and Joint Ventures* (Juris Publishing 2004)

Leitao Marques MM and Abrunhosa A, 'Cooperative Networking: Bridging the Cooperation-Concentration Gap' in Hans Ullrich (ed), *The Evolution of European Competition Law: Whose Regulation, Which Competition* (Edward Elgar Publishing 2006)

Meiners BR and Sullivan KR, 'Merger Analysis: SLC versus Dominance' in Gotz Drauz and Michael Reynolds (eds), *EC Merger Control A major Reform in Progress* (Richmond 2003)

Monti M, 'Keynote Address: Merger Control in the European Union- A Radical Reform' in Gotz Drauz and Michael Reynolds (eds), *EC Merger Control: A major Reform in Progress* (Richmond 2003)

Oxley JE and Silverman BS, 'Inter-firm Alliances: A New Institutional Economic Approach' in Eric Brousseau and Jean-Michel Glachant (eds), *New Institutional Economics: A Guide Book* (Cambridge University Press 2008)

Schmalensee R, 'Agreement Between Competitors' in Thomas M Jorde and David J Teece, *Antitrust, Innovation and Competitiveness* (Oxford University Press 1992)

Siragusa M and Rizza C, 'Joint Ventures and Cooperation between Undertakings' in Valentine Korah (ed), *Competition law of the European Community*, vol 2 (2nd edn, Lexis Publishing 2001)

Venit J, 'The Treatment of Joint Ventures under the EC Merger Regulation- Almost through the Thicket' in Barry E Hawk (ed), *Mergers & Acquisitions and Joint Ventures* (Juris Publishing 2004)

Woolich A, 'Joint Ventures in the European Union' in Martin Mankabady (ed), *Joint ventures in Europe* (3rd edn, Tottel Publishing 2008)

Journal Articles

———, 'Clayton Act Section 7 Applicable to Corporate Joint Ventures' (1965) 49 *Minnesota Law Review* 325

———, 'Joint Ventures and Section 7 of the Clayton Act' (1962) 14 *Stanford Law Review* 777

———, 'Section 7 of the Clayton Act: A Legislative History' (1952) 52 *Columbia Law Review* 766

ABA, 'The Per Se Rule' (1969) 38 *Antitrust Law Journal* 731

Armani EM, 'Alitalia-KLM: A New Trend in Assessing Airline Alliances?' (1999) *European Commission Competition Policy Newsletter* No 3

Ayres I, 'How Cartels Punish: Structural Theory of Self-Enforcing Collusion' (1987) 87 *Columbia Law Review* 295

Baker DI, 'Compulsory Access to Network Joint Ventures under the Sherman Act: Rules or Roulette?' (1993) 1993 *Utah Law Review* 999

Balto DA, 'Networks and Exclusivity: Antitrust Analysis to Promote Network Competition' (1999) 7 *George Mason Law Review* 523

Balto DA, 'The Rule of Reason: Tension in the Law of Joint Ventures' (2006) 1526 *Practice Law Institute / Corporate Law and Practice Course Handbook Series* 181

Banks K, 'Mergers and Partial Mergers under EEC Law' (1987) 11 *Fordham International Law Journal* 255

Barrett DS, 'The European Commission's Antitrust Analysis of High-Technology Joint Ventures and Strategic Alliances: A Diverging Analysis?' (1999) 12 *Transnational Lawyer* 475

Bensaid B, Encoaua D and Winckler A, 'Competition, Cooperation and Mergers: Economic and Policy Issues' (1994) 38 *European Economic Review* 637

Berghoff JC, 'Antitrust Aspects of Joint Ventures' (1964) 9 *Antitrust Bulletin* 231

Billiet P, 'Situating Cooperative R&D Joint Ventures between the Need to Innovate and Innovation-Related Competition Rules' (2009) 11 *European Journal of Law Reform* 1

Bishop S and Lofaro A, 'Assessing Unilateral Effects in Practice Lessons from GE/Instrumentarium' (2005) 26 *European Competition Law Review* 205

Bork RH, 'Ancillary Restraints and the Sherman Act' (1959) 15 *ABA Antitrust Section* 211

Bork RH, 'The Rule of Reason and the Per Se Concept: Price Fixing and Market Division' (1966) 75 *Yale Law Journal* 373

Brannon L and Bradish K, 'The Revised Horizontal mergers: Can the Courts Be Persuaded?' (2010) 10 *Antitrust Source* 1

Bresnahan TF and Salop SC, 'Quantifying the Competitive Effects of Production Joint Ventures' (1986) 4 *International Journal of Industrial Organization* 155

Bright C, 'EU Competition Law Policy: Rules, Objectives and Deregulation' (1996) 16 *Oxford Journal of Legal Studies* 535

Brodley JF, 'The Legal Status of Joint Ventures under the Antitrust Laws: A Summary Assessment' (1976) 21 *Antitrust Bulletin* 453

Brodley JF, 'Joint Ventures and Antitrust Policy' (1982) 95 *Harvard Law Review* 1521

Brunet E, 'Antitrust Summary Judgement and the Quick Look Approach' (2009) 62 *SMU Law Review* 493

Burnside A and Crossley H, 'Cooperation in Competition: A New Era?' (2005) 30 *European Law Review* 234

Carlton DW and Klamer JM, 'The Need for Coordination among Firms, with Special Reference to Network Industries' (1983) 50 *University of Chicago Law Review* 446

Carter WA, 'The Clayton Act, Original Section 7: Re-Examination and Reappraisal' (1963) 8 *Antitrust Bulletin* 187

Caves DW, Christensen LR and Tretheway MW, 'Economies of Density versus Economies of Scale: Why Trunk and Local Service Airline Costs Differ' (1984) 15 *RAND Journal of Economics* 471.

Chang HH, Evans DS and Schmalensee R, 'Some Economic Principles for Guiding Antitrust Policy towards Joint Ventures' (1998) 1998 *Columbia Business Law Review* 223

Chavez JA, 'Joint Ventures in the European Union and the U.S.' (1999) 44 *Antitrust Bulletin* 959

Chen Z and Ross TW, 'Cooperating Upstream While Competing Downstream: A Theory of Input Joint Ventures' (2003) 21 *International Journal of Industrial Organization* 381

Chik WB and Tiwari S, 'Legal Implications of Airline Cooperation: Some Legal Issues and Consequences Arising from the Rise of Airline Strategic Alliances and Integration in the International Dimension' (2001) 13 *Singapore Academy of Law Journal* 296

Clanton DA, 'Horiontal Agreements, the Rule of Reason, and the General Motors-Toyota Joint Venture' (1984) 30 *Wayne Law Review* 1239

Connolly SG, 'Joint Ventures with Third World Multinationals: A New Form of Entry to International Markets' (1984) 19 *Columbia Journal of World Business* 18.

Cooper RW and Ross TW, 'Sustaining Cooperation with Joint Ventures' (2009) 25 *Journal of Law, Economics and Organization* 31

Coscelli A and Baker S, 'The Role of Market Shares in Differentiated Product Markets' (1999) 20 *European Competition Law Review* 412

Devlin A and Jacobs M, 'Joint Venture Analysis after American Needle' (2011) 7 *Journal of Competition Law and Economics* 543

Eccleston LE, 'Antitrust Implications of a Joint Venture: Is an Efficiencies Justification Justifiable?' (1985) 31 *Wayne Law Review* 1219

Evans DS and Schmalensee R, 'A Guide to the Antitrust Economics of Networks' (1996) 10 *Antitrust* 36

Farrell J, 'Fox, or Dangerous Hedgehog? Keyte and Schwartz on the 2010 Horizontal Merger Guidelines' (2011) 77 *Antitrust Law Journal* 661

Fine FL, 'EEC Antitrust Aspects of Production Joint Ventures' (1992) 26 *International Lawyer* 89

Fine FL, 'Revised Notice on the Distinction between Concentrative and Co-operative Joint Ventures' (1994) 15 *European Competition Law Review* 291

Fong IK and Walker JK, 'International High-technology Joint Ventures: An Antitrust and Antidumping Analysis' (1989) 7 *International Tax and Business Lawyer* 57

Fountoukakos K and Ryan S, 'A New Substantive Test for EU Merger Control' (2005) 26 *European Competition Law Review* 277

Fusfeld DR, 'Joint Subsidiaries in the Iron and Steel Industry' (1958) 48 *American Economic Review* 578

Garza DA, 'Market Definition, the New Horizontal Merger Guidelines, and the Long March Away from Structural Presumptions' (2010) 10 *Antitrust Source* 1

Gavil AI, 'Moving Beyond Caricature and Characterization: The Modern Rule of Reason in Practice' (2012) 85 *Southern California Law Review* 733

Ginsburg DH, 'Comparing Antitrust Enforcement in the United States and Europe' (2005) 1 *Journal of Competition Law and Economics* 427

Giotakos D, 'GE/Honeywell: A Theoretic Bundle Assessing Conglomerate Mergers Across the Atlantic' (2002) 23 *University of Pennsylvania Journal of International Economy Law* 469

Glaister KW and Buckley PJ, 'Strategic Motives for International Alliance Formation' (1996) 33 *Journal of Management Studies* 301

Grikscheit AA, 'Are We Compatible?: Current European Community Law on the Compatibility of Joint Ventures with the Common Market and Possibilities for Future Development' (1994) 92 *Michigan Law Review* 968

Growitsch C and Nulsch N, 'Preventing Innovative Co-operations: The Legal Exemption's Unintended Side Effect' (2012) 33 *European Journal of Law and Economics* 1

Grush EH and Korenblit CM, 'American Needle and A "Positive" Quick Look Approach in Challenges to Joint Ventures' (2011) 25 *Antitrust* 55

Harrigan KR, 'Joint Ventures and Global Strategies' (1984) 19 *Columbia Journal of World Business* 7

Hassett P, 'Clayton Act Section 7 Applies to Joint Ventures' (1965) 16 *Syracuse Law Review* 101

Hawk BE, 'Joint Ventures under EEC Law' (1992) 15 *Fordham International Law Journal* 303

Hawk BE and Laudati LL, 'Antitrust Federalism in the United States and Decentralization of Competition Law Enforcement in the European Union: A Comparison' (1997) 20 *Fordham International Law Journal* 18

Holden JH, 'Joint Ventures and the Supreme Court's Decision in Texaco, Inc. v. Dagher: A Win for Substance over Form' (2007) 62 *Business Lawyer* 1467

Horner N, 'Unilateral Effects and the EC Merger Regulation – How the Commission Had Its Cake and Ate It Too' (2006) 2 *Hanse Law Review* 23

Hruska AC, 'A Broad Market Approach to Antitrust Product Market Definition in Innovative Industries' (1993) 102 *Yale Law Journal* 305

Irvine RR, 'The Uncertainties of Section 7 of the Clayton Act' (1929) 14 *Cornell Law Quarterly* 28

Johnson SA and Houston MB, 'A Reexamination of the Motives and Gains in Joint Ventures' (2000) 35 *Journal of Financial and Quantitative Analysis* 67

Jones A, 'The Boundaries of an Undertaking in EU Competition Law' (2012) 8 *European Competition Journal* 301

Kallaugher J and Weitbrecht A, 'Developments under Articles 101 and 102 TFEU in 2010' (2011) 32 *European Competition Law Review* 333

Kamien MI, Muller E and Zang I, 'Research Joint Ventures and R&D Cartels' (1992) 82 *American Economic Review* 1293

Kamien MI and Zang I, 'Meet Me Halfway: Research Joint Ventures and Absorptive Capacity' (2000) 18 *International Journal of Industrial Organization* 995

Kattan J, 'Antitrust Analysis of Technology Joint Ventures: Allocative Efficiency and the Rewards of Innovation' (1993) 61 *Antitrust Law Journal* 937

Kessler JL, Feher DG and Moore RL, 'The Supreme Court's Decision in Dagher: Canary in A Coal Mine or Antitrust Business as Usual?' (2006) 21 *Antitrust* 40

Keyte JA, 'Copperweld Corp. v. Independence Tube Corp.: Has the Supreme Court Pulled the Plug on the "Bathtub Conspiracy?"' (1985) 18 *Loyola of Los Angeles Law Review* 857

Keyte JA, 'Dagher and "Inside" Joint Venture Restraints' (2006) 20 *Antitrust* 44

Keyte JA, 'American Needle: A New Quick Look for Joint Ventures' (2010) 25 *Antitrust* 48

Keyte JA and Schwartz KB, '"Tally-Ho!": UPP and the 2010 Horizontal Merger Guidelines' (2011) 77 *Antitrust Law Journal* 587

Kimpel S, 'Antitrust Considerations in International Airline Alliances' (1998) 63 *Journal of Air Law and Commerce* 475

Kist AW, 'Decentralisation of Enforcement of EC Competition Law: New Cooperation Procedures may be Necessary' (2002) 37 *Intereconomics* 36

Kitch EW, 'The Antitrust Economics of Joint Ventures' (1985) 54 *Antitrust Law Journal* 957

Kogut B, 'Joint Ventures: Theoretical and Empirical Perspectives' (1988) 9 *Strategic Management Journal* 319, 320

Kolasky WJ, 'Network Effects: A Contrarian View' (1999) 7 *George Mason Law Review* 577

Kolasky WJ, 'Conglomerate Mergers and Range Effect: It's a Long Way from Chicago to Brussels' (2002) 10 *George Mason Law Review* 533

Korah V, 'The Rise and Fall of Provisional Validity- The Need for a Rule of Reason in EEC Antitrust' (1981) 3 *Northwestern Journal of International Law and Business* 320

Kovacic WE, 'Downsizing Antitrust: Is It Time to End Dual Federal Enforcement?' (1996) 41 *Antitrust Bulletin* 505

Krattenmaker TG, 'Per Se Violations in Antitrust Law: Confusing Offenses with Defenses' (1989) 77 *Georgetown Law Journal* 165

Lang JT, 'European Community Antitrust Law: Innovation Markets and High Technology Industries' (1997) 20 *Fordham International Law Journal* 717

Langenfeld J and Wrobel GG, 'Upward Pricing Pressure Analysis under the 2010 Horizontal Merger Guidelines' (2010) 25 *Antitrust* 21

Lemley MA and McGovan D, 'Legal Implications of Network Economic Effects' (1998) 86 *California Law Review* 479

Levy N, 'The EU's SIEC Test Five Years On: Has It Made A Difference?' (2010) 6 *European Competition Journal* 211

Lewis SD, 'Joint Ventures and Section 7 of the Clayton Act, Including International Patent Licencing' (1985) 16 *University of Toledo Law Review* 919

Lines T, 'Restructuring of the Aluminium Industry: Implications for Developing Countries' (1990) 8 *Development Policy Review* 243

Maier-Rigaud F and Parplies K, 'EU Merger Control Five Years after the Introduction of the SIEC Test: What Explains the Drop in Enforcement Activity?' (2009) *European Competition Law Review* 565

Maks H, 'The "New" Horizontal Agreements Approach in the EU: An "Economic" Assessment' (2002) 37 *Intereconomics* 28

Mariti P and Smiley RH, 'Co-Operative Agreements and the Organization of Industry' (1983) 31 *Journal of Industrial Economics* 437

McFalls MS, ‘The Role and Assessment of Classical Market Power in Joint Venture Analysis’ (1998) 66 *Antitrust Law Journal* 651

Mead WJ, ‘The Competitive Significance of Joint Ventures’ (1967) 12 *Antitrust Bulletin* 819

Messe AJ, ‘Farewell to the Quick Look: Redefining the Scope and Content of the Rule of Reason’ (2001) 68 *Antitrust Law Journal* 461

Molto MJG, Georgantzis N and Orts V, ‘Cooperative R&D with Endogenous Technology Differentiation’ (2005) 14 *Journal of Economics and Management Strategy* 461

Montag F, ‘The Case for a Reform of Regulation 17/62: Problems and Possible Solutions from a Practitioner’s Point of View’ (1998) 22 *Fordham International Law Journal* 819

Mosin S, ‘Riding the Merger Wave: Strategic Airlines in the Airline Industry’ (2000) 27 *Transportation Law Journal* 271

Moskalev SA and Swensen RB, ‘Joint Ventures around the Globe from 1990-2000: Forms, Types, Industries, Countries and Ownership Patterns’ (2007) 16 *Review of Financial Economics* 29

Muller E and Boge U, ‘From the Market Dominance Test to the SLC Test: Are There Any Reasons for a Change?’ (2002) 23 *European Competition Law Review* 495

Nazzini R, ‘Article 81 EC between Time Present and Time Past: A Normative Critique of "Restriction of Competition" in EU Law’ (2006) 43 *Common Market Law Review* 497

Nouvel L, ‘The New European Treatment of Joint Ventures: A Shift Towards A More Economic Approach’ (2002) 2002 *International Business Law Journal* 511

Odudu O, ‘Interpreting Article 81(1): Object as Subjective Intention’ (2001) 26 *European Law Review* 60

Ordover JA, ‘Competition Policy for High-Technology Industries’ (1996) 24 *International Business Lawyer* 479

Ordover JA and Shapiro C, ‘The General Motors-Toyota Joint Venture: An Economic Assessment’ (1985) 31 *Wayne Law Review* 1167

Pathak AS, ‘The EC Commission's Approach to Joint Ventures: A Policy of Contradictions’ (1991) 12 *European Competition Law Review* 171

Pfeffer J and Novak P, ‘Patterns of Joint Venture Activity: Implications for Antitrust Policy’ (1976) 21 *Antitrust Bulletin* 315

Piraino TA, 'Reconciling the Per Se and Rule of Reason Approaches to Antitrust Analysis' (1991) 64 *Southern California Law Review* 685

Piraino TA, 'Beyond Per Se, Rule of Reason or Merger Analysis: A New Antitrust Standard for Joint Ventures' (1992) 76 *Minnesota Law Review* 1

Piraino TA, 'The Antitrust Analysis of Network Joint Ventures' (1996) 47 *Hastings Law Journal* 5

Piraino TA, 'A Proposed Antitrust Approach to High Technology Competition' (2003) 44 *William and Mary Law Review* 65

Piraino TA, 'The Antitrust Analysis of Joint Ventures after the Supreme Court's Dagher Decision' (2008) 57 *Emory Law Journal* 735

Pitofsky R, 'Joint Ventures under the Antitrust Laws: Some Reflections on the Significance of Penn-Olin' (1969) 82 *Harvard Law Review* 1007

Pitofsky R, 'A Framework for Antitrust Analysis of Joint Ventures' (1985) 54 *Antitrust Law Journal* 893

Pogue RW, 'Antitrust Considerations in Forming a Joint Venture' (1985) 54 *Antitrust Law Journal* 925

Porter CJ, 'Joint Subsidiaries and Section 7 of the Clayton Act' (1962) 39 *University of Detroit Law Journal* 223

Posner RA, 'Antitrust Policy and the Supreme Court: An Analysis of the Restricted Distribution, Horizontal Merger and Potential Competition Decisions' (1975) 75 *Columbia Law Review* 282

Pratt WH, Sonda JD and Racanelli MA, 'Refusals to Deal in the Context of Network Joint Ventures' (1997) 52 *Business Lawyer* 531

Rabkin MA, 'Tactical Interdependence and Institutionalized Trust: The Unrecognized Risks of Joint Ventures among Competitors' (2009) 7 *DePaul Business and Commercial Law Journal* 63

Radicati di Brozolo LG and Gustafsson M, 'Full-Function Joint Ventures under the Merger Regulation: The Need for Clarification' (2003) 24 *European Competition Law Review* 574

Reddick EN, 'Joint Ventures and Other Competitor Collaborations as Single Entity "Undertakings" under US Law' (2012) 8 *European Competition Journal* 333

Reed BJ, 'Private Equity Partial Acquisitions: Towards A New Antitrust Paradigm' (2010) 5 *Virginia Law and Business Review* 303

Reed D, 'Resource Extraction Industries in Developing Countries' (2002) 39 *Journal of Business Ethics* 199

Renzi LM, 'The GE/Honeywell Merger: Catalyst in the Transnational Conglomerate Merger Debate' (2002) 37 *New England Law Review* 109

Riordan MH and Salop SC, 'Evaluating Vertical Mergers: A Post-Chicago Approach' (1995) 63 *Antitrust Law Journal* 513

Roberts C, 'Competitive Effects of Mergers and Acquisitions of Exploration Drilling Contractors on the Global Mineral Exploration Industry' (2001) 19 *Journal of Energy and Natural Resources Law* 317

Roller LH and De La Mano M, 'The Impact of the New Substantive Test in European Merger Control' (2006) 2 *European Competition Journal* 9

Root TE, 'Economic Influences on the History and Development of the Mining Joint Venture as a Vehicle for Hard Mineral Exploration and Development' (1979) 12 *Natural Resources Lawyer* 491

Royall MS and Di Vincenzo AJ, 'Evaluating Mergers between Potential Competitors under the New Horizontal Merger Guidelines' (2010) 25 *Antitrust* 33

Rudolf LP and Leupold B, 'Joint Ventures – The Relevance of the Full-Functionality Criterion under the EU Merger Regulation', 3 *Journal of European Competition Law and Practice* 439

Sagers C, 'American Needle, Dagher, and the Evolving Antitrust Theory of the Firm: What Will Become of Section 1?' (2009) 8 *Antitrust Source* 1

Sagers C, 'Why Copperweld was Actually Kind of Dumb: Sound, Fury, and the Once and Still Missing Antitrust Theory of the Firm' (2011) 18 *Villanova Sports and Entertainment Law Journal* 377

Scheuerman WE, 'Joint Ventures in the U.S. Steel Industry: Steel's Restructuring Includes Efforts to Achieve Tighter Control over Raw Materials and Markets' (1990) 49 *American Journal of Economics and Sociology* 413

Shapiro C, 'Exclusivity in Network Industries' (1999) 7 *George Mason Law Review* 673

Shapiro C, 'The 2010 Horizontal Merger Guidelines: From Hedgehog to Fox in Forty Years' (2010) 77 *Antitrust Law Journal* 49

Shapiro C and Willig RD, 'On the Antitrust Treatment of Joint Ventures' (1990) 4 *Journal of Economic Perspectives* 113

Siragusa M, 'A Critical Review of the White Paper on the Reform of the EC Competition Law Enforcement Rules' (1999) 23 *Fordham International Law Journal* 1089

Skitol RA, 'Are the Competitor Collaboration Guidelines Ripe for Revision' (2010) 25 *Antitrust* 55

Soames T, Goeteyn G, Camesasca PD and Hugmark K, 'EC Competition Law and Aviation: "Cautious Optimism Spreading its Wings"' (2006) 27 *European Competition Law Review* 599

Stone JE and Wright JD, 'Antitrust Formalism is Dead! Long Live Antitrust Formalism! Some Implications of American Needle v NFL' (2010) *Cato Supreme Court Review* 369

Teece DJ and Coleman M, 'The Meaning of Monopoly: Antitrust Analysis in High-Technology industries' (1998) 43 *Antitrust Bulletin* 801

Terry G, 'Clayton Act Section 7: History and Amendment' (1956) 24 *University of Kansas City Law Review* 177

Theerathorn P, Wright P and Pray B, 'Market Reaction to International Joint Venture Announcement: The Case of Developed Versus Less Developed Countries' (1991) 6 *International Trade Journal* 109

Tong TW and Reuer JJ, 'Competitive Consequences of Interfirm Collaboration: How Joint Ventures Shape Industry Profitability' (2010) 41 *Journal of International Business Studies* 1056

Tyson N, 'Joint Venture Regulation under European Competition Laws: An Update' (2007) 13 *European Law Journal* 408

Van Cise JG, 'The Future of Per Se in Antitrust Law' (1964) 50 *Virginia Law Review* 1165

Vandeman GA, 'The Joint Venture Meets Section 7 of the Clayton Act: Technical Capability, Reasonable Probability and Business Reality' (1965) 38 *Southern California Law Review* 104

Venit JS, 'The "Merger" Control Regulation: Europe Comes of Age ... or Caliban's Dinner' (1990) 27 *Common Market Law Review* 7

Volcker SN, 'Mind the Gap: Unilateral Effects Analysis Arrives in EC Merger Control' (2004) 25 *European Competition Law Review* 395

Weller CD, 'A "New" Rule of Reason from Justice Brandeis' "Concentric Circles" and Other Changes in Law' (1999) 44 *Antitrust Bulletin* 881

Werden GJ, 'Antitrust Analysis of Joint Ventures: An Overview' (1998) 66 *Antitrust Law Journal* 701

Werden GJ, 'The Ancillary Restraints Doctrine after Dagher' (2007) 8 *Sedona Conference Journal* 17

Werden GJ, 'Initial Thoughts on the American Needle Decision' (2010) *9 Antitrust Source* 1

Wilkinson LA and White JL, 'Private Equity: Antitrust Concerns with Partial Acquisitions' (2007) 21 *Antitrust* 28

Willcox TC, 'Behavioural Remedies in A Post Chicago World: It is Time to Revise the Vertical Merger Guidelines' (1995) 40 *Antitrust Bulletin* 227

Williamson OE, 'Transaction-Cost Economies: The Governance of Contractual Relations' (1979) 22 *Journal of Law and Economics* 233

Williamson OE, 'The Economics of Organisation: The Transaction Cost Approach' (1981) 87 *American Journal of Sociology* 548

Wood RH, 'Something Radical is Afoot: Texaco, In. v. Dagher and the Revolutionary Treatment of Price Fixing in the Joint Venture Context' (2007) 8 *Barry Law Review* 1

Wood WC, 'Costs and Benefits of Per Se Rules in Antitrust Enforcement' (1993) 38 *Antitrust Bulletin* 887

Yancey JP, 'Is the Quick Look Too Quick? Potential Problems with the Quick Look Analysis of Antitrust Litigation' (1996) 44 *University of Kansas Law Review* 671

Zonnekeyn GA, 'The Treatment of Joint Ventures under the Amended E.C. Merger Regulation' (1998) 19 *European Competition Law Review* 414

Online Articles, Speeches, Opinions and News

Arnold & Porter LLP, 'Review of the Current Regime for the Assessment of Horizontal Cooperation Agreements under EU Competition Rules - Public Consultation' (2010) <http://ec.europa.eu/competition/consultations/2010_horizontals/arnoldporter_en.pdf> accessed 05 April 2013

Freshfields Bruckhous Deringer, 'Response to the European Commission's Questionnaire on the Current Regime for the Assessment of Horizontal Cooperation Agreements' (30 January 2009) <http://ec.europa.eu/competition/consultations/2009_horizontal_agreements/freshfields_bruckhaus_deringer_en.pdf> accessed 05 April 2013

Hovenkamp H, 'American Needle and the Boundaries of the Firm in Antitrust Law' (2010) <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1616625> accessed 05 April 2013

Charles A James, 'Testimony on the behalf of the US Chamber of Commerce' (December 4, 1997) <http://www.ftc.gov/opp/jointvent/testim~1.shtm> accessed 05 April 2013

Kolasky WJ, 'Antitrust Enforcement Guidelines for Strategic Alliances', the FTC's Hearings on Joint Ventures (July 1, 1997) <http://www.ftc.gov/bc/cac/wkolasky-testimony.pdf> accessed 05 April 2013

Monti M, 'The Application of Community Competition Law by the National Courts', speech at Conference 'Towards the Application of Article 81(3) by National Courts' (27 November, 2000) <http://europa.eu/rapid/press-release_SPEECH-00-466_en.htm?locale=en> accessed 05 April 2013

Monti M, 'Market Definition as a Cornerstone of EU Competition Policy', speech of October 5, 2001 <www.europa.eu.int/comm/competition/speechs/index_2001.html> accessed 05 April 2013

Norton Rose, 'Comments on the Commission's Green Paper on the Review of the EC Merger Regulation' (2002) <http://ec.europa.eu/competition/consultations/2002_council_regulation/norton_rose.pdf> accessed 05 April 2013

Omatseye S, 'Sony Ericsson Phone Marriage Starts Oct. 1' *RCR Wireless News* (30 April 2001) <http://www.rcrwireless.com/article/20010430/sub/sony-ericsson-phone-marriage-starts-oct-1/> accessed 05 April 2013

Reed Smith, 'Review of the Current Regime for the Assessment of Horizontal Cooperation Agreements under EU Antitrust Rules' (30 January 2009) <http://ec.europa.eu/competition/consultations/2009_horizontal_agreements/reed_smith_en.pdf> accessed 05 April 2013

Walther M and Baumgartner U, 'Joint Venture Review under the New EC Merger Regulation' (2007) <http://www.gibsondunn.com/fstore/documents/pubs/2007_Antitrust_Rev-WaltherBaumgartner-Joint_Venture.pdf> accessed 05 April 2013

Institutional Reports, Working Papers and Commentaries

Ashurst, 'Comparative Report: Study on the Conditions of Claims for Damages in Case of Infringement of EC Competition Rules' (2004) <http://ec.europa.eu/competition/antitrust/actionsdamages/comparative_report_clean_en.pdf> accessed 05 April 2013

Centre for European Policy Studies, Erasmus University Rotterdam and Luiss Guido Carli, 'Making Antitrust Damages Actions More Effective in the EU: Welfare Impact and Potential Scenarios, Final Report' (2007) <http://ec.europa.eu/competition/antitrust/actionsdamages/files_white_paper/impact_study.pdf> accessed 05 April 2013

Commission, 'The Problem of Industrial Concentration in the Common Market', Competition Series No 3 (1966)

Commission, ‘Sixth Report on Competition Policy’ (1977)

Commission, ‘Seventh Report on Competition Policy’ (1978)

Commission, Ninth Report on Competition Policy (1980)

Commission, Twelfth Report on Competition Policy (1983)

Commission, Fourteenth Report on Competition Policy (1985)

Commission, ‘The Impact of Joint Ventures on Competition: The Case of Petrochemical Industry in the EEC’ (1991)

Commission, ‘Green Paper on the review of the Merger Regulation’ COM (96) 19

Commission, ‘Twenty-Eighth Report on Competition Policy’ (1998)

Commission, ‘White Paper on modernisation of the rules implementing Articles 85 and 86 of the EC Treaty’ COM (99) 101 final

Commission, ‘White Paper on Reform of Regulation 17: Summary of the Observations’ (2000) <http://ec.europa.eu/competition/antitrust/others/wp_on_modernisation/summary_observations.pdf> accessed 05 April 2013

Commission, ‘Green Paper on the review of Council Regulation (EEC) No 4064/89’ COM (2001) 745 final

Commission, ‘Green Paper on damages actions for breach of EU antitrust rules’ COM (2005) 672 final

Commission, ‘White Paper on Damages actions for breach of the EC antitrust rules’ COM (2008) 165 final.

Commission, ‘Antitrust Issues Involving Minority Shareholding and Interlocking Directorates’, OECD Working Party No 3 on Co-operation and Enforcement (February 2008) <http://ec.europa.eu/competition/international/multilateral/2008_feb_antitrust_issues.pdf> accessed 05 April 2013

Commission, ‘Draft Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements’ SEC (2010) 528/2

Commission, ‘Impact Assessment accompanying document to the Draft Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements’ SEC (2010) 1541 final

DOJ, ‘Submission for OECD Roundtable on Portfolio Effects in Conglomerate Mergers’ (October 12, 2001)

<http://www.justice.gov/atr/public/international/9550.htm> accessed 05 April 2013

European Competition Authorities Air Traffic Working Group, 'Report on Mergers and Alliances in Civil Aviation' (2002) <http://ec.europa.eu/competition/publications/eca/report.pdf> accessed 05 April 2013

Eurostat, 'Science, Technology and Innovation in Europe' (2012)

OECD, 'Competition Issues in Joint Ventures' (2001) <http://www.oecd.org/competition/mergers/2379097.pdf> accessed 05 April 2013