13-10

September 10, 2013

ESMT Working Paper

HIDDEN EFFICIENCIES

ON THE RELEVANCE OF BUSINESS JUSTIFICATIONS IN ABUSE OF DOMINANCE CASES

HANS W. FRIEDERISZICK, E.CA ECONOMICS, ESMT
LINDA GRATZ, E.CA ECONOMICS

ISSN 1866-3494

ESMT European School of Management and Technology

Abstract

Hidden efficiencies: On the relevance of business justifications in abuse of dominance cases[+]

Author(s):* Hans W. Friederiszick, E.CA Economics, ESMT
Linda Gratz, E.CA Economics

This article assesses the relevance of efficiencies and other justifications in recent Article 102 TFEU cases. Based on a review of all EU decisions and openings between 2009 and mid 2013 we find that procompetitive justifications still play a mediocre role in the EU Commission's evaluations, except in IT related abuse cases. This stands in contrast to the policy goals expressed during the reform phase (2005 to 2009), the Guidance Paper and the increasing relevance of efficiency considerations in merger proceedings. We argue that this is due to a malfunctioning of the balancing test, i.e., the weighting of pro- and anticompetitive effects, as pro- and anticompetitive effects are often non-separable and non-monotone in Article 102 TFEU cases. In addition, the increasing practice of commitment decisions reduces transparency; little guidance regarding dynamic efficiencies further diminishes the relevance of business justifications in Article 102 TFEU cases. Policy options are discussed.

Keywords: European competition policy, abuse of dominance, efficiency defense

JEL Codes: K21, L21, L40

* Contact: Hans W. Friederiszick, ESMT, Schlossplatz 1, 10178 Berlin, Phone: +49 (0) 30 21231-7010, friederiszick@e-ca.com.

+ Parts of this paper have been produced for the OECD Roundtable on the Role of Efficiency Claims in Antitrust Proceedings. The authors would also like to thank participants at the Hal White Antitrust Conference in Washington 2013 for helpful comments. The responsibility for all opinions, errors or omissions stays with the authors.

1. Introduction

Article 102 of the Treaty on the Functioning of the European Union (hereafter "Article 102 TFEU") is aimed at preventing abusive exclusionary and exploitative conduct by dominant undertakings. In 2005, the European Commission began a review process on the policy underlying Article 102 TFEU and the way in which it should enforce that policy, focusing on exclusionary abuses. In line with the advice given by the Economic Advisory Group on Competition Policy, the EU Commission rejected in a comprehensive staff discussion paper the former legalistic approach for assessing abusive exclusionary conduct by dominant undertakings in favour of an effects-based approach.

The subsequent Guidance Paper, which was adopted in 2009, is however less explicit about the role of economic analysis in the EU Commission's practice. Nevertheless, the Guidance Paper acknowledges the relevance of actual or likely effects for the overall assessment. Most importantly for the topic at hand, it explicitly foresees a balancing of pro- and anticompetitive effects, including efficiencies and other justifications. This approach is comparable to the approach taken under the EC merger guidelines or under Article 101 (3) TFEU and has recently also been endorsed by the European Court in *Post Danmark*.

In this paper, we discuss the actual relevance of efficiency considerations in the recent EC practice of Article 102 TFEU cases (in the following also called "abuse cases"). For this purpose, we first review the EU approach to efficiency defences and other justifications in abuse cases according to EU soft law provisions as well as the European Court's judgement in *Post Danmark*. Second, we review all opened investigations and final EU Commission Decisions from 2009 to mid 2013. We come to the following results:

Regarding current EU enforcement priorities we identify four main enforcement clusters. First, a focus lies on refusal to supply/ margin squeeze abuses in (regulated) network industries, that is, in the energy, transportation and telecommunication sectors. 32 per cent of all cases are related to this cluster. Second, a significant number of cases relates to the IT software industry and to the financial data service industry. In those cases the main focus lies on interoperability issues, that is, on tying and bundling and/or refusal to supply abuses. 25 per cent of all cases fall into this cluster. Third, we find a significant number of cases (22 per cent of all cases) in which Intellectual Property Rights (IPRs) play an important role. In those cases the main concern is exploitation of downstream customers. Fourth, with respect to manufacturing industries, the EU Commission focuses on aftermarkets and exclusive dealing concerns. Those cases account to 11 per cent of the analysed cases.

By comparing the EU Commission's closing and opening decisions it can be inferred that enforcement priorities shift more and more to cases in the IT sector and related areas as well as to patent related cases, i.e., areas in which innovation plays a decisive role.

Regarding business justifications, the review shows that in 47 per cent of recent 102 TFEU cases (in seven out of 15 final decisions) an efficiency defence or another justification was put forward and has been reported in the final decisions. We consider this number to be low given that in Article 102 TFEU cases anticompetitive behaviour and justifications are intrinsically linked. Only in 20 per cent of the cases (in three out of the 15 final decisions) a somehow transparent discussion was conducted, offering overall limited guidance on how the EC Commission considers its position on that topic.

Overall we find no transparent, detailed and decisive assessment of efficiency considerations within Art 102 TFEU decisions, and derive three main policy proposals. First, we argue that there is a necessity that the EU Commission assesses non-separable business justifications proactively. Second, we argue that there is a necessity to offer a transparent assessment of efficiencies also in commitment decisions. Third, we propose a reformed approach towards dynamic efficiencies.

The paper is structured as follows: Section 2 reviews the EU Commission's overall approach to abuse cases, focusing on efficiencies and other justifications, and summarizes the recent judgement by the European Court on *Post Danmark*. Section 3 reviews opened investigations and final EU Commission Decisions from 2009 to mid 2013. Enforcement priorities with respect to industries affected and theories of harm put forward are derived. The actual relevance of efficiency considerations in the EU Commission's practice with respect to dominance cases is explored in Section 4. Section 5 derives the reasons for the factual irrelevance of business justifications in abuse cases. It focuses in particular on the conceptual problems in disentangling pro- and anticompetitive effects and discusses policy options. Section 6 concludes.

2. The EU Commission's and the Courts' approach to abuse cases

In the following we briefly describe the standard practice of assessing abuse cases in the EU, focusing on efficiencies and other justifications.[1] For that purpose we first describe the practice as documented in the EU Guidance paper. Furthermore we summarize the recent European Court's judgement in *Post Danmark*.[2]

2.1 The EU Commission's practice in abuse case

The objective of Article 102 TFEU is the protection of competition on the market as a means of enhancing consumer welfare. To achieve this objective Article 102 TFEU prohibits abusive exclusionary and exploitive conduct by dominant undertakings.

The first step in the application of Article 102 TFEU is the assessment of dominance. Dominance has been defined under Community law as a position of economic strength enjoyed by an undertaking, which enables it "*to behave to an appreciable extent independently of its competitors, its customers and ultimately of consumers*",[3] a definition which can only hardly be reconciled with economic thinking as also a firm with significant market power will keep a strong customer orientation and will price in accordance to external rivalry.

Despite this conflict in legal and economic notion there is a common understanding between law and economics of the factors which need to be assessed in a dominance assessment. It is necessary to look *inter alia* at the market position of the allegedly dominant company, the market position of competitors, barriers to expansion and entry, and the market position of buyers.

The second step in the application of Article 102 TFEU is an assessment of the abusive conduct. As established under Community law, dominant undertakings may not "*recourse to methods*

[1] In Section 4.1, we describe the different legal forms of justifications available under Article 102 TFEU: objective necessity, meeting-competition defence and efficiencies. Throughout this text we typically refer to all three of them as "efficiencies and other justifications".
[2] ECJ 27 March 2012 – Case C-209/10 (Post Danmark A/S/ Konkurrencerådet).
[3] Case 85/76 *Hoffmann-La Roche & Co.* v *Commission* (1979) ECR 461, paragraph 38.

different from those which condition normal competition".[4] The focus of the EU Commission is on the effect on competition and consumer welfare. If the EU Commission finds that a practice is likely to exclude an equally or more efficient competitor or to result in anticompetitive exploitation of consumers, the dominant undertaking can rebut by putting forward explanations of why the conduct in question is efficient and justified by procompetitive considerations. That is, the positive and negative effects of the conduct are balanced against each other in order to come to an overall assessment. [5]

Regarding different types of abuses a distinction is made between exclusionary and exploitative conduct. Exclusionary conduct describes conduct whereby a dominant company prevents or hinders competition in the market, whereas exploitative conduct means conduct whereby a dominant company takes advantage of its market power to exploit its customers. [6] Both types of conduct are linked as exclusion is pursued with the motive of exploitation once the exclusionary objective is achieved. The opposite is not true though, as the root of exploitation may also rest in procompetitive behaviour. In fact, as is pointed out by Röller (2007) "*if there was no possibility to ever exploit ones market power, there would be no incentive to compete. Thus, pro-competitive behavior must also involve exploitation ('positive effects').*"

Regarding exclusionary conduct, the EU Commission gives priority to the most commonly encountered forms: exclusive purchasing agreements and conditional rebates, tying and bundling, refusal to supply, margin squeeze and predatory pricing.[7]

Interestingly, the EU Commission examines for the assessment of alleged price-based exclusionary conduct economic data relating to cost and sales prices in order to infer whether an *as efficient competitor* can compete with the dominant company. If the EU Commission finds that the dominant company is not engaging in below-cost pricing, that is, that the price is above the average total costs of an as efficient competitor (typically the incumbent's costs are taken), it will reach the conclusion that the dominant company's conduct is not abusive (safe harbour). If, on the other hand, the as efficient competitor test suggests that the price-based conduct causes non-negligible concern for anticompetitive foreclosure effects, the EU Commission will initiate case-by-case considerations and will also take other relevant quantitative and/or qualitative evidence into account.[8] By applying an *as efficient competitor test* the EU Commission integrates efficiency considerations into the competitive assessment – an approach which seems desirable to us. We will come back to this point later.

---

[4] Case 85/76 *Hoffmann-La Roche & Co.* v *Commission* (1979) ECR 461, paragraph 38.

[5] In the Background Note by the Secretariat of the OECD, paragraph 161, the view is taken that Article 102 TFEU *„appears to establish an absolute prohibition of an abuse of dominance, thereby depriving dominant firms of a possibility to justify their conduct."* However, in Europe *„this restrictive approach has started to gradually relax"*; *[t]he European Commission's Guidance of 2009 on its enforcement priorities in applying Article 102 also recognises efficiencies as a possible defence […]"* (paragraphs 170 and 176).

[6] A comprehensive overview on excessive pricing and competition policy is offered in OECD (2012).

[7] For a definition of the various forms of exclusionary conduct see Discussion Paper, paragraphs 93, 96, 135–137, 177, 209, Guidance Paper, paragraphs 33 and 37 and OECD (2012c, p.4-6).

[8] Guidance Paper, paragraphs 25–27, 43, Discussion Paper, paragraph 66 and ECJ 27 March 2012 – Case C-209/10 (Post Danmark A/S/ Konkurrencerådet), paragraphs 40-43. For the price being below average total costs (or long-run incremental costs for business operations comprising common costs), but above average variable costs (or average avoidable costs for business operations comprising common costs) the burden of proof is with the EU Commission to show that the behaviour is anticompetitive; for prices below average variable costs (average avoidable costs) it is for the incumbent to disprove this concern.

2.2 A recent court case – Post Danmark

In a recent judgment the European Court endorsed the approach set out in the Commission's Article 102 Discussion and Guidance Paper. It acknowledged the relevance of actual or likely effects for the overall assessment. Moreover, it acknowledged the necessity of a balancing of pro- and anticompetitive effects, including efficiencies and other justifications. In the following we briefly summarize the underlying case and the judgment.

In Denmark, Post Danmark and Forbruger-Kontakt are the two largest undertakings in the unaddressed mail sector (brochures, telephone directories, guides, local and regional newspapers etc.). Post Danmark has a monopoly in the related addressed mail sector. It therefore maintains a distribution network covering the entire national territory.

Until 2004, Forbruger-Kontakt had established a distribution network itself, which covered almost the entire national territory. Forbruger-Kontakt also had major customers in the supermarket sector, namely the SuperBest, Spar and Coop groups.

The Coop group entered contract negotiations with both, Post Danmark and Forbruger-Kontakt, in 2003. Post Danmark offered marginally lower prices than Forbruger-Kontakt and thus won the Coop group as customer. Moreover, Post Danmark won the SuperBest and Spar groups as customers.

In what follows, Forbruger-Kontakt complaint to the Danish competition council Konkurrencerådet that Post Danmark had abused its dominant position by not putting its customers on an equal footing in terms of rates and rebates and charging Forbruger-Kontakt's former customers rates different from those it charged its own pre-existing customers without being able to justify those significant differences in its rate and rebate conditions by considerations relating to its costs.

In the following decisions it was found that Post Danmark had priced to the Coop group below its "average total costs" but above its "average incremental cost." Notably, Post Danmark argued that the contract concluded with the Coop group enabled it to achieve economies of scale, leading to cost reductions of DKK 0.13 per item. The authorities assessed that the prices offered to the Spar and SuperBest groups were higher than average total costs. It could not be established that Post Danmark had intentionally sought to eliminate competition.

The European Court was addressed with the following questions:

1. Is Article 102 TFEU to be interpreted as meaning that selective price reductions on the part of a dominant postal undertaking that has a universal service obligation to a level lower than the postal undertaking's average total costs, but higher than the provider's average incremental costs, constitutes an exclusionary abuse, if it is established that the price was not set at that level for the purpose of driving out a competitor?
2. If the answer to question 1 is that a selective price reduction in the circumstances outlined in that question may, in certain circumstances, constitute an exclusionary abuse, what are the circumstances that the national court must take into account?

The European Court pointed out that Article 102 TFEU "*prohibits a dominant undertaking from, among other things, adopting pricing practices that have an exclusionary effect on competitors considered to be as efficient as it is itself and strengthening its dominant position by using*

methods other than those that are part of competition on the merits" (ECJ judgement, paragraph 25). It made clear that "*to the extent that a dominant undertaking sets its prices at a level covering the great bulk of the costs attributable to the supply of the goods or services in question, it will, as a general rule, be possible for a competitor as efficient as that undertaking to compete with those prices without suffering losses that are unsustainable in the long term.*" The European Court also pointed to the fact that Forbruger-Kontakt had not been foreclosed; Forbruger-Kontakt managed to maintain its distribution network and won back the Coop and the Spar groups as customers in 2007.

Further, the European Court emphasized that a dominant undertaking is open to provide justifications for an alleged exclusionary conduct under Article 102. A dominant undertaking "*may demonstrate, for that purpose, either that its conduct is objectively necessary (see, to that effect, Case 311/84 CBEM [1985] ECR 3261, paragraph 27), or that the exclusionary effect produced may be counterbalanced, outweighed even, by advantages in terms of efficiency that also benefit consumers (Case C-95/04 P British Airways v Commission [2007] ECR I-2331, paragraph 86, and TeliaSonera Sverige, paragraph 76)*" (ECJ judgement, par. 41). Further, the European Court stressed that an efficiency defence is also valid even if the considered efficiencies did not appear in the schedules of prices.

In conclusion the court establishes that *"[i]n order to assess the existence of anti-competitive effects in circumstances such as those of that case, it is necessary to consider whether that pricing policy, without justification, produces an actual or likely exclusionary effect, to the detriment of competition and thereby, of consumers' interests.*" Hence, the European Court endorsed the approach set out in the Commission's Article 102 Discussion and Guidance Paper. It acknowledged the relevance of actual or likely effects for the overall assessment. Moreover, it acknowledged the necessity of a balancing of pro- and anticompetitive effects.

3. Recent trends in EU enforcement priority

In this section, we review Article 102 TFEU cases[9] for which the EU Commission opened an investigation or came to a final decision between 2009 and mid 2013. Overall, 28 cases are examined, some of which are closely linked.[10] We briefly describe the competition concerns expressed by the EU Commission and, if a final decision has been taken, also the outcome of the case. The cases are presented in alphabetic order. In parenthesis the year of opening of procedure is depicted, the second date marks the date of the final decision (if applicable).

[9] Sometimes, in earlier phases of a case, a theory of harm both under Art 101 and Art 102 TFEU is pursued in parallel, but one basis for claim is dropped in later stages of the investigation. We only included cases for which in mid 2013 an infringement of Art 102 TFEU was not dropped. For instance for the CDS cases (case No 39.730 and 39.745) the press release related to the opening decision was mentioning both Art 101 and Art 102 TFEU (European Commission - IP/11/509 29/04/2011). The most recent press release related to sending a Statement of Objections only referred to Art 101 TFEU (European Commission - IP/13/630 01/07/2013). Accordingly we did not include those cases in our overview.

[10] There are three Google cases (which were merged in 2011) which address the same conduct in different niche markets, two IP cases related to Motorola, also addressing the same conduct. While addressing the same conduct and the same potentially dominant firm the cases affected different relevant markets and affected parties. Accordingly, we have counted those cases as separate cases. There are also three Deutsche Bahn cases, which all address the same conduct and markets, and two Microsoft cases, where the case at a later time relates to non-compliance with the remedies imposed in the earlier case. Those cases have been counted as one case each. The case list in the Appendix provides individual case numbers.

ARA (2011) – The EU Commission was concerned that ARA was refusing to supply access to waste collection infrastructure, which would put pressure on customers not to contract with ARA's competitors.

ČEZ (2011; 2013) – The EU Commission's concern was that ČEZ restricted entry by excessive capacity reservations on electricity transmission networks in the Czech market for the generation and wholesale supply of electricity. By committing to divest 800 to 1000 MW of its generation capacity the case was resolved.

Deutsche Bahn (2012) – The EU Commission is investigating whether the German railway incumbent Deutsche Bahn AG and several of its subsidiaries are operating an anticompetitive pricing system for traction current in Germanys. Traction current is a type of electricity used by trains on the railway network. In particular, the EU Commission is investigating whether the volume discounts applied by Deutsche Bahn's infrastructure subsidiary lead *de facto* to higher electricity prices for its downstream competitors in the rail freight and passenger markets relative to its own downstream subsidiary.

EDF, Longterm electricity contracts in France (2007; 2010) – The EU Commission was concerned that the scope, duration, and exclusive nature of EDF's supply contracts with large electricity consumers hindered the entry and expansion of EDF's competitors in the French electricity market. The case was resolved by EDF's commitments to ensure that an average of 65% of the electricity that it has contracted with large customers will return to the market every year. In addition, future contracts between EDF and large customers will be for no longer than five years, unless the customer can opt-out from the contract for free at least every five years. Moreover, EDF committed to always offer customers the possibility to conclude non-exclusive contracts. This commitment will be binding on EDF for ten years unless EDF's market share drops below 40% for two consecutive years.

ENI (2007; 2010) – The EU Commission's main concern was that the Italian energy company ENI, the main supplier of gas in Italy, abused its dominant position on the Italian gas supply markets by refusing to grant competitors access to capacity available on the transport network (capacity hoarding), by granting access in an impractical manner (capacity degradation) and by strategically limiting investment (strategic underinvestment) in ENI's international transmission pipeline system. The case was resolved by the commitment of ENI to divest its shares in the three major international transport pipelines to Italy. This shall ensure that third-party requests to access the gas pipelines will be dealt with by an entity independent of ENI.

E.ON Gas (2010; 2010) – As in the Gaz de France case the EU Commission was concerned that E.ON abused its dominant position in the gas transport markets in several market areas in Germany by foreclosing access to entry capacity into its gas transmission grid. E.ON committed to release freely allocable entry capacities into its gas transmission network on short term. In a second step, E.ON committed to further reduce its overall share in the bookings of firm and freely allocable entry capacity. E.ON may reach these thresholds by returning capacities to the transmission system operator, by measures increasing the capacity in the respective network, or by entering into market area co-operations, which increase the total capacity volume in E.ON's respective grid. E.ON committed not to exceed these thresholds until 2025.

Foundem/ Ciao/ 1plusV vs. Google (2010) – Following several complaints, the EU Commission investigated whether Google abused a dominant position in general online search by

discriminating against specialised search engine providers – so-called vertical search engines – in its unpaid and sponsored search results, while favourably placing its own vertical search services.

GdF Suez (2008; 2009) – The EU Commission's concern was that GdF Suez abused its dominant position by foreclosing access to gas import capacities in France. In particular, the EU Commission was investigating whether GdF Suez's long term reservations for most of France's gas import capacity, as well as its behaviour relating to investment and capacity allocation at two liquefied natural gas import terminals in France might have closed off access to the French gas market to other potential gas suppliers. GDF Suez committed to release significant firm long-term import capacities in both North and South balancing zones of the GRTgaz transport network. For a period of ten years, GDF Suez also agreed to limit its capacity reservations to fewer than 50 % of total firm long-term import capacity in France.

Honeywell/ DuPont (refrigerants) (2011) - The EU Commission is investigating, among others, whether Honeywell engaged in deceptive conduct during the evaluation of a new refrigerant known as 1234yf, which is intended for use in future car air conditioning systems. It is claimed that Honeywell did not disclose its patents and patent applications while the refrigerant was being assessed as a suitable global replacement for the previous refrigerant R134a and then failed to grant licences on fair and reasonable (so called "FRAND") terms.

IBM Maintenance service (2010; 2011) – The maintenance subsidiary of IBM, IBM Maintenance Service, allegedly imposed unreasonable supply conditions with regard to certain spare parts (secondary market product) required for maintenance of IBM mainframes (primary market product) on its competitors in the maintenance market, thus putting them at a competitive disadvantage. In order to address the EU Commission's concerns IBM committed to make spare parts and technical information under commercially reasonable and non-discriminatory terms swiftly available to independent mainframe maintainers.

Intel (2007; 2009) – The EU Commission was concerned that Intel abused its dominant position in the market for CPUs (x86 central processing units) by incentivising computer manufacturers and a European retailer to exclusively purchase Intel's CPUs through a conditional rebate scheme. The EU Commission also objected to other measures which allegedly aimed at preventing or delaying the launch of competing products. The case was closed by a prohibition decision imposing a fine of EUR 1.06 bn on Intel.

MathWorks (2012) - MathWorks, a specialised software provider, allegedly refused to provide competitors with certain software licenses and/ or interoperability information in relation to its Simulink and MATLAB product families, thereby potentially hindering competition.

Microsoft (2008; 2009) and (2012) – The Microsoft case concerns Microsoft's allegedly illegal tying of its web browser Internet Explorer to its dominant client personal computer operating system Windows. Microsoft submitted commitments in 2009, allowing inter alia customers to easily switch on/ off the Internet Explorer and to offer a Choice Screen where customer can choose between alternative browsers. Microsoft also committed not to make exclusive arrangements with OEMs, and not to retail against OEMs who equip PCs with alternative browsers. In 2012, the EU Commission opened new proceedings against Microsoft to investigate possible non-compliance with these commitments.

OPCOM – Romanian Power Exchange (2013) – The EU Commission's concern is that OPCOM, the operator of the only power exchange in Romania, is discriminating against companies on the basis of their nationality/place of establishment. OPCOM requires that all members of the power exchange spot markets (Day-Ahead and Intraday Markets) must have a Romanian VAT registration, and consequently must establish business premises in Romania and operate from there. The Commission's provisional finding is that this requirement discriminates against foreign traders and thereby inhibits competition on the Romanian electricity market.

Perindopril (Servier) (2009) - In this case, the main theory of harm concerns pay-for-delay settlements between the French pharmaceutical company Servier and several of its generic competitors. Pay-for-delay settlements are usually dealt with under Article 101 TFEU (see also Lundbeck (2010), Johnson & Johnson, Novartis and Sandoz (2011), and Cephalon and Teva (2011)). In addition, for the case at hand the EU Commission is concerned that Servier's acquisition of key competing technologies was aimed at delaying generic entry in violation of Article 102 TFEU.

Rambus (2007; 2009), Samsung (2012) and Motorola (2012), (2012) – The Commission concerns that the companies abuse their dominant position by charging excessive licencing fees for the use of standard essential patents (SEPs). In the Rambus case, this was preceded by a so-called patent ambush, which describes a strategy where an ex ante non-dominant member of a standards setting organisation (SSO) intentionally conceals a patent that reads on the ultimate standard, thereby becoming ex post dominant, and subsequently in a position to apply unfair license terms. In order to address the EU Commission's concerns Rambus committed to grand licences for specific packages of its patents, and to specific maximum royalties levels or even royalty holidays for some of its patents.

Reel/ Alcan (Rio Tinto) (2008; 2013) – The EU Commission investigated whether Alcan acted abusively by tying its aluminium smelting technology (primary market) with handling equipment for aluminium smelters (secondary market). The case was resolved based on the commitments by Rio Tinto to contractually unbundle the two products and by implementing an objective and a non-discriminatory pre-qualification process to allow independent suppliers to receive from Rio Tinto the status of a recommended supplier of the secondary product for Rio Tinto's primary product.

Reuters Instrument Codes (2009; 2012) - The EU Commission had concerns that Thomson Reuters' could be abusing its dominant position in the market for consolidated real-time datafeeds through its licensing practices. To remedy these concerns, Thomson Reuters offered to create a new licence allowing customers, for a monthly fee, to use Reuters Instrument Codes (RICs) for data sourced from Thomson Reuters' competitors. RICs are codes that identify securities, used by financial institutions to retrieve data from Thomson Reuters' real-time datafeeds.

RWE Gas (2007; 2010) – The EU Commission was concerned that RWE abused its dominant position on its gas transmission network through refusal of access to its network and through a margin squeeze strategy aimed at lowering the margins of RWE's downstream competitors in gas supply. The case was resolved through a commitment by RWE to divest its entire current high-pressure gas transmission in Germany to a suitable purchaser.

Slovak Telekom (2009) – The EU Commission investigated into Slovak Telekom's behaviour in broadband Internet access markets. The suspected infringements concerned a possible refusal to

deal, margin squeeze and other exclusionary behaviour with respect to wholesale local loop access, other wholesale broadband access services and retail broadband access services.

Standard and Poor's (2009; 2011) – The EU Commission held that Standard & Poor's (S&P) abused its dominant position by charging excessive licensing fees for the supply of US International Securities Identification Numbers ("US ISINs") within the EEA. S&P agreed to abolish the licensing fees that banks pay for the use of US ISINs within the European Economic Area. Moreover, for direct users, S&P committed to distribute the US ISIN record separately from other added value information, for a regulated fee.

Swedish Interconnectors (2009; 2010) – The EU Commission's concern was that Svenska Kraftnät, the state-owned Swedish electricity grid operator, limited transmission capacity at Swedish interconnectors for exports to the benefit of domestic consumption, thereby discriminating between different network users and segmenting the internal market. Svenska Kraftnät committed to set-up different bidding zones, which allow a more flexible allocation, so that Svenska Kraftnät can manage congestion in the Swedish transmission system without limiting trading capacity on interconnectors. Svenska Kraftnät also committed to build additional interconnection capacity.

Telekomunikacja Polska (2008; 2010) – The alleged anticompetitive conduct of TP, Telekomunikacja Polska, consisted of refusing to supply its wholesale broadband products, hindering alternative operators from efficiently accessing its network and using its wholesale broadband products. The case was closed with a prohibition decision imposing a fine of EUR 128 Mio.

In order to classify the different cases we distinguish in Table 1 between four broad industries: first, (regulated) network industries, including energy, transportation and telecommunications; second, manufacturing industries, particularly IT hardware manufacturing; third, service industries, including financial services as well as IT software provision; finally, pharma. Regarding classification of conducts, we follow the nomenclature of the EU Commission in its Discussion and Guidance Papers. We add exploitative abuses and others as a further category. In "others" we allocated cases related to segmentation of the internal market and delaying generic entry.

[Insert Table 1]

When classifying the cases, the problem arises that single cases may comprise several theories of harm. For instance, refusal to supply often inheres tying/ bundling elements and margin squeeze often inheres predatory pricing elements. This applies, for example, to the MathWorks case, where MathWorks, a specialised software provider, allegedly refused to provide competitors with certain software licenses and/ or interoperability information in relation to its Simulink and MATLAB product families, thereby potentially hindering competition. Preventing interoperability can be seen as a refusal to supply as interoperability is essential for competitors to be able to compete in the market. At the same time, by preventing interoperability MathWorks tied its flagship products to its own applications.

Multiple theories of harm may also arise for conduct related to aftermarkets. Aftermarkets comprise complementary products (or "secondary products") that are purchased after the purchase of another product (the "primary product") to which they relate. Examples include after-

sales services and spare parts. A company may abuse its dominant position by excluding competitors from an aftermarket, either through tying or refusal to deal. Depending on the character of the secondary product we classified aftermarket cases either as tying/ bundling or refusal to supply cases.

Further, the problem of multiple theories of harm may arise for cases concerning exploitative conduct as exploitation is often a consequence of exclusion.

For the classification of cases we focus on those theories of harm which we consider to be the main ones. Some ambiguity remains though.

Based on this classification Table 2 identifies four main enforcement clusters, labelled A, B, C and D.

[Insert Table 2]

First, a focus (cluster A) is on refusal to supply/ margin squeeze abuses in (regulated) network industries, that is, in the energy, transportation and telecommunication sectors. 32 per cent of all cases are related to this cluster. The large majority of those cases, specifically those in the energy sector, have only recently been closed. Here, the EU Commission takes the role of a regulator of last resort.

Second, a significant number of cases (cluster B) relates to the IT software industry and to the financial data service industry (which are closely interlinked, as financial data providers supply data which feeds into financial analytics software). In those cases the main focus lies on interoperability issues, that is, on tying and bundling and/ or refusal to supply. 25 per cent of all cases fall into this cluster, with Google and MathWorks being still under investigation in mid 2013.

Third, we find a significant number of cases in industries in which Intellectual Property Rights (IPRs) play an important role (cluster C). The EU Commission's main concern in those cases is exploitation of downstream customers. 22 per cent of all cases fall into this cluster, with several important investigations still being open in mid 2013 (Samsung and Motorola).

Fourth, with respect to manufacturing industries the EU Commission focuses on exclusive dealing, aftermarkets and refusal to supply (cluster D). Those cases account for 11 per cent of the analysed cases; all cases being closed recently.

By comparing the EU Commission's closing and opening decisions it can be inferred that the enforcement priorities shift more and more to cluster B (cases in the IT sector and related areas sectors) and to cluster C (patent related cases affecting various industries). The high percentage of cases in the IT sector and of patent related cases, i.e., areas in which innovation plays a decisive role, is remarkable.

4. Efficiency defences and other justifications in the EU Commission's practice

In the following we describe efficiency defences and other justifications according to EU soft law provisions and past EU decisions.

4.1 Efficiency defences and other justifications according to EU soft law provisions

If the EU Commission finds that the conduct causes non-negligible concern for anticompetitive effects, the dominant company can rebut by proving justifications for its conduct, for instance, by demonstrating that its conduct produces substantial efficiencies or is objectively necessary and proportionate so that the positive effects outweigh the negative effects.

The EU discussion paper distinguishes between three types of justifications:[11]

- **Defences of objective necessity**: In a case of refusal to supply, examples would be capacity limitations or concerns about quality, security, or safety at a facility.[12]
- **Meeting-competition defence:** Applies to situations in which a dominant firm takes reasonable steps to protect its commercial interests.
- **Efficiency defence**: Applies to situations in which the dominant firm's conduct is justified by market expanding or other efficiencies.

For an efficiency defence to be accepted, the dominant undertaking must show that the following cumulative conditions are fulfilled:[13]

- Efficiencies are realised or are likely to be realised as a result of the conduct;
- The conduct is indispensable to realise these efficiencies;
- The likely efficiencies outweigh any likely negative effects on competition and consumer welfare;
- The conduct does not eliminate effective competition by removing all or most existing sources of actual or potential competition.

Table 3 summarises justifications which the EU Commission points out to be of relevance in its Discussion and Guidance Papers regarding exclusionary conduct. To the extent that an exploitative abuse is a consequence of a specific exclusionary conduct, the efficiencies and other justifications mentioned for such kinds of exclusionary conduct may be considered relevant also for the related exploitative abuses.

[Insert Table 3]

4.2 Efficiency defences and other justifications in past EU decisions

In the following we examine whether the EU Commission took in its recent Article 102 TFEU decisions efficiency considerations or other business justifications into account and discussed them transparently. Table 4 provides an overview of Article 102 TFEU cases which the EU Commission has decided since 2009 and in which justifications were raised by the dominant companies.

[Insert Table 4]

Table 4 shows that in seven out of fifteen final abuse decisions (or in 47 per cent of the cases) an efficiency defence or another justification was put forward and reported. We consider this

[11] See also O'Donoghue and Padilla (2006), Section 4.5. Loewenthal (2005), Albors-Llorens (2007) and Rousseva (2010, p.281-295) offer a critical assessment of this position based on a comprehensive review of the case law.
[12] See FAG-Flughafen Frankfurt/Main AG, OJ 1998 L 72/30.
[13] See Guidance Paper, paragraph 30.

number to be low given that in Article 102 TFEU cases anticompetitive behaviour and justifications are intrinsically linked.

While the firms tried to bring in justifications in the above mentioned Article 102 TFEU cases they almost always failed to convince the EU Commission of their relevance. Only in IBM Maintenance did the EU Commission indicate that the exercise of an exclusive intellectual property right (IPR) may justify an exclusionary conduct. The EU Commission pointed out, though, that *"the exercise of an exclusive intellectual property right may not justify the arbitrary refusal to supply spare parts to independent repairers"*. Finally, IBM submitted commitments.

More in general one finds only in three of the seven cases a transparent discussion of the business justifications; the business justifications discussed are summarized in Table 5.

[Insert Table 5]

In the following we describe the relevant paragraphs of the above mentioned decisions in detail.

Intel's defence contained efficiencies and other justifications which the EU Commission in general considers to be of relevance (see Table 3). For instance, Intel brought forward cost efficiencies. The EU Commission, however, took the view that Intel did not provide enough supportive evidence for these cost efficiencies. In particular, the EU Commission held that Intel failed to demonstrate why conditionality of the rebate would lead to lower prices compared to a rebate that would not be conditional upon exclusivity or quasi exclusivity. In fact, the EU Commission was reluctant to actually consider Intel's defence as it would *"relate more generally to conduct to which the Commission did not object (i.e. discounting/provision of rebates), and not to conduct to which the Commission did object (i.e. conditions associated with the discounts/rebates)."*

Intel also brought forward a meeting-competition defence. It argued that "*the intense price competition between Intel and AMD, and the discounts granted by Intel in response to competition, produced very substantial consumer benefits in the form of lower consumer prices*".[14] The meeting-competition defence was, however, also rejected by the EU Commission: *"Intel's conducts directly harmed competition. A product which a supplier had been actively planning to release was delayed or constrained from reaching the market. Consumers therefore ended up with a lesser choice than they otherwise would have had."* This constitutes a rather extreme position given the fact that Intel's main competitor, AMD, was apparently not foreclosed but growing during the investigation period.[15] The EU Commission imposed a fine of €1.06 billion on Intel and obliged Intel to cease the identified illegal practices.

In Reel/ Alcan[16] the parties justified their tying practice by arguing for product related efficiencies, operational efficiencies and reputational efficiencies. According to the parties product related efficiencies derive from joint development and production of the two tied

[14] Intel Reply to the 26 July 2007 SO, paragraphs 709–713; the quote is in paragraph 711.

[15] Also in earlier cases the EU Commission' rebate policy has been relatively strict. It only allowed dominant firms to offer linear rebates, which are directly linked to cost savings on the volume of the order (Case T-219/99, *British Airways*, OJ L30-1/2000, 2000 4 CMLR, 999; Commission decision, *Irish Sugar*, OJ L258-1/1997; Case T-228/97, *Irish Sugar*, 1999 5 CMLR 1300; Commission decision, *Cewal, Cowal, Ukwal*, OJ L34- 20/1993). Quantitative rebates, which are linked solely to the purchase volume have not been considered abusive under Article 102 because they are deemed to reflect economies of scale as efficiency gains (Case T-203/01, *Michelin II*, 2003 ECR II-4071, 2004 4 CMLR 923.).

[16] Case AT.39230 – Rio Tinto Alcan, EC Decision, 20.12.2012.

products, smelting technology and handling equipment for aluminium smelters, so called PTAs (see footnote 40 of the Decision). They may relate both to cost efficiencies and pricing related efficiencies. These arguments were rejected by the EU Commission as the joint development and production would not require contractual tying.

The operational efficiencies, that is "*that pre-integrated PTA can prevent significant operational losses for aluminium producers*" (see paragraph 92 of the Decision), as well as the reputational efficiencies, that are negative repercussion on a producer's reputation due to bundled operation of his product with a qualitative inferior product of a different producer, were rejected by the EU Commission based on evidence that customer strongly requested unbundled products, i.e. expressed preferences to mix components of different producers, and by the EU Commissions assessment that the price of Alcan's combined product was higher than that of bundle alternatives.

In Telekomunikacja Polska (TP) the defences raised by TP basically consisted of the EU Commission having too-high expectations regarding TP's business skills and that the refusal to supply was just a result of TP's improper business practice. Apparently, this argument did not qualify as objective justification in the EU Commission's view, regardless of the evidence TP would have submitted to support it. The EU Commission stated in paragraphs 880–883 of its decision that TP's "justifications" could not be accepted on objective grounds. It imposed a fine of €127 million on TP.

Except for the cases described above business justifications have not been transparently discussed in the decisions. Table 6 summarizes four other decisions in which business justifications have somehow been tackled with.

[Insert Table 6]

The Microsoft case on the tying of Internet Explorer (IE) to Windows was very much influenced by the earlier Microsoft case on the tying of Windows Media Player (WMP) to Windows. In the earlier case, efficiencies and other justifications were brought forward by Microsoft. Microsoft was, however, unsuccessful in convincing the EU Commission of the relevance of these efficiencies. As the commitment decision on the tying of Internet Explorer does not contain any assessment of business justifications we summarize in the following the discussion related to the earlier infringement.

The EU Commission argued that the potential transaction efficiencies experienced by consumers do not require that the pre-installation be undertaken by Microsoft. Furthermore, it argued that cost savings made by a tied sale of two products could not possibly outweigh the distortion of competition because distribution costs in software licensing would be insignificant; a copy of a software programme could be duplicated and distributed at no substantial effort. In contrast, the importance of consumer choice and innovation regarding applications such as media players would be high. With respect to Microsoft's argument that the tie-in made it easier for third-party software producers to implement a functionality, the EU Commission noted that Microsoft failed to supply evidence that the tying was indispensable for the alleged procompetitive effects to come into effect. Finally, the EU Commission imposed a fine on Microsoft. It seems that as a

consequence Microsoft did not bring forward justifications in the subsequent tying case but submitted commitments straightaway.[17]

In the case IBM[18] the parties justified the refusal to supply spare parts to independent repairers based on intellectual property right protection "*with regard to some inputs required to provide maintenance services to IBM mainframes*" (paragraph 40 of the Decision). In addition to noting that no in-depth assessment was required due to the willingness of IBM to offer commitments, the EU Commission points to existing case law[19] in arguing that even if those IP rights existed this would not justify arbitrary refusal to supply of spare parts to independent repairers.

In Standard & Poor's (S&P) S&P asserted that copyrights in respect of US ISINs served as a justification for the excessive pricing. However, the EU Commission took the view that S&P did not own copyrights as *"the intellectual effort invested in selecting and arranging its content has been made by the international financial community as a whole, that is to say, ISO and the Association of National Numbering Agencies ('ANNA'), and not by S&P in particular."* S&P committed to abolish the licensing fees.

In Reuters Instrument Codes[20] the EU Commission addressed efficiencies in just one paragraph. In paragraph 44 it is simply states that Thomson Reuter's behaviour cannot be "*justified on grounds of intellectual property rights, the protection of Thomson Reuters' reputation, or technical risks linked to the use of RICs.*"

Overall, the review shows that in 47 per cent of recent 102 TFEU cases an efficiency defence or another justification was put forward and reported. We consider this number to be low given that in Article 102 TFEU cases anticompetitive behaviour and justifications are intrinsically linked. Only in 20 per cent of the cases (in three of the 15 final decisions) a somehow transparent discussion has been put forward, offering only limited insights on the EC Commission's position on that topic.

The finding is consistent with the result of a recent survey in which we asked competition lawyers, who are mostly working in Brussels, about their perception of how often efficiency considerations are brought forward in Article 101 and 102 TFEU cases. 31 per cent of the respondents perceive that efficiency considerations played a significant role but were often not reported transparently.[21] [22]

It is striking that in the majority of cases in which efficiencies or other justifications were put forward by the dominant companies, the dominant companies were active in the IT sector, whereas in the majority of cases in which no procompetitive justifications were put forward by

[17] On 17 July, 2012, the Commission opened proceedings against Microsoft in order to investigate whether the company has failed to comply with its 2009 commitments.
[18] Case Comp/C-3/39692 IBM Maintenance Services, EC Decision 13.12.2011.
[19] Case 238/87 AB Volvo v Erik Veng (1988) ECR 6211, paragraph 9.
[20] Case AT.39654 – Reuters Instrument Codes, EC Decision, 20.12.2012.
[21] This online survey was conducted during the first two weeks of October 2012 and was addressed to antitrust lawyers advising clients on European competition matters. In this survey it was asked whether analyses of efficiencies in 101 and 102 TFEU cases… a) have played an important role and were presented transparently in the Decisions, b) have played an important role but were not presented transparently in the Decisions, c) have not played an important role or d) whether the respondent holds no opinion on that question. We received 55 answers. 10 respondents held no opinion on that question. 2 respondents chose answer a), 12 respondents answer b) and 31 respondents answer c).
[22] The finding is also consistent with a finding by Geradin and Petit (2011) that in only 40 percent of Article 102 TFEU judgments by the General Court between 2000 and 2010 the economic concept "efficiency" was cited.

the dominant companies, the dominant companies were active in the energy sector. The latter cases are EDF S.A. (exclusive dealing), ENI (refusal to supply), E.ON Gas (refusal to supply), Gaz de France (refusal to supply), RWE Gas (refusal to supply and margin squeeze) and Swedish Interconnectors (curtailing of capacity).

A further interesting insight is that most of the decisions which offer a somehow transparent assessment of efficiencies and other justifications are prohibition and not commitment decisions. In fact, Intel and Telekomunikacja Polska are the two only prohibition decisions taken since 2009. It seems that commitment decisions shift the focus of the assessment on eliminating the anticompetitive concern raised by the EU Commission and move it away from a broader more integrated balancing of the pros and cons of the specific behaviour. Due to that practice a transparent evaluation of efficiency considerations in the EU Commission's decision is not achieved. From a policy perspective this is a lost opportunity for providing more guidance to the business community on the kinds of justifications that are acceptable.

Overall, the review of past Article 102 TFEU cases shows that efficiency defences are of limited importance under the current practice. They play a role mainly in cases related to the IT sector but not in others. The observed shift in the European Commission's enforcement priority towards cases related to the IT sector implies a growing importance of a well-conceived approach to efficiency considerations within Article 102 TFEU. In the following section, we discuss the reasons behind the limited role of efficiency defences under the current practice and point to policy options.

5. Discussion

During the debate on the Article 102 TFEU Guidelines, i.e. in the period from 2005 to 2009, most commentators agreed that efficiency considerations should play a more prominent role when assessing abuse cases.[23] And indeed the Guidance Paper, which was adopted in 2009, explicitly establishes an efficiency defence. However, our empirical review of recent EC decisions does not indicate that the debate and the Guidance Paper resulted in any observable changes. Despite the advance in IT related cases, the procedures seem to have remained hostile to a transparent, detailed and decisive assessment of efficiency considerations within Article 102 TFEU decisions.

This stays in contrast to the increasing relevance of efficiency considerations under merger proceedings, in which a comparable legal approach towards efficiencies is put forward. [24]

[23] For instance, the Economic Advisory Group for Competition Policy (2005, p.2) formulated: *"This implies that competition authorities will need to identify a competitive harm, and assess the extent to which such a negative effect on consumers is potentially outweighed by efficiency gains. The identification of competitive harm requires spelling out a consistent business behaviour based on sound economics and supported by facts and empirical evidence. Similarly, efficiencies – and how they are passed on to consumers – should be properly justified on the basis of economic analysis and grounded on the facts of each case."* Furthermore, Whish and Bailey (2012, p.212) comment: *"In the opinion of the authors the Commission's approach seems reasonable, in that efficiency considerations can be taken into account under Article 101(3) and in EU merger control: it would seem odd if efficiency had no part to play in Article 102 analysis."*

[24] See Röller (2010) and Veugelers (2012) for an assessment of the relevance of efficiency considerations in EU merger proceedings. In fact, both, Röller and Veugelers, hold a rather sceptical view on the success of efficiency considerations in merger proceedings, in particular related to earlier years after the introduction of the 2004 Merger Guidelines. However, recently efficiency considerations seem to have become more effective in merger proceedings. For instance, Kühn et al. (2012) report the assessment of efficiencies in three recent phase II mergers (*Deutsche*

Several points may explain the limited relevance of business justifications in Art 102 TFEU cases.

First, it can be argued that firms do not put forward business justifications simply because no plausible justification exists. Indeed, the Commission can select the cases it pursues and is potentially focusing on blatantly abusive cases. This might be true in particular for network industries related cases, where the intervention is more of regulatory character enforcing some form of asymmetric regulation. The case Telekomunikacja Polska, the only case where an incumbent operator active in a network industry put forward some business justifications, indicates indeed the limited availability of plausibility justifications. The justification put forward by Telekomunikacja Polska must be labelled more an INefficiency defence than a proper business justification.

Second, a major reason why there has not been a transparent discussion of business justifications may lie in the predominant application of commitment decision. In fact, more than 87 per cent of all decision taken over the period 2009 to mid 2013 have been commitment decisions (13 out of 15 decisions; only Intel and Telekomunikacja Polska have been prohibition decisions). Commitment decisions are shorter, do not require any acceptance of wrongdoing by the firms and do not impose fines. Although the analysis must be supported by "*solid evidence and theories of harm*",[25] commentators have questioned this approach.[26] Indeed, our assessment indicates that transparency, and hence advocacy, is traded-off against speed. We will come back to this point when discussing policy options.

Third, the type of efficiencies relevant for abuse cases might be difficult to verify. In abuse cases, many of the relevant efficiencies are related to fix cost savings and/ or dynamic efficiencies. In fact, those characteristics are often the reason for the finding of dominance in the first place. Such efficiencies are difficult to proof and to verify. Hence, the relevance of business justifications in dominance cases may stay limited as long as the Commission does not reconsidered its position on fix costs efficiencies and the high requirements regarding standard of proof for dynamic efficiencies.

Finally, the two-step/ balancing approach within which dominance cases are assessed may be considered inappropriate to the issue at hand. In abuse cases business justifications include meeting competition and objective necessity defences. Here the pro- and anticompetitive elements are non-separable, and a two-step assessment process seems less natural than for simple marginal costs efficiencies. Also, an analysis of actual effects is required as effects are often non-monotone.

We will come back to the first three points when discussing the policy options. First, we will more carefully discuss the last point(s). We argue that non-separability and non-monotony of pro- and anticompetitive effects in abuse cases may render the two-step balancing approach less suitable for abuse cases than for merger cases and may therefore – in addition to the other points

---

Börse/ NYSE (2012), *Seagate/ Samsung* (2011) and *Western Digital/ Hitachi* (2011)). In these cases efficiency considerations, including dynamic efficiencies, were assessed in depth and seemed to have been relevant in particular for designing remedies.

[25] See Almunia (2013, p.2) and EC (2013, p.1).

[26] Despite the different institutional background a parallel discussion is held in the US. „Consent Agreements", which are the US pendant to commitment decision, are criticized on comparable grounds. For a discussion on this point see Ginsberg and Wright (2013).

mentioned above - explain why efficiencies and other justifications only played a minor role in abuse cases.[27]

5.1 The properties of non-separability and non-monotony

The balancing test as applied in EU competition law rests on the assumption that pro- and anticompetitive effects can be disentangled, assessed separately and then be weighed against each other under a common welfare objective.

In fact, it was a general point of criticism within the "more economic approach" reform that partitioning of specific analytical steps is inappropriate and that a more integrated assessment of the countervailing effects is warranted.

We agree on that. The reasons that speak against a piecemeal approach and for an integrated analysis can be inferred best from the traditional structure-conduct-performance principle ("SCP principle"). The SCP principle proclaims a causal, unidirectional relationship from market structure on a firm's strategy towards its performance. In other words, the SCP principle proclaims a causal, unidirectional relationship from the number of firms and their market shares on a firm's strategy choice, like a low price strategy or product differentiation, towards its short- and/ or long-term profitability.

However, this framework on how markets function cannot cope with endogeneity of its components: the number of firms in a market is equally driven by an industry's profitability as the industry's profitability is driven by the number of firms in the market.

Reversed causality between individual components of the SCP principle translates into severe misjudgements: an assessment that a merger introduces an upward pricing pressure and, hence, increases profitability of the merged parties, offers a wrong prediction of post-merger price levels when elevated profitability does attract entrants (which in turn dissipates extra profits). Obviously, a proper assessment has to take those interactions into account. The analysis has to establish an equilibrium outcome and not only identify partial effects.

This shortcoming of the SCP principle affects both, the assessment of merger cases as well as the assessment of abuse cases. It is more pronounced for abuse cases, though. To see this, consider Figure 1.

[Insert Figure 1]

A major distinction between the competitive assessments in the two fields is the different starting point. In a merger case the assessment is triggered by a change in market structure. In an abuse case the starting point is a particular conduct. Within the SCP framework this implies that a

[27] The literature identifies several further differences in the type of potential efficiencies and their assessment in abuse cases compared to merger cases. However, in our view those differences cannot explain why the balancing test works better for merger cases than for abuse cases. For completeness, though, we list them in the following: First, a higher diversity of conduct in abuse cases has to be expected. This is so because in contrast to merger cases Article 102 TFEU cases focus on behaviour and not on market structure. Moreover, since business behaviour is more diverse this results in more diverse theories of harm and more diverse potential efficiencies. Second, different types of analysis can be carried out in Article 102 cases as those cases often are backward looking, while merger cases are typically forward looking. Third, different presumptions (negative vs. neutral) do exist. See Riziotis (2008) as well as Bellis and Kasten (2010) for further explanatory notes.

merger assessment enters the causal chain at the beginning, whereas an abuse case starts in the middle. Because the starting point of the assessment in abuse cases is in the middle of the SCP chain non-separability of positive and negative effects results.

To illustrate this, consider a standard unilateral effects merger case. The assessment begins with an assessment of the concentration proposed by the parties. Thereafter, it is assessed whether the merger will increase market power of the merging parties and hence potentially result in increased prices. In this situation, an elegant way to disentangle the pro- and anticompetitive effects is to first calculate the critical marginal cost reduction which is required to offset the upward pricing pressure due to increased market power.[28] In a second step the actual, expected efficiencies are compared with the elasticities needed to offset the upward pricing pressure. While the combination of the two price effects serves as a prediction of the overall effect of the merger on consumer welfare, the two price effects can be analysed separately and only finally be combined in a single price prediction.[29]

This is different in a typical abuse case. Consider, for instance, a predatory pricing allegation against a larger firm. The starting point for this kind of case is the conduct, i.e. the middle piece of the SCP principle. From there one first moves back to market structure in order to assess dominance. Once this is established, conduct and efficiencies are (to a large extent completely separated from the dominance assessment) analysed in the traditional two-step-balancing-procedure.

While in a merger case it is assessed with which probability the merging firms will implement a low or a high price strategy, in an abuse case the question is rather whether a low price strategy had pro- or anticompetitive motives and effects. For instance, a low price strategy could have been motivated by a specific shape of the cost function or could just have been a competitive reaction. In case of such procompetitive motives an as efficient competitor will not be foreclosed. Hence, the answer to the procompetitive justifications is also the answer to the likely anticompetitive effects. This evaluation is not a balancing exercise but requires an "either-or-decision" by the competition authority. Accordingly, the two-step approach of first assessing anticompetitive effects and then pointing to procompetitive effects seems to be less tractable in abuse cases than in merger cases. In fact, it often appears to be unclear how anticompetitive elements can be analysed without analysing the procompetitive elements.

More generally, we can distinguish between three scenarios: (1) conducts that only have anticompetitive motives and effects, (2) conducts that have anticompetitive and procompetitive

[28] In fact, this is a good example to see some of the more technical complications in the assessment of pro- and anticompetitive effects: When assessing the price effect of increased market power one has to estimate the price elasticity of demand at the new price level. Typically one can measure, however, only the price elasticity of demand at the current price level. Using the price elasticity of demand at the current price level to predict the price increase post-merger can result in severe estimation bias if the true price elasticity of demand varies with the price level. One way to circumvent this problem is to calculate the offsetting cost efficiencies which would keep – despite increased market power – prices at the current level, thereby avoiding the above mentioned measurement problem (see Werden and Froeb, 2006). In this case a combined assessment of pro- and anticompetitive effects offers a more reliable (and potentially less complicated) estimate of the likely effects.

[29] We speak of conceptual separation to distinguish this property from the element of merger specificity. Merger specificity requires that the two effects can only be achieved jointly through the merger. The property of conceptual separability allows analysing the two effects separately without making a judgement error. It has to be pointed out that also in merger cases a complete separability of the pro- and anticompetitive effects cannot be taken as granted. For instance, the pass-on of cost efficiencies to end consumer may depend on the level of market power held by the merging parties post merger, that is, the pro- and anti-competitive effects may depend on each other.

motives and effects and (3) conducts that only have procompetitive motives and effects (see Table 7).

[Insert Table 7]

In merger cases pro- and anticompetitive effects typically come together, that is, in merger cases scenario (2) typically holds. In these cases we can, however, also separate positive effects, usually due to marginal cost decreases, from negative effects, usually due to increased market power. Both these effects are reflected in the price, so that it is possible to measure the combined effect, i.e. the overall price change.

In dominance cases, by contrast, the conduct is often driven by either pro- or anticompetitive motives and/ or effects, that is, in dominance cases an antitrust authority focuses in its assessment on whether scenario (1) or (3) holds.[30] Coming back to the example of low price strategies, the immediate effect is undisputed and can be described by low prices. The central question is whether this strategy is pursued for anticompetitive reasons and has the actual or likely effect to foreclose as efficient competitors (scenario 1) or whether it is pursued for procompetitive reasons and is likely to be beneficial for consumers (scenario 3). This is not a balancing exercise but requires a position on whether or not the conduct is abusive.[31] The Commission has partly addressed this problem by implementing the as efficient competitor test in cases in which the concern is a price-based exclusionary conduct (see Section 2.1.). Under the as efficient competitor test the cost benchmarks are derived based on the actual costs of the incumbent. Within such a test high efficiency translates into a less restrictive legal standard (i.e. very aggressive price strategies are still acceptable); low efficiency translates into a more restrictive legal standard (i.e. only non-aggressive price strategies are acceptable). To some extent this can be considered an integrated assessment of efficiency considerations.

In summary, standard abuse cases require an integrated analysis of the pro- and anticompetitive effects of a conduct because positive and negative effects are deeply intertwined. However, this fact is not sufficiently recognized in the EU Commission's practice and in its Guidance Paper. Forcing the analysis into a two-step-procedure incentivizes the Commission to postpone efficiency considerations to a later stage, a stage where the affected parties do not see a great potential to "turn the case" given the anticompetitive findings in the first step.[32] An integrated analysis is of increasing relevance in the new markets currently under investigation.

[30] We mention motives and actual or likely effects here in parallel. This is to highlight the „either-or"-character of the assessment. We do not argue that motives always need to be in line with effects, or that they should play a larger role than they currently do in the competitive assessment. Further, it should be clear that we discuss the standard case. Also abuse cases may involve separable pro- and anticompetitive effects. For instance technical tying of two products may result in some marginal cost reductions in producing the bundle and increase the capabilities to exclude rivals (independently from conduct specific cost reductions). For a discussion on these points see Nalebuff (2005).

[31] Interestingly this is in line with the a legal perspective that there is no efficiency defence within Article 102, but that it is more about whether or not there is an abuse: if a conduct is based on legitimate grounds or efficiencies it is not abusive. For a discussion on these points see O'Donoghue and Padilla (2006, p.227/228).

[32] In the field of merger review it has been argued that parties do not put forward an efficiency defence because it signals that the merger comes with anticompetitive effects which need to be counterbalanced (so called „informational efficiency offence" according to Röller 2010, p.21). In abuse cases this seems to us of lesser relevance given the already existing negative presumption with which a typical abuse case comes in.

5.2. The property of non-monotony

A second, related problem which speaks against the two-step procedure and the separation of pro- and anticompetitive effects in abuse cases is the non-monotony of effects. Market effects are often non-monotone in dominance cases in the sense that a low price strategy is beneficial up to some extent. Beyond a specific threshold, when an as efficient competitor is foreclosed, it is, however, detrimental to consumer welfare. Put differently, at least the large group of exclusionary conduct cases within abuse cases are about understanding the conduct's overall effect on market structure (that is the first component of the SCP principle) and not its effect on performance indicators like prices as in the merger procedure.[33] In fact, from a consumer welfare perspective, attempted predatory strategies which fail to achieve their goal of exclusion are mostly beneficial. It is only the post exclusion period which allows recoupment and, hence, the exploitation of customers.

While one may argue that a policy built upon failed business strategies is not well founded, it is not uncommon that short term effects – initiated in an attempt to exclude – persist in the long term. For instance, limit pricing strategies may lead to foreclosure but also come at the cost of lower prices for the predator. If the predator fails to exclude, consumers are better off with the predator having tried to exclude.

Similarly, exclusive dealing may be motivated by exclusionary motives but may result in the emergence of a low price equilibrium: If downstream firms have signed exclusive contracts with an incumbent upstream firm, an upstream competitor may be pressurized to become more efficient in order to induce contract breach by the downstream firms, resulting in overall lower prices for final consumers. That is, due to a conduct that may well have anticompetitive motives, firms may end up in a supra-competitive situation.

Further, the competitive effects of exclusive dealing may vary depending on factors unrelated to the incumbent's motives. For instance, Gratz and Reisinger (2013) show that exclusive dealing has - within the analysed theoretical framework - a neutral effect when downstream competition is weak.[34] At an intermediate level of downstream competition, however, it has a positive effect. And when downstream competition is strong it has a negative effect (see Figure 2).

[Insert Figure 2]

Hence, the competitive effects of exclusive dealing contracts are non-monotone in the sense that exclusive dealing has a neutral or positive effect up to some extent. However, beyond a specific threshold, i.e. when downstream competition becomes very intense, the effect may be anticompetitive.

Within such a context the independent assessment of anticompetitive effects and efficiencies becomes even more superficial than discussed in the earlier section. Here the "efficiencies" are identical to the potentially anticompetitive conduct, where the only way to distinguish the two scenarios is through an assessment of the exact degree of its actual or likely effects.

[33] Acknowledging this implies that the efficiency analysis also has implications for the dominance assessment as the abuse helps you to understand whether a firm can act to a large extent independently from its competitors. A full understanding of the efficiencies underlying a conduct contains also helpful information to judge on dominance.
[34] Within the theoretical framework it is assumed that the potential upstream competitor is sufficiently efficient and breach of contract is feasible.

5.3. Policy Options

The arguments against a piecemeal approach when assessing efficiencies are not new. Important reform steps towards a new approach included the publication of the Guidance paper in 2009 and the establishment of a Chief Economist Team within the DG Competition, which has the absorptive capabilities to evaluate economic analysis put forward by the parties and to conduct its own economic research. The hope was that the taken reform steps are sufficient to trigger a process towards an economically sound approach. This was not the case though. The Commission's current practice does not produce a transparent, detailed and decisive assessment of efficiency considerations within Art 102 TFEU decisions, despite advocacy efforts spend in the meantime and despite a more economic institutional surrounding.

We have argued above that due to the properties of non-separability and non-monotony a two stage procedure seems flawed in particular with respect to abuse cases. Further, the high number of commitment decisions in abuse cases impedes clarity regarding analysis as well as relevance of efficiencies and other justifications; the limited guidance on how to assess fix cost related and dynamic efficiencies hampers further the relevance of business justifications in abuse cases.

Several, partially overlapping, policy options exist to enable a more integrated approach towards efficiencies in abuse cases. In the following, we list these policy options according to the extent of reform steps required, ranging from incremental to more drastic reform steps:

Advocacy: The EU Commission may produce more comprehensive guidelines, deliver precedent cases and stated opinions by key stakeholders, indicating its willingness to allow efficiency considerations and other justifications to play a larger role in their decision making.

Lower standard of proof: The standards of proof to accept efficiencies and other justifications may be reduced. This could be established by limiting the degree of verifiability more generally or by committing to accept specific forms of evidence. For instance in the Metso/ Aker Knaerner case, which is so far the only EC merger case for which dynamic efficiencies where accepted by the Commission, the Commission applied according to Lugard (2012) "*a low evidentiary threshold for the verifiability of the claimed efficiencies; the parties' claims and the reaction from customers seem to have been sufficient*". A conceptual more sound approach may consist in deriving market characteristics, which make the realization of efficiencies more likely. In the context of merger control, Veugelers (2012), for instance, derives ex ante criteria to assess the impact of a merger on the incentives to innovate.[35]

Inverting the sequence of the balancing test: The assessment could start with the evaluation of the business justifications of a particular behaviour. Potential anticompetitive effects of a conduct would then be considered only in a second step. Such an approach would be comparable to that in EC State aid cases, which starts with the analysis of the justification of aid. In state aid cases indispensability and proportionality are addressed only in a second step; only at last the assessment concerns distortions of competition and effects on trade.

Obligation to review efficiencies: Currently there are no explicit obligations for the Commission to review efficiencies without an efficiency defence being invoked by the parties. The burden of

[35] Veugelers' main policy proposal is to put an obligation on the parties to report static and dynamic efficiencies and to put an obligation on the Commission to assess static and dynamic efficiencies in order to support a more stringent assessment of efficiencies in merger proceedings.

proof is with the parties. This seems questionable to the extent that pro- and anti-competitive effects in abuse cases are deeply intertwined. Hence, for non-separable justifications the Commission may acknowledge its obligation to assess those justifications when balancing the probabilities.

Efficiency assessment fully integrated into the competitive assessment: A broader policy reform would be to fully integrate the efficiency assessment into the competitive assessment. This would de facto put the burden to disprove efficiencies, separable and non-separable, on the Commission, and induce the Commission to follow a more holistic assessment of the motives and actual or likely effects. Given the investigative tools of the Commission in abuse cases, which allow it to request related information from the parties, such an approach might be feasible. Within such an integrated assessment the boundaries between the competitive assessment and dominance assessment may also become more permeable, as it would allow starting with an integrated assessment of pro- and anticompetitive effects, turning to the dominance assessment only thereafter. [36]

Require efficiency considerations in commitment decisions/ limit the overall usage of commitment decisions: As discussed before the majority of abuse cases is concluded by a commitment decision. Commitment decisions are shorter, do not require any acceptance of wrongdoing by the firms and do not impose fines. Although the analysis must be supported by "*solid evidence and theories of harm*",[37] commentators have questioned this approach. Wagner-von Papp (2013), for instance, argues that negotiated commitments do not mimic the outcome of formal prohibition decisions. Despite the "*voluntary*" character, parties are prone to offer commitments that are too broad or are only loosely related to the distortionary effects. This is so for several reasons. Firstly, parties expect that a formal prohibition decision includes disproportionate responses which are only partially challenged by the European Courts due to perceived or real shortcomings of the judicial review process. As this outcome describes the Commission's outside option the parties are willing to accept disproportionate commitments in the first place. Secondly, they expect otherwise negative repercussions on future negotiations with the Commission. And finally, they are willing to "pay a price" for the lower litigation risk of commitment decisions (as they do not require any acceptance of wrongdoing).[38] While commitment decisions in comparison to prohibition decisions reduce legal certainty in general, this has in particular negative effects on efficiency considerations: the required "either-or-decision" is not explicitly taken as the affected parties are willing to step back voluntarily; an explicit efficiency defence is not invoked by the parties given that the commitments resolve already any potential competition concern. Requiring a more complete assessment also in commitment decisions or avoiding commitment decisions in the first place (eventually replacing

[36] A good example for such an integrated approach is given in the recent study by Lear (2012, p.136). Here the theory of harm and efficiency considerations are always analysed in parallel. The following quote describes a screening device to assess cross supplier price matching clauses: "*At the start the practitioner is asked a few general questions aimed at identifying the key characteristics of market in which the PRA* [Price Relationship Agreement] *under exam is adopted. These questions should help to determine the most likely theory of harm or, if more appropriate, the most likely efficiency justification. The practitioner is then asked to further analyse some specific characteristics of the PRA and of the market concerned in order to assess the potential risk/gravity of the alleged competitive harm or the plausibility of the efficiency justification identified earlier. Third, some checks - specific to the underlying hypothesis – are proposed in order to further test the plausibility of the conclusions reached.*"

[37] See also Almunia (2013, p.2) and EC (2013, p.1).

[38] See also Wagner-von Papp (2013, p.5).

them with prohibition decisions in combination with injunctions in fast moving industries)[39] may be considered an appropriate response to that concern.

Change in the welfare standard: A more drastic change would be to adopt a different economic standard. For instance, under a total welfare standard fix cost savings and dynamic efficiencies would more naturally be considered in the assessment. As fix costs considerations are often central to a dominance case and to the justifications of a dominant firm's market behaviour this may be considered an appropriate policy change.[40] Alternatively, and less intrusive for the existing enforcement environment, one may want to give so called dynamic efficiencies a more prominent and explicit role under a consumer welfare standard.[41] Indeed in the context of merger review Röller (2010, p. 22) concludes as follows: "*The consumer surplus standard focuses attention on the right empirical facts that need to be uncovered in competition policy cases. However, it is important that efficiencies, investment and innovation play a proper role under a consumer surplus standard.*"

The question arises which of the above mentioned policy options offer a reasonable remedy to observed irrelevance of business justifications in Art 102 TFEU cases. While the call for a fully integrated analysis with a proper focus on likely and actual pro- and anti-competitive effects seems conceptually sound, it finds its boundaries in the day-to-day realities of competition law enforcement: a partial, eventually sequential assessment allows to filter for irrelevant cases and to focus the assessment on the most problematic components. It is in the broader context of on the one hand conceptual purity and on the other hand practicality within which a procedure needs to be evaluated.[42]

Still it seems to us unavoidable to have some assessment of business justifications within the standard assessment of most of the abuse cases: Given the non-separability characteristic of anticompetitive effects and business justifications in many instances, there is no proper assessment of the merits of the case without assessing those elements in tandem. [43] Hence, in our view the EU Commission and the parties have to acknowledge that when assessing the probability of likely or actual anticompetitive effects an assessment of business justifications is required as well.

[39] Lugard et al. (2013, p.7) point out that the three commitment decisions taken in IT markets in the recent past were not concluded in a particular short time period. Processing time varied between 17 month (IBM 2011) and 29 months (Rambus 2009). This stands in contrasts with the average period required for granting interim measures of three to eight month.

[40] See also Ridyard (2013). He argues that dominance is often a consequence of the fix costs intensive character of an industry. Recoupment of those fix costs, eventually through price discrimination, are often the major justification for allegedly anti-competitive conduct.

[41] In the context of merger review Röller (2010, p. 22) concludes as follows: *"The consumer surplus standard focuses attention on the right empirical facts that need to be uncovered in competition policy cases. However, it is important that efficiencies, investment and innovation play a proper role under a consumer surplus standard."*

[42] Vickers (2009, p.72-74) for instance defends a separate dominance assessment, instead of fully intertwining competitive assessment and dominance aspects, based on the argument that the dominance assessment offers a plausible screen. This was at least partially acknowledged also by the EAGCP (2005, p.14) which states: *"…an effects-based approach needs to put less weight on a separate verification of dominance, except possibly for a de minimis consideration."*

[43] In the context of cartel detection through economic evidence Harrington (2008, p.227) coins the notion of *"putting two theories into a horse race against each other"*. This seems also to us the intellectually right framework when balancing the probabilities regarding a specific abuse.

Given that argument we see an approach that explicitly puts an obligation on the EU Commission to assess business justifications but with a relative low standard of (dis)proof, allowing the parties to rebut the Commissions assessment, as the most convincing reform step. The criteria of non-separability may trigger the requirement for the Commission to proactively assess the specific efficiencies and other justifications (and therefore the obligation to firms to properly address those issues in their submissions). In addition – or better to say as a consequence of this obligation to assess non-separable efficiencies – the assessment needs to become more transparent in the decisions, a requirement which means stepping back from the current practice of commitment decisions – at least in its current form.

These non-separable justifications are in our view broader than a claim to objective necessity (for which already now the EU Commission accepts its obligation to assess). The latter is based on external factors to the dominant firm, like for instance health and safety considerations;[44] business justifications may include more general strategic considerations of a dominant firm. The EU Commission should offer a transparent discussion of its assessment of those factors in its decisions; a reformed approach towards dynamic efficiencies will further strengthen the relevance of business justifications in Art 102 TFEU cases.

6. Conclusions

In this paper, we explored the actual relevance of efficiency considerations in the EC practice of abuse cases. We reviewed opened investigations and final EU Commission Decisions from 2009 to mid 2013. Overall, the review showed that efficiency defences are of limited importance under the current practice. They played a role mainly in cases related to the IT sector but not in others. The observed shift in the European Commission's enforcement priority towards cases related to the IT sector implies a growing importance of a well-conceived approach to efficiency considerations within Article 102 TFEU.

Various policy options are available to facilitate a transparent, detailed and decisive assessment of efficiency considerations within Art 102 TFEU decisions. In our view the most reasonable policy option is to require the EU Commission to assess business justifications, which are non-separable from the assessment of anticompetitive effects and do so transparently - also in commitment decisions. This would facilitate an integrated assessment and produce further guidance to the business community regarding the kinds of justifications that are acceptable from an antitrust perspective; a reformed approach towards dynamic efficiencies would further strengthen the relevance of business justifications in Art 102 TFEU cases.

[44] See also Wish and Bailey (2012, p.211).

Literature

Albors-Llorens, Albertina (2007). The Role of Objective Justification and Efficiencies in the Application of Article 82 EC. *Common Market Law Review,* 44: 1727-1761.

Almunia, Joaquín (2013). Remedies, commitments and settlements in antitrust. Speech at the Studienvereinigung Kartellrecht, Brussels 8 March 2013.

Bellis, J.F., and T. Kasten (2010).Will Efficiencies Play an Increasingly Important Role in the Assessment of Conduct under Article 102 TFEU? In: *Competition Law and the Enforcement of Article 102*, ed. F. Etro and I. Kokkoris, Oxford: Oxford University Press, Chapter 9.

Economic Advisory Group on Competition Policy (2005). An economic approach to Article 82. http://ec.europa.eu/dgs/competition/economist/eagcp_july _21_05.pdf.

European Commission (2005). DG Competition discussion paper on the application of Article 82 of the Treaty to exclusionary abuses.

European Commission (2008). Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings.

European Commission (2009). Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings. *Official Journal of the European Union,* 7–20.

European Commission (2013). Antitrust: commitment decisions – frequently asked questions. Memo/13/189.

Geradin, D., and N. Petit (2011). Judicial review in European Union competition law: A quantitative and qualitative assessment. *TILEC Discussion Paper Series*.

Gratz, Linda, and Markus Reisinger (2013). On the Competition Enhancing Effects of Exclusive Dealing Contracts. *International Journal of Industrial Organization,* 31(5): 429–437.

Harrington, Joseph E. (2008). Detecting Cartels. In: *Handbook of Antitrust Economics*, ed. P. Buccirossi, MIT Press.

Kühn, Kai-Uwe, Szabolcs Lorincz, Vincent Verouden and Annemiek Wilpshaar (2012). Economics at DG Competition, 2011-2012. *Review of Industrial Organization,* 41: 251-270.

Loewenthal, Paul-John (2005): The defence of "objective justifications" in the application of Article 82 EC. *World Competition*, 28(4): 455-477.

Lugard, Paul and David Cardwell (2012). Innovation is King. Or is it? Summary Observation on the Application of EU Antitrust and Merger Control Law to Innovation-related Transactions. *CPI Antitrust Chronicle,* 2: 1-10.

Lugard, Paul and Martin Möllmann (2013). The European Commission's Practice Under Article 9 Regulation 1/2003: A Commitment a Day Keeps the Court Away? *CPI Antitrust Chronicle,* 3: 1-12.

Nalebuff, Berry (2005). Exclusionary Bundling. *The Antitrust Bulletin,* 50(3): 321-370.

O'Donoghue, R., and A.J. Padilla (2006). *The Law and Economics of Article 82*. Hart Publishing.

OECD (2012). Competition Policy Roundtable on Excessive Prices. Background Note by the Secretariat written by Frank Maier-Rigaud, DAF/COMP(2011)18.

Ridyard, Derek (2013). Efficiency Concepts in Article 102 Cases. Presentation at the IBC Competition Economics Conference, 23 April 2013, London.

Riziotis, D. (2008). Efficiency Defence in Article 82 EC. In: *Abuse of Dominant Position: New Interpretation, New Enforcement Mechanisms?* MPI Studies on Intellectual Property, Competition and Tax Law, 5: 89–115.

Röller, L.-H. (2007). Exploitative Abuses. *ESMT Business Brief*, ESMT No. BB-107-002.

Röller, L.-H. (2010). Challenges in EU Competition Policy. Report commissioned by the Competition Policy Working Group.

Rousseva, Ekaterina (2010). Rethinking Exclusionary Abuses in EU Competition Law. Hart Publishing, Oxford.

Veugelers, Reihilde (2012). Innovation in EU Merger Control: Walking the Talk. Bruegel Policy Contribution issue 2012/04.

Vickers, John (2009): Some Economics of Abuse of Dominance. In: *Competition Policy in the EU: 50 Years on From the Treaty of Rome*, ed. Xavier Vives, Oxford University Press, 71-91.

Wagner-von Papp, Florian (2013). Critical considerations on the Commission's Commitment to the Commitment Procedure. *CPI Antitrust Chronicle*, 3: 1-6.

Werden, G. J. and Froeb, L. M. (2006). Unilateral Competitive Effects of Horizontal Mergers. In: *Advances in Economics of Competition Law*, ed. P. Buccirossi, MIT Press.

Wish, Richard and David Bailey (2012). Competition Law. 7th Edition. Oxford University Press.

Appendix – Article 102 TFEU, enforcement activity of DG Comp

List of Openings of proceedings between 2009 and mid 2013, ordered by date of opening decision

1. 39.523 Slovak Telekom (2009)
2. 39.612 Perindopril (Servier) (2009)
3. 39.740 Foundem/ Google (2010)
4. 39.768 Ciao/ Google (2010)
5. 39.775 1plusV/ Google (2010)
6. 39.822 Honeywell/ DuPont – refrigerants (2011)
7. 39.759 ARA foreclosure (2011)
8. 39.840 The MathWorks (2012)
9. 39.678 / 39.731 / 39.915 Deutsche Bahn I – III (2012)
10. 39.939 Samsung – Enforcement of ETSI standards essential patents (2012)
11. 39.985 Motorola – Enforcement of ETSI standard essential patents (2012)
12. 39.986 Motorola – Enforcement of ITU/ISO/IEC and IEEE standard essential patents (2012)
13. 39.984 OPCOM – Romanian Power Exchange (2013)

List of Decisions taken between 2009 and mid 2013, ordered by date of opening decision

1. 37.990 Intel (2007; 2009); prohibition decision
2. 39.402 RWE Gas foreclosure (2007; 2009), commitment decision
3. 39.386 EDF - Longterm electricity contracts in France (2007; 2010), commitment decision
4. 38.636 Rambus (2007; 2009), commitment decision
5. 39.315 ENI (2007; 2010), commitment decision
6. 39.530 Microsoft (tying) (2008; 2009 and 2012), commitment decision
7. 39.230 Reel / Alcan (Rio Tinto) (2008; 2013), commitment decision
8. 39.316 GDF foreclosure (2008; 2009), commitment decision
9. 39.351 Swedish Interconnector (2009; 2010), commitment decision
10. 39.525 Telekomunikacja Polska (2009; 2010), prohibition decision
11. 39.592 Standard and Poor's (2009; 2011), commitment decision
12. 39.654 Reuters Instrument Codes (2009; 2012), commitment decision
13. 39.317 E.ON gas foreclosure (2010; 2010), commitment decision
14. 39.692 IBM – Maintenance service (2010; 2011), commitment decision
15. 39.727 ČEZ (2011; 2013), commitment decision

Table 1: Opened investigations (#13) and final decisions (#15) by name, 2009 – mid 2013

	Regulated network industries			Manufacturing		Services		Pharma
	Energy	Transport	Telecoms	General	IT Hardware	IT Software	Financial Services	
Exclusive dealing	EDF (2007; 2010)				Intel (2007; 2009)			
Tying/ bundling				Reel/ Alcan (2008; 2013)		Microsoft (2008; 2009/ 2012; 2013) Google (2010/ 2010/ 2010)	Reuters (2009; 2012)	
Refusal to supply/ margin squeeze	ENI (2007; 2010) RWE Gas (2007; 2009) GDF (2008; 2009) E.ON Gas (2010; 2010) ČEZ (2011; 2013)	Deutsche Bahn (2012) ARA (2011)	TP (2008; 2010) Slovak Telekom (2009)		IBM (2010; 2011)	MathWorks (2012)		
Predatory pricing								
Exploitative abuses				Honeywell, DuPont (2011)	Rambus (2007; 2009) Samsung (2012) Motorola (2012/ 2012)		S&P (2009; 2011)	
Others	Swedish Interc. (2009; 2010) OPCOM (2013)							Servier (2009)

Notes: In brackets are the opening dates of the investigations and, given the case has already been decided, also the final decision dates.
Source: Authors' review of past EU decisions.

Table 2: Opened investigations (#13) and final decisions (#15), numbers and priorities, 2009 – mid 2013

	Regulated network industries			Manufacturing		Services		Pharma
	Energy	Transport	Telecoms	General	IT Hardware	IT Software	Financial Services	
Exclusive dealing	1				1	D		
Tying/ bundling		A		1		5	1	B
Refusal to supply/ margin squeeze	5	2	2		1	1		
Predatory pricing					C			
Exploitative abuses				1	4		1	
Others	2							1

Source: Authors' review of past EU decisions.

Table 3: Potential efficiencies and other justifications mentioned by the EU Commission

	Objective necessity and meeting-competition defence	Efficiencies
Exclusive purchasing obligations or conditional rebates	The EU Commission points out that meeting-competition can in general not be used as a justification.	The exclusive purchasing obligation or conditional rebate may be indispensable • to obtain cost advantages (economies of scale and scope, network effects or learning curve effects); • to provide the supplier with an incentive to make a relationship-specific investment necessary to supply a particular customer; • to avoid double marginalisation.
Refusal to supply and margin squeeze	• The undertaking seeking access will not be technically able to use the facility in a proper manner. • The undertaking being terminated is not able to provide the appropriate commercial assurances. • In the case of access to an essential facility access will lead to a substantial increase in cost that will jeopardise the economic viability of the facility holder.	Access may be denied if • thereby adequate returns on investment and thus continuing investment incentives will be assured; • otherwise the dominant undertaking's level of innovation will be impacted negatively (e.g. through the development of follow-on-innovation by competitors); • the dominant undertaking wants to integrate downstream and perform the downstream activities itself (it then has to show that consumers are better off with the refusal to supply).
Tying and bundling	It may be an objective necessity to tie products for reasons of quality or good usage of the products necessary to protect the health or safety of the customers.	• Tying and bundling may help to produce savings in production, distribution and transaction costs. • Combining two independent products into a new, single product may be an innovative way to market the product(s), enhancing the ability to bring such a product to the market to the benefit of consumers.
Predatory pricing	Predatory pricing may be objectively necessary • for the dominant company to minimise its losses in the short run as market conditions changed o due to dramatic fall	• In general, the EU Commission considers the creation of efficiencies through predatory pricing unlikely. • It mentions, though, that the low pricing may enable the dominant undertaking to achieve economies of scale or efficiencies related to expanding the market.

		in demand leading to excess capacity or ○ due to entry by a rival; • as there is a need to sell off perishable inventory or phased out or obsolete products or the costs of storage have become prohibitive; • due to re-start-up costs or strong learning effects.	

Source: Authors' review of the EU Commission's Discussion and Guidance Paper.

Table 4: Final decisions within which efficiencies have been mentioned, 2009 – mid 2013

	Regulated network industries			Manufacturing		Services		Pharma
	Energy	Transport	Telecoms	General	IT Hardware	IT Software	Financial Services	
Exclusive dealing					Intel (2007; 2009)			
Tying/ bundling				Reel/ Alcan (2008; 2013)		Microsoft (2008; 2009/ 2012; 2013)	Reuters (2009; 2012)	
Refusal to supply/ margin squeeze			Telekomunikacja Polska (2008; 2010)		IBM (2010; 2011)			
Predatory pricing								
Exploitative abuses							S&P (2009; 2011)	
Others								

Source: Authors' review of past EU decisions.

Table 5: Final decisions within which there was a transparent discussion of objective justification, 2009 – mid 2013

Case/ Conduct/ Sector	Objective justifications raised by the dominant undertakings
Intel (fine; under appeal); exclusive dealing; IT	• By using a rebate, Intel responded to price competition from its rivals • The rebate system was necessary to achieve efficiencies (lower prices, scale economies, other cost savings and production efficiencies and risk sharing and marketing efficiencies) Transparent discussion (25 paragraphs); main argument by the Commission: efficiencies relate to rebates, but not to exclusivity condition; insufficient evidence and availability of less restrictive means
Reel/ Alcan (Commitment Decision); tying; manufacturing	Alcan justified tying by arguing for • Product related efficiencies • Operational efficiencies • Reputational efficiencies Transparent discussion (10 paragraphs); rebutted due to customer requests for untied product and higher prices for combined product
Telekomunikacja Polska (TP) (fine; under appeal); refusal to supply; telecommunications	TP claimed that it had difficulties • to simultaneously manage several projects on many various wholesale services ("high regulative activity") • to develop proper IT systems • to find human resources to perform certain projects Despite TP did not evoke properly an efficiency defence the Commission carefully assessed objective necessity grounds

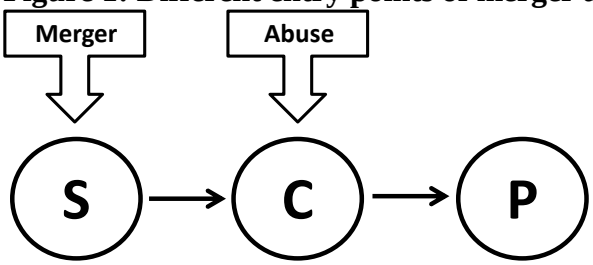
Source: Authors' review of past EU decisions.

Table 6: Final decisions within which there was a non-transparent discussion of objective justification, 2009 – mid 2013

Case/ Conduct/ Sector	Objective justifications raised by the dominant undertakings
Microsoft (Commitment Decision); Tying of Internet Explorer to Windows; ICT	In the earlier case of the tying of Windows Media Player to Windows, Microsoft argued the tying • lowers **transaction costs** for consumers • saves **resources** • makes it easier for third-party software producers to implement a functionality → increase in the **value** of the operating system package for end-users No transparent discussion in its later decision (no paragraph)
IBM (Commitment Decision); Refusal to supply (after-markets); ICT	**Intellectual property rights** with regard to some inputs required to provide maintenance service to IBM mainframes No transparent discussion (one paragraphs; making the point that IP alone does not justify non-supply
Standard & Poor's (Commitment Decision); Excessive pricing; Financial Services	**Intellectual property rights** over US ISIN databases and on US ISIN numbers for the use of which it is entitled to claim licensing fees No transparent discussion (four paragraphs); mainly arguing that no copyrights did exists
Reuter Instrument Codes (Commitment Decision); tying; Financial Services	The Commission took the preliminary view that the conduct cannot be justified on grounds of • of **intellectual property rights** • the protection of TR **reputation** • Or **technical risks** linked to RICs No transparent discussion (no paragraph)

Source: Authors' review of past EU decisions.

Figure 1: Different entry points of merger and abuse assessments along the SCP chain



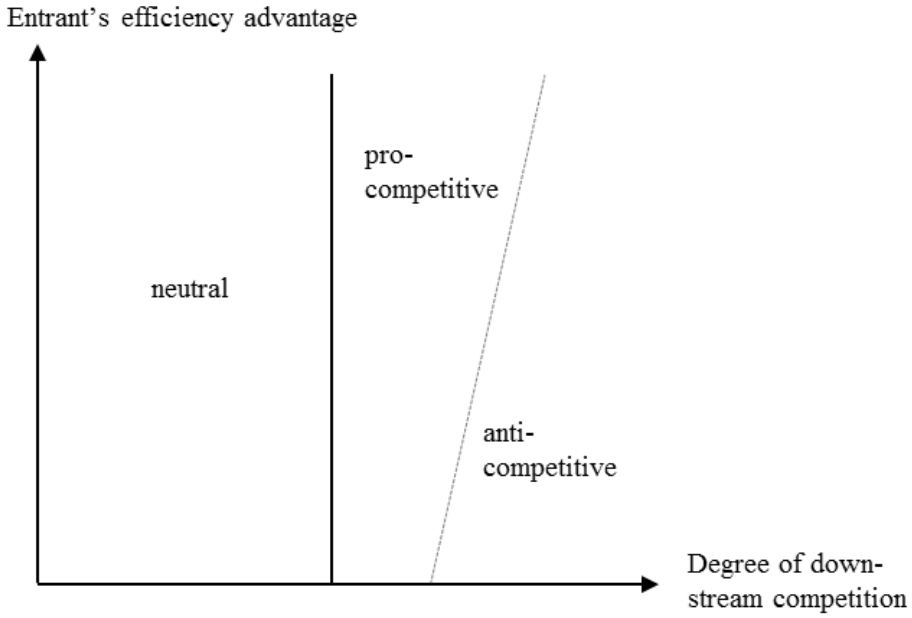
Source: Authors' assessment.

Table 7: Types of conduct according to motives and effects

Types of conduct	Anticompetitive motives/ effects	Procompetitive motives/ effects
(1)	**x**	
(2)	**x**	**x**
(3)		**x**

Source: Authors' assessment.

Figure 2: Non-monotony of the competitive effects of exclusive dealing contracts



Notes: At the lowest degree of downstream competition downstream firms are independent monopolists, whereas at the highest degree of downstream competition downstream firms are perfect Bertrand competitors. The entrant's efficiency advantage derives from a comparison between the entrant's and the incumbent's marginal costs. The entrant has no efficiency advantage when its marginal costs are just as high as the incumbent's marginal costs.
Source: Authors' assessment, based on Gratz and Reisinger (2013).

Recent ESMT Working Paper

	ESMT No.
Overcoming localization of knowledge: The role of professional service firms Stefan Wagner, ESMT Karin Hoisl, University of Munich Grid Thoma, University of Camerino	**13-09**
The generosity effect: Fairness in sharing gains and losses Guillermo Baquero, ESMT Willem Smit, SMU, IMD Luc Wathieu, Georgetown University, McDonough School of Business	**13-08**
Corporate social responsibility, multi-faceted job-products, and employee outcomes Shuili Du, University of New Hampshire CB Bhattacharya, ESMT Sankar Sen, Baruch College	**13-07**
Confidence via correction: The effect of judgment correction on consumer confidence Francine Espinoza Petersen, ESMT Rebecca W. Hamilton, University of Maryland	**13-06**
How to deal with unprofitable customers? A salesforce compensation perspective Sumitro Banerjee, ESMT Alex P. Thevaranjan, Whitman School of Management, Syracuse University	**13-05**
Tangible temptation in the social dilemma: Cash, cooperation, and self-control Kristian Ove R. Myrseth, ESMT Gerhard Riener, DICE, University of Düsseldorf Conny Wollbrant, University of Gothenburg	**13-04**
Conflict resolution, public goods and patent thickets Dietmar Harhoff, University of Munich Georg von Graevenitz, University of East Anglia in London Stefan Wagner, ESMT	**12-04 (R1)**

ESMT
European School of Management and Technology
Faculty Publications
Schlossplatz 1
10178 Berlin
Germany

Phone: +49 (0) 30 21231-1279
publications@esmt.org
www.esmt.org