

Ilmenau Economics Discussion Papers, Vol. 24, No. 119

**EXPLOITATIVE ABUSE AND ABUSE OF ECONOMIC
DEPENDENCE: WHAT CAN WE LEARN FROM AN IN-
DUSTRIAL ORGANIZATION APPROACH? [Updated
Version 2018]**

Patrice Bougette, Oliver Budzinski & Frédéric Marty

December 2018

Institute of Economics

Ehrenbergstraße 29
Ernst-Abbe-Zentrum

D-98 684 Ilmenau

Phone 03677/69-4030/-4032

Fax 03677/69-4203

<http://www.wirtschaft.tu-ilmenau.de>

ISSN 0949-3859

EXPLOITATIVE ABUSE AND ABUSE OF ECONOMIC DEPENDENCE: WHAT CAN WE LEARN FROM AN INDUSTRIAL ORGANIZATION APPROACH?*

[Updated Version 2018]

Patrice Bougette†, Oliver Budzinski‡, and Frédéric Marty†

Abstract: This article conducts a detailed analysis of the concept of economic dependence and exploitative abuse based on how their treatment in competition law and economics and their enforcement in European case law have evolved. Although the theoretical roots of these concepts lie in economic theory, these issues have been ignored or considered only scantily in the context of competition law enforcement. An *effects-based* approach should take these problems into account and could provide insights into how to portray the impacts of these abuses. We draw on two examples – from the agri-food industries and the digital economy – of relevant economic dependence issues. This paper highlights the existence of a paradox: although industrial organization models provide relevant tools to characterize these abuses, assess their effects, and devise remedies, it seems that they are seldom used by competition law enforcers.

Keywords: exploitative abuse, abuse of economic dependence, competition law, European Commission, effects-based approach, digital economy.

JEL codes: K21, L12, L40, L42.

The authors thank participants in the second French law and economics association (AFED) conference at Aix-Marseille Université for insightful comments, and Paul Belleflamme and Romain Espinosa in particular. The authors are grateful to two anonymous referees and the editor of the special issue, Claudine Desrieux, for their suggestions. The usual disclaimer applies.

† Université Côte d’Azur, GREDEG, CNRS, France. Contact: patrice.bougette@unice.fr, frederic.marty@gredeg.cnrs.fr

‡ Technische Universität Ilmenau. Contact: oliver.budzinski@tu-ilmenau.de

1. INTRODUCTION

Although the theoretical basis of exploitative abuse once formed the cornerstone of the original European Union (EU) competition policy, such cases have become marginal in EU competition law enforcement by now. While exploitative abuse initially was considered the only case to which article 102 applied, Court of Justice case-law (e.g., *Continental Can*,¹ *Hoffmann-La Roche*²) has promoted a shift towards exclusionary abuse cases along with an increasing neglect of exploitative abuse cases. The related case of *abuse of economic dependence* is even more specific.³ In contrast to EU competition law, French, Italian, German, Portuguese, and Greek competition laws include specific provisions in this regard⁴. For example, French competition law sanctions abuse of economic dependence by considering: i) the company's share of its partner(s) turnover, ii) brand awareness, iii) the importance of partner's market share, iv) the existence (or not) of alternative solutions, v) the factors that led to the situation of dependence (strategic choice or "forced" on the victim). In the ongoing antitrust reform debate in Germany, a strengthening and expansion of competition policy combating economic dependence abuses is intensively discussed (Budzinski & Stöhr, 2018).

Under EU case-law, the concept of economic dependence is contained in Court of Justice (CJ) case law.⁵ The notion emerged in the case *British Leyland*⁶ in 1986 but related closely to the legal monopoly rights granted to a trade partner. Similarly, its uses in the *Deutsche Bahn* and *Aéroports de Paris* cases in 1997 and 2000 respectively

¹ Judgment of the Court on February 21, 1973, *Europemballage Corporation and Continental Can Company Inc. v Commission of the European Communities*, Case 6-72.

² Judgment of the Court on February 13, 1979 - *Hoffmann-La Roche & Co. AG v Commission of the European Communities*, Case 85/76.

³ See for a comprehensive presentation of the legal provisions related to economic dependence the 2008 International Competition Network report.

⁴ See Fabbio (2006) and Falce (2015) for Italy, OECD (1998, p.55) for Germany and Portugal, and Truli (2017) for Greece.

⁵ EU regulation includes no clear definition of the concept but case-law insists on the concept of an unavoidable trading *partner*: "An undertaking which has a very large market share and holds it for some time, by means of the volume of production and the scale of the supply which it stands for [...] is by virtue of that share in a position of strength which makes it an unavoidable trading partner and which, already because of this secures for it, at the very least during relatively long periods, that freedom of action which is the special feature of a dominant position." (*op.cit.*).

⁶ CJEU, C-226/84, *British Leyland Public Limited Company vs. Commission*, November 11, 1986.

were also related exclusively to legal monopoly issues.⁷ Similarly, in an April 2017 opinion issued in the context of a request for a preliminary ruling by the Latvian Supreme Court, Advocate General Nils Wahl stated that such abuses are rightly considered with extreme reluctance in EU case law because of the risk of *false positive* decisions.⁸ According to him, one can only observe such cases in regulated markets. In other words, the concept of economic dependence has been applied only in the case of firms benefiting from exclusive legal rights and not against firms whose market position was based on merit. However, characterizing abusive behavior by an incumbent with an exclusive-rights-based market position does not involve the demonstration of anticompetitive effects on the market.⁹ Therefore, competition law does not provide a test or a set of criteria to identify such abuses with respect to market transactions among private undertakings.

From an economics perspective, neglecting cases of exploitative abuses and abuses of economic dependence seems contradictory in the context of an *effects-based* approach. Modern industrial organization (IO) theory shows a number of case constellations, in which anticompetitive effects can follow from such abuses. Therefore, our objective in this paper is to demonstrate the importance of exploitative and economic dependence abuses in an economics-oriented implementation of EU competition law. We show that despite its imperfections, competition law enforcement is best-suited to deal with exploitative and economic dependence abuse issues. In doing so, we focus on the characterization of these abuses and provide only some insights into possible remedies (for an analysis of these issues see Këllezi, 2008). We do not

⁷ General Court, T-22/94, *Deutsche Bahn A.G. vs. Commission*, October 21, 1997 and T-128/98, *Aéroports de Paris vs. Commission*, December 12, 2000.

⁸ Opinion of the Advocate General Nils Wahl, Case C-177/16, *Biedrība 'Autortiesību un komunikācijai konsultāciju aģentūra – Latvijas Autoru apvienība' v Konkurences padome*, 6 April 2017.

⁹ See e.g. EU Commission Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (EU Commission, OJ C 45, 24.2.2009, pp. 7–20) and especially Art. 82 related to sanction of refusal to deal. An *effects-based* approach is not required since “the upstream market position of the dominant undertaking has been developed under the protection of special or exclusive rights or has been financed by state resources”. In contrast, the otherwise dominant effects-based approach in EU competition policy is “focuse[d] on the presence of anti-competitive effects that harm consumers, and is based on the examination of each specific case, based on sound economics and grounded on facts” (Rey, 2005, p. 2.).

address the specific case of abuse of economic dependence by a firm with no market power¹⁰, or in the context of merger control.¹¹

The rest of the paper is organized as follows. Section 2 discusses why an economics-oriented approach to competition law enforcement should address exploitative abuses and economic dependence abuses. Section 3 investigates the main body of modern IO theory on exploitative and economic dependence issues, i) in general, ii) with respect to the agri-food sector and iii) related to the digital economy. Eventually, section 4 discusses competition policy implications.

2. WHY SHOULD AN ECONOMICS-ORIENTED APPROACH ADDRESS ECONOMIC DEPENDENCE?

2.1. EU Competition law enforcement: why are exploitative and economic dependence abuses neglected?

2.1.1. A lost continent in relation to decision practice?

In the context of abuse cases we can distinguish two main types: exploitative and exclusionary abuses. While both types originally were at the heart of competition policy, one type of abuse has emerged as much more prominent. Exclusionary abuses were at the top of legal agendas in the 1970s promoted by the 1973 Court of Justice decision in the *Continental Can* case, and have remained relevant as can be seen in the remarkable decisions in July 2018 in the *Android* case, in June 2017 in the *Google Shopping* case, and in January 2018 in the *Qualcomm* case.¹² In contrast, the longstanding disregard of exploitative abuses in EU competition law is exemplified by two observations. The first is related to the European Commission's (EC) February 2009 communication on its enforcement priorities in relation to article 102. This

¹⁰ An abuse of economic dependence may be at stake even if the contractual partner does not enjoy a dominant position, for instance, if one of the partners has made specific investments it cannot recoup if the contractual relationship ends.

¹¹ For instance, the European Commission (EC) took into consideration similar dimensions in its assessment of the *Rewe/Meinl* merger case (European Commission, Decision 1999/674/EC *Rewe/Meinl* (1999) OJ L 274/1). See e.g. Kellezi (2008).

¹² The fines imposed in these cases amounted to €997 million for Qualcomm (IP/18/421, January 24, 2018), €2.42 billion for *Google Shopping* (IP/17/1784, June 27, 2017), and € 4.34 billion for *Android* (IP/18/4581, July 18, 2018).

communication deals only with exclusionary abuses and completely ignores exploitative abuses. It seems clear that although initially core to competition law this type of abuse is no longer a priority for competition law enforcement. The second observation derives from the Court of Justice (CJ) decisional practice, specifically a 1978 abuse of economic dependence case which occurred outside the regulated industries borders. It concerned the oil industry post the 1973 crisis. BP was accused of an abuse to the detriment of one of its customers (ABG). Despite BP's market share (26%), the EC considered article 102 to apply. However, this decision was annulled by the CJ on the grounds that the buyer's economic dependence on its own is not sufficient for the finding of a dominant position in the relevant market.¹³

One of the most recent uses of the concept of exploitative abuse was in a case against S&P for its abusive practices in the international securities identification numbers (ISIN) market.¹⁴ The competition concerns (not the statement of objections) communicated by the EC focused on the mandatory purchase by firms of additional financial information using these ISIN codes even if the user did not need them. The alleged exploitative abuse was related to this forced sale. However, two remarks should be made here. The first is that the case was settled through article 9 of EU Regulation 1/2003, i.e. through a negotiated procedure and, thus, with no decision ruling on the matter. Consequently, the EC was not required to publicly establish a theory of damage, and the defendant was not required to discuss this theory or to develop an *efficiency-based* defense. This deprives us of any legal discussion or economic test that would characterize the exploitative abuse. The available legal knowledge may have been impaired by this relaxation of the *struggle for law* (Wagner-von Papp, 2012). A second point is that exclusive rights by regulation again play a crucial role in this case. While S&P cannot be considered to be a state-owned firm, it enjoys an exclusive legal right to provide the ISINs for all securities issued on the U.S. financial market. This, again, is far from an abuse of economic dependence among firms operating in a purely private market.¹⁵

¹³ ABG/oil companies operating in the Netherlands, Case n°IV/28.841, Commission Decision of April 19, 1977 and Court of Justice, Case n°77/77, Benzine en Petroleum Handelsmaatschappij BV and others *vs.* Commission [1978].

¹⁴ European Commission, 2011, Standard & Poor's, COMP/39592, 14 May.

¹⁵ Furthermore, such a case could be analyzed also through the prism of exclusionary abuses. Indeed, S&P's strategy could be considered as tying. S&P could increase its dominant position based on

2.1.2. Why have exploitative and economic dependence cases disappeared?

The EC's overly cautious attitude to exploitative and economic dependence abuses, and thus, the disappearance of these abuses from case law can be explained by the hazards involved in identifying and remedying exploitation (Lyons, 2008). The EC is reluctant to mobilize these abuse theories because of the difficulties involved in determining how to characterize an unfair price and how to demonstrate harm to competition (Akman, 2009). For instance, Evans and Padilla (2005) illustrate the risks and costs of false convictions or acquittals which could be induced by flawed decision-making criteria.

There is an implicit underlying conception which might explain this disregard, namely the assumption that the exercise of economic power in an economic transaction has no impact on overall welfare but has only distributional consequences. This raises two different issues. First, if competition law enforcement focuses only on the net *effects* on welfare by a given market practice irrespective of its impact on distribution, exploitative abuses are outside the enforcers' scope since they are alleged only to be distributional. Second, when exploitative abuses are (allegedly) related only to fairness considerations and not also to efficiency concerns, then, again, an *effects-based* approach tends to exclude these types of abuses.

A second explanation for the neglect of abuse of economic dependence cases in the decisional practices of competition authorities might be a reluctance to deal with issues that could be considered as linked more to contract law than to competition law. In a nutshell, an abuse of a dominant position is conditioned on the characterization of that dominance in a given relevant market. A *horizontal dimension* is implied, ensuring both consumer welfare and the commercial partner involved in the transaction are affected by the practice. In contrast, at first sight an abuse of economic dependence involves only a *vertical relationship* between two partners along a supply chain. It may not affect any relevant markets and inflict harm only on a given undertaking.

the financial codes segment (i.e. based on its legal monopoly) to a competitive position (financial information).

Furthermore, a third line of explanation may stem from the concept of an error-cost framework (Bougette et al., 2015). The standard of proof historically used in exploitative abuse cases is seen as being far weaker than that imposed by the *effects-based* approach. Such a less rigorous standard of proof, however, may lead to decisions that are not sufficiently grounded in sound economic analysis. The uncertainty about the theory of competitive damage may lead, also, to inappropriate remedies that could harm consumers (Lianos and Lombardi, 2016). At the same time, correcting the contracting disequilibria among commercial partners in a vertical supply chain implies that competition authorities perform a trade-off between fairness-related concerns and economic efficiency. Since there is no way to balance these conflicting objectives, the risk is excessive room for the judges' discretion.

2.2. Economic reasons for reinvigorating competition policy on exploitative and economic dependence abuses

However, exploitative and economic dependence related abuses can have significant effects on overall welfare. Ignoring such abuses as potential anticompetitive behavior *per se*, violates the fundamental idea of the *effects-based* approach, namely that actual effects should trump formalistic assertions. Depending on the case in question, consumer welfare and the competition process may be negatively affected by exploitative and economic dependence abuses in several ways.

- (1) Such abuses may indirectly impair consumer welfare through three channels: (i) increased prices, (ii) reduced choices, and (iii) limited innovation incentives. Squeezed downstream companies may feel forced to pass through power-based mark-ups to consumers. Squeezed upstream firms may be restricted in their abilities and incentives to invest and innovate. Niche suppliers may exit the market because they may not be able to cope with the enforced conditions, thus reducing choice for consumers (and reducing competition, at least in some pockets or segments of heterogeneous markets). Also, if the consumer is the dependent, exploited economic actor, the negative consumer welfare effects are apparent. Obviously, negative consumer welfare effects are not automatic. For instance, a recent study casts doubt on the impact of increased concentration

at the retail level on the prices paid by final consumers (Ciapanna and Rondinelli, 2014). Similarly, an EC (2014) report on modern retail challenges the assumed adverse consequences in the food sector of retailer concentrations on consumers' range of choices and on the incentives to innovate for producers. However, neither of these studies implies that there cannot be negative effects in other cases.

- (2) The competition process itself may be harmed if such abuses impair firms' capacities to access the market. In this sense, an abuse of economic dependence must be sanctioned on a competition law basis since the freedom to compete in the market is threatened. In this perspective, "the concentration of economic powers in the hand of private economic entities affects not only the structure of the market, but also the individual freedoms of market participants" (Bakhoum 2015, p. 21). Preserving market access cannot be seen as a non-economic goal of antitrust legislation which can be criticized for an induced trade-off with economic efficiency. Instead, freedom to access the market (contestability) is considered a necessary condition for efficiency and long-run welfare.
- (3) Distribution affects efficiency. The dividing line between efficiency and wealth distribution concerns is not so obvious. The *effects-based* approach is used to assess the net effects on welfare of pricing practices as, for instance, in the case of exclusionary prices. The as-efficient competitor test helps competition law enforcers to sanction exclusionary abuses without the risk of unduly protecting weak competitors at the expense of final consumers. In a nutshell, assessing the net effects of an exclusionary practice may provide practical decision rules and open the door to an efficiency-based defense. Along the same lines, the net effects of exploitative or economic dependence related abuses determine their anti- or procompetitive character. Distributional wealth transfer enforced by superior economic power can have implications for economic efficiency. If competition had been based on merit, a specific wealth transfer would not be observed and the weaker party might have been better placed to invest and to innovate. Similarly, this exercise of market power can have distorting effects on the competition among customers, especially if discriminatory practices were applied.

- (4) Economic power itself might be a welfare concern. An unconstrained exercise of private economic power could induce regulatory harm distinct from any welfare harm in the affected relevant markets (Nachbar, 2013). Such a consideration could be linked to the current legal and economic literature which considers economic power to be an issue in and of itself (Khan and Vaheesan, 2017). Negative welfare effects of accumulation of market power include, inter alia, increased lobbying and regulatory biases, and a shift in resources-use from market competition towards achieving and securing noncompetitive institutional (or other) privileges.¹⁶
- (5) In addition, concentration of economic power can have a significant impact on welfare. For instance, empirical studies using U.S. data demonstrate that mark-ups decreased between the 1950s and the early 1980s, and increased thereafter (De Loecker and Eeckhout, 2017). In 2014, the higher the market share of an undertaking, the higher were its mark-ups (which contrasts to the situation in the early 1980s). Over the last 35 years, the mark-up increase has accounted for a yearly 1 percent rise in final consumer prices. As a consequence of the increased market power, productivity gains (3% to 4% per year) did not yield lower prices. This in turn has led to wealth transfers between consumers and firms, which can cause macroeconomic imbalances (Piketty 2014; Khan and Vaheesan 2017). Also, the recent economic literature emphasizes various negative welfare effects (on macroeconomic as well as on dynamic welfare) from an increase in industry concentration and market power across many markets, particularly in the U.S. but also internationally (although more mixed across Europe, see Valletti 2017; Weche & Wambach 2018), which are considerably weakening the process of competition (Autor et al. 2017a, 2017b; Grullon et al. 2017; Gutiérrez & Philippon 2017, 2018).¹⁷
- (6) It is possible also, that in the long run the frequent and non-sanctioned occurrence of abusive strategies may lead to an erosion of the “moral of the market” and results in loss of faith within society regarding the view of markets and

¹⁶ See e.g. what Zingales (2017) calls a broader “political theory” of the firm.

¹⁷ Grullon et al. (2017) explicitly blame lax enforcement of antitrust regulation as one of the reasons for this development.

competition as coordination mechanisms. In particular, the exploitative abuse of dependent “Davids” by dominant “Goliaths” is likely to considerably violate widespread societal perceptions of fairness. It is likely that the negative welfare effects from public opinion and voters increasingly favoring anticompetitive regulation (which influences populist and other manifestos as well as election outcomes and subsequent policies) will quickly outweigh the marginal efficiency losses from granting economic-dependent companies more breathing space.

Overall, the concentration and exercise of economic power are relevant issues in the context of competition law. Protection of the competitive process in itself and for itself is a relevant objective for competition law enforcement even though there is not always a clear and direct impact on consumer welfare. Furthermore, efficiency-related concerns may be indirect. The notion in EC case law of the special responsibility of the dominant undertaking regarding maintenance of an effective competition is thus reconfirmed. It follows from the above that the responses of competition law to exploitative abuses or abuses of economic dependence positions should not be limited to direct efficiency-related considerations. Exploitative abuses and abuses of economic dependence can potentially affect competition and welfare in a negative way and, thus, should be within the scope of competition law.

2.3. Some examples of exploitative and economic dependence abuses in EU case law

In order to illustrate the increasing relevance of exploitative and economic dependence related abuses, we argue in this section that the digital economy is subject to such problems due to the emergence and different roles of new intermediaries. One of the unexpected consequences of the current convergence between online and offline commercial activities is that the risk of the occurrence of such a practice is increasing (from offline to online retailing) both in terms of the number of affected relevant markets but also in terms of intensity. According to industrial economics, several factors promote the market power of online platforms in the digital economy (see inter alia, Evans and Schmalensee, 2007; Haucap and Heimeshoff, 2014; Haucap

and Stühmeier, 2016) including: strong direct network effects, strong and symmetric indirect network effects, single-homing by customer groups (including commercial customers), homogeneity of customer preferences and platform services, incompatibility among platforms and high switching costs, and weak innovation dynamics. The more these factors characterize a platform and the stronger these factors are pronounced, the higher is its market power and the stronger is the dependence of the economic actors on all market sides.

In April 2018, the EC published an impact assessment of digital platforms.¹⁸ The EC underlined the importance of e-commerce platforms for sellers, especially small and medium sized enterprises (SMEs) (for which trading on the dominant e-commerce platform is an essential step to accessing the market). Its inquiry into trading practices (Communication COM (2016) 288, 25 May 2016) led to its expressing some concern over the damages that SMEs can suffer as the result of unbalanced contracts.

2.3.1. Unilateral, frequent, and unannounced changes to contractual terms

This concern echoes the concepts in legal theory of *unconscionable contract* and *contract of adhesion*. The first can be defined as a contract which is so harsh and unfair to one of the parties that no reasonable person would freely and knowingly agree to it. The second corresponds to an arrangement offered by the party who benefits from the stronger bargaining position on a *take-it-or-leave-it* basis and without any capacity to negotiate terms with its counterpart.¹⁹

As the EC underlines, these unilateral practices can emerge during the pre-contract period (e.g. refusal to negotiate), during negotiation of the contract (e.g. lack of clarity in contractual provisions), during the period of the contract (e.g. unilateral changes, lack of prior notice about changes), and at contract termination (e.g. unilateral termination). For instance, European Commission (2017a, p. 25) reveals that “online platforms usually reserve for themselves the right to change their [terms & conditions] and may refuse to negotiate such changes”. It is possible also, that one

¹⁸ European Commission, *Impact assessment – promoting fairness and transparency for business users of online intermediation services*, SWD (2018) 138 final, Brussels, 26.4.2018; European Commission, *Proposal for a regulation of the European Parliament and of the Council on promoting fairness and transparency for business users of online intermediation services*, COM(2018) 238 final, 2018/0112 (COD), Brussels, 26 April 2018.

¹⁹ According to European Commission (2017a), only 13% of the surveyed marketplaces allow negotiation and among these only 10% of the negotiations are effective.

form of abuse based on higher bargaining power could be depriving sellers of opportunities for redress by imposing excessive liability disclaimers, or by choosing non-EU jurisdictions to settle disputes.

2.3.2. Delisting threats

Products can be withdrawn unilaterally from the marketplace or the seller account can be suspended without proper prior notification or without provision of a clear statement of reasons and without due process allowing the decision to be challenged. The litigation between Google-AdWords and Navx before the French Competition Authority is an example of such risks.²⁰ The alleged exclusionary effect consisted of a sudden termination of Navx's AdWords contract. This capacity to delist a product and to impede access to the market is one of the main components of abuse of economic dependence strategies which bricks-and-mortar stores and centralized procuring agencies may face.

Amazon's fight with various publishers in the e-books market may serve as another illustrative example. In several cases where publishing houses did not agree with the changes to contractual conditions demanded by Amazon (e.g. Melville House in 2005, and both Hachette and Bonnier in 2014), Amazon tried to "discipline" them by arbitrary delistings and threats to delist a range of these publishers' titles. It combined these threats with obvious handicapping means such as, inter alia, artificial increases (up to several months) in delivery times, deactivation of buy-buttons (they appear but the customer is unable to click on them), biased search results, and the placing of pop-up advertisements for similar titles from 'compliant' publishers or Amazon's own publishing services (overshadowing titles from the threatened publishers). These actions harm consumer welfare by confusing the customer and imposing unnecessary transaction costs on them, and generally are discriminatory and inappropriate (Budzinski and Köhler, 2015).

2.3.3. Ranking and search biases

²⁰ Autorité de la concurrence, *Avis du 28 octobre 2010 relatif à des pratiques mises en œuvre dans le secteur de la publicité sur Internet.*

In the online world, this issue is especially significant since access to consumers depends largely on algorithm-based rankings of search results and recommendations provided by the platforms.²¹ The EC's Google Shopping decision²² issued in June 2017 testifies to the difficulties involved in holding search or ranking algorithms accountable. In the case of marketplaces, sellers may find it difficult to identify the criteria being considered in the algorithms and how they are weighted. This opacity facilitates rankings manipulations which distort competition. Additionally, the platform may offer additional services to favor better visibility of the seller's offer against additional payments (European Commission, 2017a).²³ Indeed, *paid-for ranking* devices can raise significant competition concerns.

The issues related to the offline segment involving national brands or private labels suppliers can be exacerbated in the online environment.²⁴ The risk of anticompetitive discrimination and distortion increases if the platform acts in a *dual role*, for instance, as the marketplace organizer and as a seller on this marketplace with its own shop(s) (see e.g. Faherty et al., 2017) – like for instance Amazon with the dualism of its online retailing business and its marketplace. In such constellations, the platform experiences incentives to introduce a discriminatory bias. The platform may manipulate the algorithm-based search or recommendation results in a way that the goods (products, contents or services) of its competitors in upstream or downstream markets (for instance, the shops competing to its own shop) are disadvantaged and its own goods are favored. The Google Shopping case, and especially the demotion issue (based on the Panda algorithm) is illustrative. Google also acts in a dual role – as the provider of the search engine Google Search and as the provider of its own Google Shopping price comparison service. Thus, it may abuse its dual role power by assigning systematically lower ranking positions to competitors to Google Shopping via

²¹ European Commission (2018a, p. 13) reveals that the top 5 results attract 88% of the clicks. The probability that a user clicks anywhere beyond the 10th rank equals 1%.

²² European Commission Google Search (Shopping), case AT.39740, 27 June 2017.

²³ These offers may include presentation in a specific box on the platform's website. These boxes can hide the general ranking results. In addition, the allocation of these boxes or spaces is even less transparent than the functioning of the general algorithm.

²⁴ For an analysis of the effects of the development of private labels in the offline line commerce segment on the downstream buyer power see Scott-Morton and Zettelmeyer (2004).

Google Search's search results.²⁵ Similar mechanisms may be used to sanction a "non-cooperative" bargaining partner.

2.3.4. Imposing costly or useless auxiliary services

Platforms may impose mandatory services upon commercial users, which are either more expensive than the competitive price or of limited usefulness. Delivery and payment services are common examples. This practice can be analyzed as a *tying* strategy leading to artificially increased costs for sellers using the platform. If these sellers are competing with the platform's downstream services, then this can be analyzed in terms of a *raising rivals costs* strategy, cross-subsidizing mechanisms, or at the extreme, margin squeeze practices (by a vertically-integrated firm controlling an essential facility in the upstream market). It may lead also to exploitative abuses. These auxiliary services may be the lever used to extract a part of the seller's surplus realized through the platform. If this is the only way to access the market, the platform manager enjoys gatekeeper rights which allow it to tax platform users.

2.3.5. Prohibitive switching costs and personalized data

Personalized data represents an important resource for the online economy (inter alia, Budzinski & Kuchinke 2018; Budzinski & Stöhr 2018). A dominant e-commerce platform may take control of any contact between a supplier and its (final) customers and, thus, may deprive it of access to customers' personal data and online behavior, etc. The supplier can access these valuable data only through the dominant platform; should it switch platforms then these data become inaccessible. This questions the efficiency of multi-homing strategies since it divides the market and reinforces dependence on the focal platform by increasing switching costs hugely if the firm decides to withdraw from this platform. Furthermore, such policies can reduce the seller's capacity to negotiate better deals with customers outside the platform. In addition, they reinforce the dependence of sellers on the platform especially if the consumers tend to privilege the platform rather than the sellers' website, and if they

²⁵ Automatic algorithms may be affected by "editorial correcting and complementing of their results" (European Commission, 2017a, p. 21) in order to favor own or cooperative sellers over their competitors.

have a preference for single-homing. The EC (2017a, p. 28) refers to the “inability to access transaction data and/or use them outside the platform impedes the business users’ ability to measure their performance, to develop new business strategies and business models, better respond to market trends, improve products or develop new ones.”

In addition, the supplier will be increasingly dependent on the platform for its marketing campaigns and commercial strategies.²⁶ The platform may commercialize high value-added services which the supplier (especially SMEs) cannot refuse to buy. The data (or the *capta*) are an increasing part of the economic surplus created by the transaction as they can be re-used for future transactions with both the focal consumer and other consumers based on profiling strategies.

3. THE NEW INDUSTRIAL ORGANIZATION APPROACH AND HOW TO CHARACTERIZE EXPLOITATIVE AND ECONOMIC DEPENDENCE ABUSES

Under case-law, two conditions are usually used to describe a situation of economic dependence: i) the supplier’s production factors cannot be used or adapted for the production of other goods at an economically acceptable cost, (ii) for a given supplier, there are no comparable retailers for the goods it is offering. These criteria refer to specific capacity investments which suppliers are required to make in distributors. However, these case-law originated criteria do not match the proposals in the economic literature. This section proposes a theoretical approach (section 3.1) and illustrates it by the examples of the agrifood sector and the digital economy (sections 3.2 and 3.3).

Given the contractual structure, the first instrument used to measure economic dependence is risk rate – also called the *threat* rate. It measures the proportion of the business of a supplier with a dominant retailer, i.e. the share of its turnover related to the distribution through the dominant retailing platform (Kéllezi 2008, p. 70). The higher the risk rate the more the producer’s viability will be jeopardized in the event

²⁶ A parallel can be drawn with negotiations between Google (or another aggregator) and the press industry on the issue of commercialization of subscriptions or payments using the “click model” i.e. article by article. In these two cases, the platform centralized customer data, a model that attracted criticism from media industry players.

of a breach of contract. Indeed, the producer will be economically dependent since it might find it difficult to switch from one retailer to another especially in the case of large orders. For any supplier, it is possible to calculate a series of risk rates. Similar to the Herfindahl-Hirschman index in the case of merger control, the risk rate allows for an initial screening to identify and justify situations of economic dependency. However, it does not capture the complexity of different contractual situations and different industry dynamics.

Therefore, a theoretical definition of the economic dependence of an independent supplier with respect to one retailer can be based on the concept of *specific assets* (Williamson, 1985). The criterion related to economic dependence is the redeployable nature of the technology for another product or volume, or for an order from another client. Independent suppliers invest in order to be able to supply large retailers. When designed as part of a bilateral contractual relationship, such investments expose the supplier to opportunism from the retailer which can exploit a dependence introduced by mutual specific assets.

3.1. Efficiency concerns related to exploitative abuses: buyer power through bargaining power

Modern IO theory analyzes the concept of economic dependence using a vertical chain perspective.²⁷ Dependence can be explained as an imbalance in the contractual relationship between a producer and a retailer. While a structural approach introduces this imbalance with a cost asymmetry among suppliers and retailers, a bargaining approach investigates how in oligopolistic markets large firms can have greater bargaining power than small firms. Since market power may exist in the upstream (concentration of producers) or in the downstream (concentration of retailers) markets, the imbalance may stem from two different sources (table 1). The majority of analyses focus on situations of few suppliers and many buyers, i.e. an oligopoly (e.g. Belleflamme and Peitz, 2015). Alternatively, situations of oligopsony, which are less prevalent in the literature, refer to markets including few buyers (retailers in this case)

²⁷ For a discussion of the benefits of and limits to modern IO to competition policy, see for instance Budzinski (2011).

and many suppliers (producers). In this paper we focus on economic dependence resulting from buyers' bargaining power (oligopsony). Note, however, that this market configuration does not result systematically in an anticompetitive outcome, for instance, procompetitive effects are possible whenever upstream competition is weak.

TABLE 1: ASYMMETRIC MARKET STRUCTURE

	<i>Upstream</i>	<i>Downstream</i>
<i>Bargaining power</i>	Few sellers (oligopoly problem: retailers face powerful suppliers)	Many buyers
	Many sellers (oligopsony problem: suppliers face powerful retailers)	Few buyers

An important strand of the economic literature discusses vertical bargaining games. The joint negotiation of price and quantity (which may also include other contract terms) is modeled employing a bilateral Nash-bargaining between manufacturers and retailers (see among others Horn and Wolinsky, 1988). For instance, an input supplier negotiates with a downstream producer. If an agreement is reached on a market, a fixed benefit from cooperation is shared by the negotiating parties. Chae and Heidhues (2004) use this framework to analyze buyers' incentives to form alliances among SMEs. Furthermore, there is a growing body of literature that analyzes the effects of buyer power on prices and welfare (von Ungern-Sternberg, 1996; Dobson and Waterson, 1997; Inderst and Wey, 2007). In line with John Kenneth Galbraith's (1952) work, this literature shows the existence of countervailing power: "In the typical modern market of few sellers, the active restraint [on the exercise of private economic power] is provided not by competitors but from the other side of the market by strong buyers". Therefore, a decrease in the number of retailers may have beneficial effects for consumers since larger retailers can extract lower prices from

their suppliers.²⁸ In addition, buyer power can strengthen suppliers' incentives to invest in capacity or to adopt new technologies with lower marginal costs.

Chen et al. (2016) show that buyer power and downstream competition can be considered substitutes. They model downstream competition in the case of one large retailer. Consumer welfare improves following an increase in the buyer power of the large retailer. Increased competition among retailers forces the large retailer to bargain harder with its supplier to obtain a lower input price which further reduces retail prices.

In settings where downstream buyers put a high value on the future and internalize the benefits of supporting a certain number of suppliers, Mérel and Sexton (2017) show that retailer firms have no incentive to exercise buyer power. This would reduce rates of return on investment below 'normal' levels, and would lead them to exit the market or would attenuate their entry rate which would be damaging for the downstream buyers' substantial sunk investments. Thus, increasing buyer concentration can benefit input producers by allowing buyers to avoid the 'tragedy of the commons' and internalize the benefits from paying prices that insure the profitability of the upstream suppliers. Many agricultural product markets are representative of such settings. Also, vertical integration could be a response to securing a stable supply of the agricultural input.

What if retailers decide to merge? Assuming that retailers are local monopolists operating in separate markets, Inderst and Wey (2003, 2007) show that a downstream merger will increase the upstream firms' incentives to reduce their marginal costs. Asymmetries among retailers, with some large buyers and some smaller ones simultaneously active and facing different input prices, may lead to a "waterbed effect" (Inderst and Valetti, 2011). If a large firm exercises its bargaining power, the terms for its competitors may be deteriorated enough to eventually increase the average retail price, which in the end harms consumers.²⁹

²⁸ Unlike work which adopts a linear form of demand, Gaudin (2017) shows that countervailing buyer power arises in equilibrium for a broad class of demand forms, and its magnitude depends on the degree of product differentiation.

²⁹ See Allain et al. (2017) for empirical evidence of increased prices following mergers in the French grocery retail sector. This study challenges the results of the *Modern Retail* enquiry (European Commission, 2014).

A more flexible alternative to merging is an alliance (Caprice and Rey, 2015). Downstream firms enhance their collective bargaining position at the expense of their suppliers. With regard to retailers, there are two advantages from an “alliance strategy”. First, firms benefit from associated economies of scale. Second, they can make a joint delisting decision (i.e. to remove goods from the shelves). This delisting threat significantly increases their bargaining power, and retailers do use delisting as a bargaining strategy: the risk of a manufacturer going bankrupt if delisted by a large supermarket is real. Caprice and Rey (2015) show that joint delisting decisions increase the bargaining positions of the group’s members.³⁰ This improved bargaining position can put suppliers in a position of economic dependence and also does not favor consumers since delisting decisions do not necessarily lead to lower retail prices.

3.2. Application to the agri-food sector

Rogers and Sexton (1994) identify structural features specific to the agri-food sector which reflect theoretical reasoning. First, products are often perishable; they are difficult and costly to store and transport. Packing facilities or processors (e.g. slaughterhouses for meat products) are located in geographic proximity to farms and therefore may exert buyer power over farms in their vicinity. Second, in many cases, an intermediary between producer and distributor such as a processor will emerge. These intermediates are specialized and can exercise significant market power, ultimately leading to a triple margin on products along the value chain. Third, producers such as farmers need specific assets and thus face high sunk costs. Barriers to entry in these sectors are relatively high. Finally, as a response, new players have emerged to counterbalance the bargaining power in place. For example, purchasing cooperatives or associations of producers have emerged, entailing their own problems in relation to competition. These four characteristics, Rogers and Sexton (1994) argue, justify intervention by public authorities to promote competition in the upstream industry and to develop means of countervailing powers.

³⁰ For a survey of different buyer power abuses and their effects on suppliers, see Nicholson and Young (2012, p. 6). Delisting threats constitute an abuse. Large retailers also can demand slotting fees, retrospective discounts, or after-sale rebates.

Processors can play the role of gatekeepers and may enjoy significant market power (Armstrong and Wright, 2007). These vertical dimensions require an analysis of the global value chain (De Backer and Miroudot, 2014). In this perspective, the vertical relationship between producers and retailers can be categorized to distinguish, for instance, market-based models of governance, relational markets, and captive markets (Lianos and Lombardi (2016). The last model category is the most relevant for our analysis. In contrast to a relational model³¹, the relationship between producer and retailer (which has undertaken specific investments) is very precarious. The importance of criteria for the origins of the dependence and requirements in terms of compulsory notice and stand-still periods prior to putting an end to the relationship can be explained in this type of framework. According to Vogel (2016), the challenge is to separate legitimate competition law enforcement from the incorporation of concerns based on the requirements of contractual protectionism.

In the early 1980s, the new empirical IO (NEIO) approach was pioneered by Appelbaum (1982), Bresnahan (1982), and Lau (1982) to assess the degree of market power of a specific industry in the output market under specific assumptions related to demand, cost functions, and strategic interactions among firms. While the first studies concerned oligopolistic settings, empirical work soon emerged on oligopsony power in the retail food industry (inter alia, Just and Chern, 1980 (tomatoes); Love and Murniningtyas, 1992 (wheat); Wann and Sexton, 1992 (pears); Cakir and Balagtas, 2012 (milk)). Most empirical studies show some presence of oligopsony power.³²

Gohin and Guyomard (2000) were the first to apply NEIO methods to the retail grocery sector and food products such as dairy and meat. Based on the assumption of quantity competition, they found that French food retailers do not behave competitively. They show also that more than 17% of the wholesale-to-retail price margins for dairy and meat products can be attributed to oligopoly-oligopsony distortions. Another study stressing the specificities of the agri-food sector is Richards et al.

³¹ The relational model stresses the significant role of relations in informal agreements and unwritten codes of conduct: "In the absence of third-party enforcement, markets resemble a collection of bilateral trading islands rather than a competitive market" (Brown et al., 2004, pp. 747).

³² An in-depth technical survey of market power estimations is beyond the scope of the present article. See, for instance, Perloff et al. (2007) who propose different approaches to modeling and assessing market power.

(2001), which analyzes the frozen potato processing market in Washington DC and shows that potato processors behave as an oligopsony in relation to acquiring raw potato stock. Furthermore, "processors are able to collude and offer potato prices below the competitive level and, somewhat perversely, suggest that the bargaining process may indeed be a facilitating mechanism for this collusion" (Richards et al., 2001, p. 269). The presence of an oligopsonistic-colluding processor market structure reduced growers' surplus by approximately 1.6 percent of market revenue per month.

Delors (2007) evaluates economic dependence based on the diversification of independent supplier outlets. Their database includes 942 private label French products from year 2004. Data limitations do not allow an assessment of alternative technical and commercial solutions or calculation of the costs and time involved in finding a new retailer. Thus, the evaluation of economic dependence is focused on the diversification of independent suppliers' outlets. The variety of outlets provides an indicator of SME economic dependence which is reduced when each contract represents a smaller share of the independent supplier's turnover. The results show that in terms of number of contracts, independent suppliers mainly adopt a strategy of outlet diversification which should protect them from economic dependence.

Florez-Acosta and Herrera-Araujo (2017) provide an empirical examination of the effects of product delisting on consumer shopping behavior when consumers are able to source multiple stores. Based on scanner data on grocery purchases by French households in 2005, their results mitigate the importance of delisting as a credible strategy. They show that delisting a product whose customers are loyal to the brand can be detrimental for the manufacturer and for the supermarket. If consumers are able to find an alternative store which supplies the missing product, it will be the retailer that is likely to suffer most from its strategic decision.

Competition authorities have also been interested in assessing market power in the grocery retail sector. In 2008, the UK Competition Commission launched the *Groceries Market Investigation*. The authority analyzed prices negotiated between supermarkets and their suppliers. They found buyer power to be absent in the case of branded products with a single supplier but to matter for private label products

where suppliers compete. What matters more than buyer size alone is the combination of buyer size and choice of supplier (Davis and Reilly, 2010). In the same vein, Noton and Elberg (2018) investigate the profit-sharing behavior of bargainers in a vertical relationship. In the case of the Chilean coffee market, they found that large retailers did not extract most of the channel surplus from small manufacturers. Their results are in line with the notion of brand loyalty playing a key role in profit-sharing between retailers and manufacturers.

Two other examples of scrutiny of the grocery sector by a competition authority stem from the French competition agency. The first refers to an opinion which concluded that the Paris market was highly concentrated. The competition authority proposed a new instrument to intervene in the market structure i.e. the structural injunction.³³ The second example is a March 2015 opinion where the competition authority identified certain competitive risks which could arise from cooperation agreements among grocery retailers including the risks of coordination among distributors and limitations on supply in upstream markets. According to the authority, although these agreements could generate significant gains in terms of reducing purchasing costs, the likelihood that they would generate overall efficiency gains that could offset the identified risks remained uncertain.³⁴

3.3. Application to the digital economy

The issue of economic dependence is especially important in the digital economy where “strong, data-driven network effects reinforce this dependency and together these effects lead to an imbalance in bargaining power” (European Commission, 2018, p. 10). While online platforms appear concentrated on few operators, more than one million merchants in the EU compete on them. Two-thirds of internet users made online purchases in 2016 and the value of this market was assessed at over EUR 500 billion by the EC. In Germany, 37% of internet sales are accounted for by only three platforms. In 2016, online booking channels accounted for 49% of all

³³ Autorité de la concurrence, *Avis du 11 janvier 2012 relatif à la situation concurrentielle dans le secteur de la distribution alimentaire à Paris.*

³⁴ Autorité de la concurrence, *Avis n° 15-A-06 du 31 mars 2015 relatif au rapprochement des centrales d’achat et de référencement dans le secteur de la grande distribution.*

travel bookings in the EU. The significance of seller dependence increases with strong concentration at the platform level. Since sellers (or app developers) cannot organize themselves to counterbalance the platforms' bargaining power, they face a competition bottleneck (Armstrong, 2006). For instance, in 2016 Amazon had a 20 percent market share of total online sales in the EU. Its market share in Germany has reached 40 percent (Dutch-Brown, 2017b, p. 4).

As platforms compete aggressively for consumers, they recoup the price cuts by imposing higher costs on the sellers' side or by reducing the quality of the services provided. As the online retail market becomes increasingly concentrated sellers cannot react by applying a multi-homing strategy, especially if consumers show a preference for single-homing and one-stop-shopping options (see e.g. Dutch Brown, 2017a, p. 25) which weakens the seller's position even more (i.e. platform dependence increases because consumers are accessible only through a particular platform). Platforms have significant interest in offering consumers the equivalent of an 'exclusive contract' as proposed by Armstrong and Wright (2007), based for instance on loyalty discount schemes.

Dutch-Brown (2017b) shows that this recoupment may have not only distributional effects but also efficiency-related ones. Platforms' unfair commercial practices can have adverse effects on the quality of the service they provide to sellers which can reduce sellers' revenues. In other words, the platform discriminates among users providing the desired quality for the single-homing side and a sub-optimal level for the multi-homing side. Indeed, buyers (for which the platform competes fiercely) search for simple functionalities (search, navigation) while sellers (for which the platform becomes a competition bottleneck) may "need more sophisticated services related to marketing, accounting transparency in pricing and product listing" (Dutch-Brown, 2017b). Such services may be poor unless sellers agree to pay the (exploitative) price of (bundles of) auxiliary services.

There is a growing economic literature on online resale price maintenance combined with an agency model.³⁵ The price parity clause (PPC) applied in this context has come under scrutiny. Two forms of PPC have been investigated. First, a “wide” PPC requiring that the price a firm charges on the platform must be no higher than the price the same firm would charge for the same good sold through any other channel including direct sale and sale on a rival platform. Second, a “narrow” PPC requires only that the price the firm sets on the platform must be no higher than the price the firm charges when it sells directly. These types of restrictions are known also as *most-favored customer* or *best-price* clauses (Ezrachi, 2015) and can be seen as aggravating the dependence of retailers upon platforms.

Wang and Wright (2017) analyze these clauses by modeling a search platform including the possibility of “showrooming”, i.e. free riding behavior consisting of searching for a suitable good on the platform and then buying directly from the seller and avoiding the platform fee. In this context, a (narrow or wide) PPC removes the gain that the consumer would acquire from showrooming. They show that the effects of PPCs are ambiguous. They find that consumers are harmed if a monopoly platform introduces a PPC of whatever form. However, when platforms compete, PPCs may be procompetitive depending on their form. Platform competition can be a countervailing power to platform fees – except in the case of a wide PPC because the constraint on fees implied by platform competition is removed. Furthermore, Boik and Corts (2016), Johnson (2017) and Foros (2017) show anticompetitive effects of wide PPCs in terms of higher fees and prices. However, Johansen and Vergé (2016) argue that such restraints may benefit consumers in certain circumstances, leading to lower prices. Their model is closely related to Boik and Corts (2016) and Johnson (2017) although with two major differences. First, they allow suppliers to sell both directly and through agents. Second, they do not assume that suppliers are always

³⁵ Resale price maintenance (RPM) mechanisms can be considered unlawful under EU competition law. Any efficiency-based defense (e.g. protecting investments against free-riding strategies, preserving brand reputation) must be balanced against anticompetitive effects on the downstream market (obstructing intrabrand competition). One of the hottest antitrust issues is related to the use of price-monitoring and price-setting algorithms to ensure each seller complies with the agreements. See e.g. the EC decision of July 24, 2018, *Asus, Denon & Marantz, Philips and Pioneer* (cases AT.40465, 40469, 40181 and 40182) and the EC report on the E-Commerce Sector Inquiry (May 10, 2017, COM (2017) 229 final). See generally on the economics of price-setting algorithms Schwalbe (2018).

active on all platforms. Thus, they find that if each supplier can choose whether to list on both platforms or on only one in addition to selling directly, whether the PPC lead to higher or lower commissions depends on the degree of competition between suppliers. In particular, they show that PPC may lead simultaneously to higher profits for platforms and suppliers, and increase consumer surplus.

The LEAR (2012) report commissioned by the UK Office of Fair Trade (OFT) underlines three anticompetitive effects outside the price effects: i) foreclosing entry of other platforms by reducing their ability to attract members, ii) facilitating collusion between platforms by improving their ability to monitor each other, iii) signaling information about platforms' costs (i.e. the goods and services sold on that platform are not available at a lower price elsewhere). In relation to the procompetitive effects, protection of the platforms' investments is important for building reliable platforms.

The situation of sellers in the context of platforms may be unfavorable depending on the form of market structure. The higher the variety of the products requested by consumers, the lower the competitive pressure on sellers on the platform. In contrast, if consumers are more sensitive to price than to quality or diversity, the platform can extract a higher share of the surplus generated (Dutch-Brown, 2017a; Belleflamme and Peitz, 2018). The situation of a seller facing a bottleneck marketplace (due to the single-homing behavior of its users and prevailing network effects) is the same as that of a supplier in relation to a retailer. The cuts in retail prices imposed by downstream competitive pressure are passed through suppliers (see the above mentioned *waterbed effect* in Inderst and Valletti (2011)). The effects on welfare can be difficult to assess since the vertical restraints imposed on sellers may allow the platform to propose exclusive contracts to buyers and by so doing may benefit all of its potential positive network effects (Dutch-Brown, 2017c).

The European Commission (2017a) survey confirms seller's fears about these practices and their effectiveness: 60% fear being delisted – many have encountered the difficulties quoted above. 75% of e-commerce marketplace heavy users (sellers) have experienced problems including technical problems (41%), lack of customer support (37%), lack of transparency related to platform data practices (28%), sudden changes to contractual terms or pricing (19%), unfair access conditions (15%), algorithmic

bias (12%), limitations on payment possibilities (11%), and discontinuation or suspension of user account (11%). Regarding the seller's perception of unfairness, the reasons for heavy users are: no possibility to negotiate terms and conditions (79%), possibility of unilateral changes made by the platform (57%), limited access to dispute resolution procedures (49%), unfair pricing (43%), biased or non-transparent search practices (42%), limitations on consumer data (37%), limitations on payment possibilities (26%), termination provisions (24%), and so on.

Dutch-Brown's (2017c) econometric analysis shows that frequent changes in terms and conditions, a lack of reliable dispute resolution mechanism, and issues related to data portability are correlated to lower intensity of platform use. However, if multi-homing is the solution it should be remembered that users tend to single-home, and that as Dutch-Brown (2017c, p. 25) shows, "firms that multi-home are more likely to face problems with platforms" (in terms of unfair trading practices). This can impede their market access or hinder their capacity to invest and to innovate.

4. DISCUSSION

Modern IO models demonstrate that vertical restrictions can have horizontal consequences. It is not just a question of wealth transfer among vertically-related firms; it also involves effects on consumer welfare. The impacts of such exploitations of economic power surface in terms of mark-ups (oligopoly power) or mark-downs (oligopsony power). The discussion in the preceding section shows that a variety of IO studies – both generally and in relation to our examples agri-food industries and the digital economy – offer conditions and criteria to distinguish between situations with pro- and such with anticompetitive effects. As a consequence, we should question the reluctance to implement the provisions of article 102 and the confinement of abuse of economic dependence cases in Member State legislation to the field of restrictive practices. Given the emphasis on an effects-based and more-economic approach in European competition policy, the observed reluctance to apply modern IO insights to exploitative abuse and economic dependence cases appears astonishing. It might be explained first by a common feature of the entire *effects-based* approach. Despite the rise of modern IO models over the last 30 thirty years or more, some old-style Chicago models continue to rule economic assessment of market practices in

antitrust rulings on exploitative abuse and economic dependence. In these contexts, IO models are often disregarded because they rely on what Fisher (1989) defines as exemplifying theory. They propose a case-by-case analysis of a market practice, based mainly on game-theoretical approaches backed by econometric calibration. Since their results are dependent on their hypotheses or chosen parameters, they are considered with caution by judges. Their complexity and their exemplifying nature raise concerns about arbitrating between models and the assessments proposed by each party to the litigation (Budzinski and Ruhmer, 2010). It is a question not only of the complexity of the economic reasoning involved (Baye and Wright, 2011) but also the robustness of the judicial adjudication. The main risk for the judge is seeing his or her decision overturned by an appeal court.

Second, competition authorities may be reluctant to sanction these types of abuses because they appear to be related mainly to welfare transfer and not efficiency issues. While according to old-style Chicago School logic welfare transfer issues may be outside the scope of economic theory, modern IO theory clearly shows that they are accompanied by relevant efficiency and welfare effects. Considering wealth transfers may create a margin of discretion for the judge involving the risk that a given judge may promote his or her own values or preferences. However, again, it is mainly a risk of seeing a ruling superseded in the appeals process.

However, the two possible alternatives to employing competition law to combat exploitative and economic dependence abuses entail severe deficiencies. First, contract law would enable the resolution of contractual imbalances. However, does a judge act as a contract regulator making decisions about and changing contracts aimed at achieving a fair transaction? Second, there is sector-specific regulation. It is not obvious that efficient and effective sector specific regulation could be created in relation to economic fields not characterized by essential facilities or which do not induce a systemic risk for the whole economy. In addition, sector specific regulators are more easily captured by lobbies. Add to this information imperfections and the enforcement of such regulation could (rather probably) lead to organized wealth transfers, the protection of uncompetitive companies (also through adverse selection and moral hazard problems), the generation of anticompetitive privileges, and altogether damage to the competition process at the expense of consumer welfare. Eventually,

relying on sector specific regulation is likely to induce excessive regulatory costs and excessive rigidities, especially in the context of the highly dynamic and innovative digital economy.

The case *for* a competition policy treatment of exploitative and economic dependence abuses is strengthened further by the indication that these abuses are not beyond the scope of the effects-based approach. In contrast, modern IO insights suggest that an economics-based approach is capable of effectively tackling these issues. On the one hand, we have shown that such vertical restrictive practices have negative effects on horizontal competition and welfare, in other words. First, restrictive practices implemented by a bottleneck player may reduce competition by favoring its own subsidiaries even if it is less efficient than its competitors. Second, in the case of silo structured competition in which upstream good suppliers are dependent on downstream players, a downstream player might exploit the economic dependency of its upstream partner to impose price decreases to preserve its own markup. The cost of the adjustment could be passed-through to the dependent player, reducing its capacity to invest and to innovate, and thus further strengthening its dependence. The downstream player may enjoy a relatively *quiet life* in terms of margins. The consequence will be negative dynamic welfare effects.

However, we need to consider the downside of an effects-based approach that the defendants may engage in cherry-picking among economic models, searching for or “creating” a procompetitive explanation of their anticompetitive market behavior. The complexity, reliance of sound market data, and frequent inability to provide clear-cut and valid results imply that modern IO tools cannot solve every case in question. Therefore, on the other hand, a strict case-by-case-analysis approach may not be optimal to manage abuses of economic power. Instead, a rules-based approach with theory-driven, rebuttable presumptions protecting economic-dependent players might be a useful second best option (Budzinski 2010). Although *per se* rules do not appear appropriate here, rebuttable presumptions based upon theory-driven case constellations and sets of criteria may be a reasonable way to reduce the prospect of abuse of economic power bearing in mind the difficulties involved in characterizing such abuses and the risk of irreversible competitive damage. This would

apply particularly if IO theory suggests that a certain practice will lead to anticompetitive harm in the vast majority of realistic case constellations (Breyer 2010). A rebuttable rule then makes sure that the legal efforts (and the burden of proof) are focused on proving the exception rather than the rule. As another way to avoid some of the pitfalls of an effects-based approach, it may be reasonable to allocate the burden of evidence to the most powerful market players.

Furthermore, the difficult but necessary objective to comply with society's (not individuals') fairness expectations needs to be reflected. In EU Commissioner for Competition Margaret Vestager's words, "[...] competition enforcement also sends a message of fairness. That's what President Juncker referred to last week as the social side of competition law".³⁶ Enforcement of competition law is not only a matter of technique; it is mainly the expression of a social choice among different combinations of efficiency and distribution which are considered by society to be reasonable. The role of legal rules (i.e. institutions) is to balance the different values and objectives in such an equilibrium. A comprehensive competition economics approach, embracing not only IO but also institutional and behavioral economics may be superior to create a sound framework for competition policy.

REFERENCES

- Akman, Pinar. 2009. Searching for the Long-Lost Soul of Article 82EC. *Oxford Journal of Legal Studies* 29: 267–303.
- Allain, Marie-Laure, Claire Chambolle, Stéphane Turolla, and Sofia B. Villas-Boas. 2017. Retail Mergers and Food Prices: Evidence from France. *Journal of Industrial Economics* 65: 469–509.
- Appelbaum, Elie. 1982. The Estimation of the Degree of Oligopoly Power. *Journal of Econometrics* 19: 287–299.
- Armstrong, Mark. 2006. "Competition in Two-Sided Markets." *Rand Journal of Economics* 37 (3): 668–91.

³⁶ See Margaret Vestager's speech "Competition for a Fairer Society", 10th Annual Global Antitrust Enforcement Symposium, Georgetown, 20 September 2016. https://ec.europa.eu/commission/commissioners/2014-2019/vestager/announcements/competition-fairer-society_en

- Armstrong, Mark, and Julian Wright. 2007. "Two-Sided Markets, Competitive Bottlenecks and Exclusive Contracts." *Economic Theory* 32 (2): 353–80.
- Autor, David, David Dorn, Lawrence F. Katz, Christina Patterson, and John Van Reenen. 2017a. "The Fall of the Labor Share and the Rise of Superstar Firms." NBER Working Paper No. 23396.
- Autor, David, David Dorn, Lawrence F. Katz, Christina Patterson, and John Van Reenen. 2017b. "Concentrating on the Fall of the Labor Share." *American Economic Review* 107 (5): 180–85.
- Bakhoun, Mor. 2015. Abuse without Dominance in Competition Law: Abuse of Economic Dependence and its Interface with Abuse of Dominance. In *Abuse Regulation in Competition Law: Past, Present and Future*, ed. Paul Nihoul. Edward Elgar Publishing.
- Baye, Michael R., and Joshua D. Wright. 2011. Is Antitrust Too Complicated for Generalist Judges? The Impact of Economic Complexity and Judicial Training on Appeals. *Journal of Law and Economics* 54: 1–24.
- Belleflamme, Paul, and Martin Peitz. 2015. *Industrial Organization: Markets and Strategies*. 2nd ed. Cambridge, UK: Cambridge University Press.
- Belleflamme, Paul, and Martin Peitz. 2018. Managing Competition on a Two-Sided Platform. Mannheim Discussion Paper No. 028/2018.
- Boik, Andre, and Kenneth S. Corts. 2016. The Effects of Platform Most-Favored-Nation Clauses on Competition and Entry. *The Journal of Law and Economics* 59 (1): 105–34.
- Bougette, Patrice, Marc Deschamps, and Frédéric Marty. 2015. When Economics Met Antitrust: The Second Chicago School and the Economization of Antitrust Law. *Enterprise & Society* 16: 313–353.
- Bresnahan, Timothy F. 1982. The Oligopoly Solution Concept is Identified. *Economics Letters* 10: 87–92.
- Breyer, Stephen. 2009. Economic Reasoning and Judicial Review. *The Economic Journal* 119: 123–135.
- Brown, Martin, Armin Falk, and Ernst Fehr. 2004. Relational Contracts and the Nature of Market Interactions. *Econometrica* 72 (3): 747–80.

- Budzinski, Oliver. 2010. An Institutional Analysis of the Enforcement Problems in Merger Control. *European Competition Journal* 6: 445–474.
- Budzinski, Oliver. 2011. Modern Industrial Economics and Competition Policy: Open Problems and Possible Limits. In *Competition Policy and the Economic Approach: Foundations and Limitations*, ed. Josef Drexl and Wolfgang Kerber, 111–138. Cheltenham, UK: Edward Elgar Publishing.
- Budzinski, Oliver, and Karoline Henrike Köhler. 2015. Is Amazon The Next Google? *ORDO* 66: 263-288.
- Budzinski, Oliver, and Björn A. Kuchinke. 2018. The Modern Industrial Organization Theory of Media Markets and Competition Policy Implications. *Ilmenau Economics Discussion Papers* 115.
- Budzinski, Oliver, and Isabel Ruhmer. 2010. Merger Simulation in Competition Policy: A Survey. *Journal of Competition Law & Economics* 6(2): 277-320.
- Budzinski, Oliver, and Annika Stöhr. 2018. Competition Policy Reform in Europe and Germany - Institutional Change in the Light of Digitization. *European Competition Journal* 14(2): <https://doi.org/10.1080/17441056.2018.1555942>.
- Cakir, Metin, and Joseph V. Balagtas. 2012. Estimating Market Power of U.S. Dairy Cooperatives in the Fluid Milk Market. *American Journal of Agricultural Economics* 94: 647–658.
- Caprice, Stéphane, and Patrick Rey. 2015. Buyer Power from Joint Listing Decision. *Economic Journal* 125: 1677–1704.
- Chae, Suchan, and Paul Heidhues. 2004. Buyers' Alliances for Bargaining Power. *Journal of Economics & Management Strategy* 13: 731–754.
- Chauve, Philippe, and An Renckens. 2015. The European Food Sector: Are Large Retailers a Competition Problem? *Journal of European Competition Law & Practice* 6: 513–529.
- Chen, Zhiqi, Hong Ding, and Zhiyang Liu. 2016. Downstream Competition and the Effects of Buyer Power. *Review of Industrial Organization* 49: 1–23.
- Ciapanna, Emanuela, and Concetta Rondinelli. 2014. Retail Market Structure and Consumer Prices in the Euro Area. *European Central Bank Working Paper Series*. n°1744.

- Davis, Peter, and Alan Reilly. 2010. Market Power, Market Outcomes, and Remedies in the UK Groceries Market. *Agricultural Economics* 41: 93–108.
- De Backer, Koen, and Sébastien Miroudot. 2014. Mapping Global Value Chains¹. In *Global Value Chains and World Trade*, edited by René A. Hernández, Jorge Mario Martínez-Piva, and Nanno Mulder, 43–78. ECLAC Books.
- De Loecker, Jan, and Jan Eeckhout. 2017. The Rise of Market Power and the Macroeconomic Implications. *NBER Working Paper No. 23687*. <http://www.nber.org/papers/w23687>
- Delors, Nicolas. 2007. Puissance d'achat et concurrence dans la grande distribution. Université de Nancy 2.
- Dobson, Paul W., and Michael Waterson. 1997. Countervailing Power and Consumer Prices. *Economic Journal* 107: 418–430.
- Dutch-Brown, Néstor. 2017a. The vertical B2B relationship between platforms and their suppliers: a literature review. Quoted in *Business-to-Business relations in the online platform environment*.
- Dutch-Brown, Néstor. 2017b. Quality discrimination in online multisided markets. *JCR Digital Economy Working Paper 2017-06*
- Dutch-Brown, Néstor. 2017c. Platforms to business relations in online platform ecosystems. *JCR Digital Economy Working Paper 2017-07*.
- European Commission. 2014. The Economic Impact of Modern Retail on Choice and Innovation in the EU Food Sector. DG Competition. <http://ec.europa.eu/competition/publications/KD0214955ENN.pdf>
- European Commission. 2017a. *Business-to-Business relations in the online platform environment*, FWC ENTR/300/PP/2013/FC-WIFO, 22 May. <https://publications.europa.eu/en/publication-detail/-/publication/04c75b09-4b2b-11e7-aea8-01aa75ed71a1/language-en>
- European Commission. 2018a. *Commission Staff working Document on the Impact assessment of the proposal for a regulation on promoting fairness and transparency for business users of online intermediation services*, SWD(2018) 138 final, April 26. <https://ec.europa.eu/digital-single-market/en/news/impact-assessment-proposal--promoting-fairness-transparency-online-platforms>

- Evans, David, and Jorge Padilla. 2005. Excessive Prices: Using Economics to Define Administrable Legal Rules. *Journal of Competition Law and Economics* 1: 97–122.
- Evans, David, and Richard Schmalensee. 2007. The Industrial Organization of Markets with Two-sided Platforms. *Competition Policy International* 3(1): 151-179.
- Ezrachi, Ariel. 2015. The Competitive Effects of Parity Clauses on Online Commerce. *European Competition Journal* 11 (2–3): 488–519.
- Fabbio, Philipp. 2006. *L'abuso di dipendenza economica*. Milano: Giuffrè.
- Faherty, Emily, Kevin Huang, and Robert Land. 2017. The Amazon Monopoly: Is Amazon's Private Label Business the Tipping Point? *MPRA Paper No. 83672*, <https://mpra.ub.uni-muenchen.de/83672>
- Falce, Valeria. 2015. Abuse of Economic Dependence and Competition Law Remedies: A Sound Interpretation of the Italian Regulation. *European Competition Law Review* 36: 71.
- Florez-Acosta, Jorge, and Daniel Herrera-Araujo. 2017. Multiproduct Retailing and Buyer Power: The Effects of Product Delisting on Consumer Shopping Behavior. *PSE Working Papers No. 2017-07*.
- Foros, Øystein, Hans Jarle Kind, and Greg Shaffer. 2017. "Apple's Agency Model and the Role of Most-Favored-Nation Clauses." *The RAND Journal of Economics* 48 (3): 673–703.
- Galbraith, John Kenneth. 1952. *American Capitalism: The Concept of Countervailing Power*. Boston: Houghton Mifflin.
- Gaudin, Germain. 2017. Vertical Bargaining and Retail Competition: What Drives Countervailing Power? *The Economic Journal*. doi:10.1111/econj.12506.
- Gohin, Alexandre, and Hervé Guyomard. 2000. Measuring Market Power for Food Retail Activities: French Evidence. *Journal of Agricultural Economics* 51: 181–195.
- Grullon, Gustavo, Yelena Larkin, and Roni Michaely. 2018. "Are U.S. Industries Becoming More Concentrated?", *Review of Finance*, forthcoming. Available at <https://ssrn.com/abstract=2612047>
- Gutiérrez, Germán, and Thomas Philippon. 2017. "Declining Competition and Investment in the U.S." NBER Working Paper No. 23583.
- Gutiérrez, Germán, and Thomas Philippon. 2018. "Ownership, Concentration, and Investment." *AEA Papers and Proceedings* 108: 432–37.

- Haucap, Justus, and Ulrich Heimeshoff. 2014. Google, Facebook, Amazon, eBay: Is the Internet Driving Competition or Market Monopolization? *International Economics and Economic Policy* 11(1): 49-61.
- Haucap, Justus, and Torben Stühmeier (2016), Competition and Antitrust in Internet Markets, in: Bauer, J. & Latzer, M. (Hrsg.), *Handbook on the Economics of the Internet*, Edward Elgar: Cheltenham, 183-210.
- Horn, Henrick, and Asher Wolinsky. 1988. Bilateral Monopolies and Incentives for Merger. *RAND Journal of Economics* 19: 408–419.
- Inderst, Roman, and Christian Wey. 2003. Bargaining, Mergers, and Technology Choice in Bilaterally Oligopolistic Industries. *RAND Journal of Economics* 34: 1–19.
- Inderst, Roman, and Christian Wey. 2007. Buyer Power and Supplier Incentives. *European Economic Review* 51: 647–667.
- Inderst, Roman, and Tommaso M. Valetti. 2011. Buyer Power and the Waterbed Effect. *Journal of Industrial Economics* 59: 1–20.
- International Competition Network. 2008. *Report on Abuse of Superior Bargaining Position*. <http://www.internationalcompetitionnetwork.org/uploads/library/doc386.pdf>
- Johansen, Bjørn Olav, and Thibaud Vergé. 2017. Platform Price Parity Clauses with Direct Sales. *Working Papers in Economics 01/17*, University of Bergen, Department of Economics.
- Johnson, Justin P. 2017. The Agency Model and MFN Clauses. *The Review of Economic Studies* 84 (3): 1151–85.
- Just, Richard E., and Wen S. Chern. 1980. Tomatoes, Technology, and Oligopsony. *Bell Journal of Economics* 11: 584–602.
- Khan, Lina, and Sandeep Vaheesan. 2017. Market Power and Inequality: The Antitrust Counterrevolution and its Discontents. *Harvard Law and Policy Review* 11: 235–294.
- Këllezi, Pranvera. 2008. Abuse below the Threshold of Dominance? Market Power, Market Dominance, and Abuse of Economic Dependence. In *Abuse of Dominant Position: New Interpretation, New Enforcement Mechanisms?* ed. Mark-Oliver Mackenrodt, Beatriz Conde Gallego, and Stefan Enchelmaier, 55–88.

- Lande, Robert H. 1989. Chicago's False Foundation: Wealth Transfers (Not Just Efficiency) Should Guide Antitrust. *Antitrust Law Journal* 58: 631–644.
- Lau, Lawrence J. 1982. On Identifying the Degree of Competitiveness from Industry Price and Output Data. *Economics Letters* 10 (1–2): 93–99.
- Lianos, Ioannis, and Claudio Lombardi. 2016. Superior Bargaining Power and the Global Food Value Chain: The Wuthering Heights of Holistic Competition Law? *Concurrences* 1–2016: 22–35.
- Liu, Donald J, Chin-Hwa Sun, and Harry M Kaiser. 1995. Market Conduct under Government Price Intervention in the U.S. Dairy Industry. *Journal of Agricultural and Resource Economics* 20: 301–315.
- Love, H. Alan, and Endah Murniningtyas. 1992. Measuring the Degree of Market Power Exerted by Government Trade Agencies. *American Journal of Agricultural Economics* 74: 546–555.
- Lyons, Bruce R. 2008. The Paradox of the Exclusion of Exploitative Abuse. *Centre for Competition Policy Working Paper, 08-1*.
- Mérel, Pierre, and Richard J. Sexton. 2017. Buyer Power with Atomistic Upstream Entry: Can Downstream Consolidation Increase Production and Welfare? *International Journal of Industrial Organization* 50: 259–293.
- Nachbar, Thomas. 2013. The Antitrust Constitution. *Iowa Law Review* 99: 57–114.
- Nicholson, Catherine and Bob Young. 2012. *The Relationship between Supermarkets and Suppliers: What are the Implications for Consumers?* London.
- Noton, Carlos, and Andrés Elberg. 2018. Are Supermarkets Squeezing Small Suppliers? Evidence from Negotiated Wholesale Prices. *The Economic Journal* 128 (610): 1304–30.
- OECD. 1998. Buying Power of Multiproduct Retailers. *Policy Roundtable DAF/CLP(99)21*.
- Perloff, Jeffrey M., Larry S. Karp, and Amos Golan. 2007. *Estimating Market Power and Strategies*. Cambridge University Press.
- Piketty, Thomas. 2014. *Capital in the Twenty-First Century*. Cambridge, MA: Harvard University Press.

- Rey, Patrick. coord., 2005. An Economic Approach to Article 82. Report by the Economic Advisory Group on Competition Policy, EU Commission, DG Comp., Brussels, July, 53p.
- Richards, Timothy J., Paul M. Patterson, and Ram N. Acharya. 2001. Price Behavior in a Dynamic Oligopsony: Washington Processing Potatoes. *American Journal of Agricultural Economics* 83: 259–271.
- Schwalbe, Ulrich. 2018. Algorithms, Machine Learning, and Collusion. Discussion Paper. URL: <https://www.uni-hohenheim.de/organisation/publikation/algorithmus-machine-learning-and-collusion> (accessed August 07th, 2018).
- Scott Morton, Fiona, and Florian Zettelmeyer. 2004. The Strategic Positioning of Store Brands in Retailer-Manufacturer Negotiations. *Review of Industrial Organization* 24: 161–94.
- Truli, Emmanuela. 2017. Relative Dominance and the Protection of the Weaker Party: Enforcing the Economic Dependence Provisions and the Example of Greece. *Journal of European Competition Law & Practice*: 1–7.
- Valletti, Thomas. 2017. Concentration Trends in Europe. European Commission: Brussels.
- Vogel, Louis. 2016. The Recent Application of EU and National Competition Law to Distribution Agreements: Does Competition Law Promote Efficient Distribution Networks? *Journal of European Competition Law & Practice* 7: 628–640.
- von Ungern-Sternberg, Thomas. 1996. Countervailing Power Revisited. *International Journal of Industrial Organization* 14: 507–519.
- Wagner-von Papp, Florian. 2012. Best and Even Better Practices in Commitment Procedures after Alrosa: The Dangers of Abandoning the “Struggle for Competition Law.” *Common Market Law Review* 49: 929–970.
- Wang, Chengsi, and Julian Wright. 2017. Search Platforms: Showrooming and Price Parity Clauses. https://ap4.fas.nus.edu.sg/fass/ecsjkdw/intermediation_and_search.pdf.
- Wann, Joyce J., and Richard J. Sexton. 1992. Imperfect Competition in Multiproduct Food Industries with Application to Pear Processing. *American Journal of Agricultural Economics* 74: 980–990.

- Weche, John P. and Achim Wambach. 2018. The Fall and Rise of Market Power in Europe, ZEW Discussion Paper 18-003, Mannheim.
- Werden, Gregory J. 2006. The "No Economic Sense" Test for Exclusionary Conduct. *The Journal of Corporation Law*. 293–305.
- Williamson, Oliver E. 1985. *The Economic Institutions of Capitalism*. New-York: The Free Press.
- Zingales, Luigi. 2017. "Towards a Political Theory of the Firm." *Journal of Economic Perspectives* 31 (3): 113–30.

**Diskussionspapiere aus dem Institut für Volkswirtschaftslehre
der Technischen Universität Ilmenau**

- Nr. 69 *Budzinski, Oliver:* Empirische Ex-Post Evaluation von wettbewerbspolitischen Entscheidungen: Methodische Anmerkungen, Januar 2012.
- Nr. 70 *Budzinski, Oliver:* The Institutional Framework for Doing Sports Business: Principles of EU Competition Policy in Sports Markets, January 2012.
- Nr. 71 *Budzinski, Oliver; Monostori, Katalin:* Intellectual Property Rights and the WTO, April 2012.
- Nr. 72 *Budzinski, Oliver:* International Antitrust Institutions, Juli 2012.
- Nr. 73 *Lindstädt, Nadine; Budzinski, Oliver:* Newspaper vs. Online Advertising - Is There a Niche for Newspapers in Modern Advertising Markets?
- Nr. 74 *Budzinski, Oliver; Lindstädt, Nadine:* Newspaper and Internet Display Advertising - Co-Existence or Substitution?, Juli 2012b.
- Nr. 75 *Budzinski, Oliver:* Impact Evaluation of Merger Control Decisions, August 2012.
- Nr. 76 *Budzinski, Oliver; Kuchinke, Björn A.:* Deal or No Deal? Consensual Arrangements as an Instrument of European Competition Policy, August 2012.
- Nr. 77 *Pawlowski, Tim, Budzinski, Oliver:* The (Monetary) Value of Competitive Balance for Sport Consumers, Oktober 2012.
- Nr. 78 *Budzinski, Oliver:* Würde eine unabhängige europäische Wettbewerbsbehörde eine bessere Wettbewerbspolitik machen?, November 2012.
- Nr. 79 *Budzinski, Oliver; Monostori, Katalin; Pannicke, Julia:* Der Schutz geistiger Eigentumsrechte in der Welthandelsorganisation - Urheberrechte im TRIPS Abkommen und die digitale Herausforderung, November 2012.
- Nr. 80 *Beigi, Maryam H. A.; Budzinski, Oliver:* On the Use of Event Studies to Evaluate Economic Policy Decisions: A Note of Caution, Dezember 2012.
- Nr. 81 *Budzinski, Oliver; Beigi, Maryam H. A.:* Competition Policy Agendas for Industrializing Countries, Mai 2013.

- Nr. 82 *Budzinski, Oliver; Müller, Anika*: Finanzregulierung und internationale Wettbewerbsfähigkeit: der Fall Deutsche Bundesliga, Mai 2013.
- Nr. 83 *Doose, Anna Maria*: Methods for Calculating Cartel Damages: A Survey, Dezember 2013.
- Nr. 84 *Pawlowski, Tim; Budzinski, Oliver*: Competitive Balance and Attention Level Effects: Theoretical Considerations and Preliminary Evidence, März 2014.
- Nr. 85 *Budzinski, Oliver*: The Competition Economics of Financial Fair Play, März 2014.
- Nr. 86 *Budzinski, Oliver; Szymanski, Stefan*: Are Restrictions of Competition by Sports Associations Horizontal or Vertical in Nature?, März, 2014.
- Nr. 87 *Budzinski, Oliver*: Lead Jurisdiction Concepts Towards Rationalizing Multiple Competition Policy Enforcement Procedures, Juni 2014.
- Nr. 88 *Budzinski, Oliver*: Bemerkungen zur ökonomischen Analyse von Sicherheit, August 2014.
- Nr. 89 *Budzinski, Oliver; Pawlowski, Tim*: The Behavioural Economics of Competitive Balance: Implications for League Policy and Championship Management, September 2014.
- Nr. 90 *Grebel, Thomas; Stuetzer, Michael*: Assessment of the Environmental Performance of European Countries over Time: Addressing the Role of Carbon, September 2014.
- Nr. 91 *Emam, Sherief; Grebel, Thomas*: Rising Energy Prices and Advances in Renewable Energy Technologies, July 2014.
- Nr. 92 *Budzinski, Oliver; Pannicke, Julia*: Culturally-Biased Voting in the Eurovision Song Contest: Do National Contests Differ?, December 2014.
- Nr. 93 *Budzinski, Oliver; Eckert, Sandra*: Wettbewerb und Regulierung, März 2015.
- Nr. 94 *Budzinski, Oliver; Feddersen, Arne*: Grundlagen der Sportnachfrage: Theorie und Empirie der Einflussfaktoren auf die Zuschauernachfrage, Mai 2015.
- Nr. 95 *Pannicke, Julia*: Abstimmungsverhalten im Bundesvision Song Contest: Regionale Nähe versus Qualität der Musik, Oktober 2015.
- Nr. 96 *Budzinski, Oliver; Kretschmer, Jürgen-Peter*: Unprofitable Horizontal Mergers, External Effects, and Welfare, October 2015.

- Nr. 97 *Budzinski, Oliver; Köhler, Karoline Henrike: Is Amazon The Next Google?, October 2015.*
- Nr. 98 *Kaimann, Daniel; Pannicke, Julia: Movie success in a genre specific contest: Evidence from the US film industry, December 2015.*
- Nr. 99 *Pannicke, Julia: Media Bias in Women's Magazines: Do Advertisements Influence Editorial Content?, December 2015.*
- Nr. 100 *Neute, Nadine; Budzinski, Oliver: Ökonomische Anmerkungen zur aktuellen Netzneutralitätspolitik in den USA, Mai 2016.*
- Nr. 101 *Budzinski, Oliver; Pannicke, Julia: Do Preferences for Pop Music Converge across Countries? - Empirical Evidence from the Eurovision Song Contest, Juni 2016.*
- Nr. 102 *Budzinski, Oliver; Müller-Kock, Anika: Market Power and Media Revenue Allocation in Professional Sports: The Case of Formula One, Juni 2016.*
- Nr. 103 *Budzinski, Oliver: Aktuelle Herausforderungen der Wettbewerbspolitik durch Marktplätze im Internet, September 2016.*
- Nr. 104 *Budzinski, Oliver: Sind Wettbewerbe im Profisport Rattenrennen?, Februar 2017.*
- Nr. 105 *Budzinski, Oliver; Schneider, Sonja: Smart Fitness: Ökonomische Effekte einer Digitalisierung der Selbstvermessung, März 2017.*
- Nr. 106 *Budzinski, Oliver; Pannicke, Julia: Does Popularity Matter in a TV Song Competition? Evidence from a National Music Contest, April 2017.*
- Nr. 107 *Budzinski, Oliver; Grusevaja, Marina: Die Medienökonomik personalisierter Daten und der Facebook-Fall, April 2017.*
- Nr. 108 *Budzinski, Oliver: Wettbewerbsregeln für das Digitale Zeitalter – Die Ökonomik personalisierter Daten, Verbraucherschutz und die 9.GWB-Novelle, August 2017.*
- Nr. 109 *Budzinski, Oliver: Four Cases in Sports Competition Policy: Baseball, Judo, Football, and Motor Racing, September 2017.*
- Nr. 110 *Budzinski, Oliver: Market-internal Financial Regulation in Sports as an Anticompetitive Institution, October 2017.*
- Nr. 111 *Bougette, Patrice; Budzinski, Oliver; Marty, Frédéric: EXPLOITATIVE ABUSE AND ABUSE OF ECONOMIC DEPENDENCE: WHAT CAN WE LEARN FROM THE INDUSTRIAL ORGANIZATION APPROACH?, December 2017.*

- Nr. 112 *Budzinski, Oliver; Gaenssle, Sophia*: The Economics of Social Media Stars: An Empirical Investigation of Stardom, Popularity, and Success on YouTube, Januar 2018.
- Nr. 113 *Gaenssle, Sophia; Budzinski, Oliver; Astakhova Daria*: Conquering the Box Office: Factors, influencing Success of International Movies in Russia, Mai 2018.
- Nr. 114 *Budzinski, Oliver; Stöhr, Annika*: Die Ministererlaubnis als Element der deutschen Wettbewerbsordnung: eine theoretische und empirische Analyse, Juli 2018.
- Nr. 115 *Budzinski, Oliver; Kuchinke, Björn A.*: Modern Industrial Organization Theory of Media Markets and Competition Policy Implications, September 2018.
- Nr. 116 *Budzinski, Oliver; Lindstädt-Dreusicke, Nadine*: The New Media Economics of Video-on-Demand Markets: Lessons for Competition Policy, Oktober 2018.
- Nr. 117 *Budzinski, Oliver; Stöhr, Annika*: Competition Policy Reform in Europe and Germany – Institutional Change in the Light of Digitization, November 2018.
- Nr. 118 *Budzinski, Oliver; Noskova, Victoria; Zhang, Xijie*: The Brave New World of Digital Personal Assistants: Benefits and Challenges from an Economic Perspective, December 2018.