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**The Economics of International Competition Policy: New
Challenges in the Light of Digitization?**

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The Economics of International Competition Policy: New Challenges in the Light of Digitization?

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Abstract: The International Competition Network (ICN) celebrates its 20th birthday in 2020. It governs global competition by providing a cooperative forum for (mostly national) competition authorities from all around the world. In the absence of binding global competition rules and antitrust laws, it attempts to coordinate national and supranational competition policies by providing best practice recommendations and exercising peer pressure on deviating regimes. While the first twenty years of the ICN have been mostly a success story, the ubiquitous process of digitization poses new challenges to the voluntary and informal coordination of decentralized competition policies governing pro- and anticompetitive arrangements and conduct on international and intercontinental markets. First, the digitization of markets and goods increases the number of cross-border, interjurisdictional cases regarding cartels, mergers and acquisitions, as well as anticompetitive market behavior. Second, digital platforms and data-based business models increase the probability of dominant companies on intercontinental scales as well as problems of economic dependency on few global player companies. Third, the economics of digital platforms and data-based competition strategies partly differ from traditional standard economics and are still being developed in the academic world. Consequently, the previous convergence of competition policy practices across jurisdictions tends to shift towards a process of divergence with respect of how to deal with innovative pro- and anticompetitive conduct in the digital world. This essay discusses the influence of the effects from digitization on the problems of (only soft-coordinated) national competition policies in international markets like cross-border externalities, costs and burden of multiple procedures, loopholes in the protection of global competition, and the diversity of societies and competition regimes. It concludes by outlining the challenges that the ICN will face in its third decade.

Keywords: international competition policy, international antitrust, International Competition Network, global governance, digitization, industrial economics, law and economics, international economics, international organizations, international business

JEL: F02, F53, F55, K21, L40

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1 Introduction

The debate whether competition on international, intercontinental and global markets requires an international competition policy regime is about 100 years old. For a long time, solutions were envisioned in the context of international organizations governing the relations of sovereign nations, like the League of Nations or, after the Second World War, the global trading system since the 1990s under the umbrella of the World Trade Organization (WTO) (see with comprehensive references *Budzinski 2008a: 134-142; Budzinski 2015: 129-130*). However, the implementation of binding global competition rules or enforcement agencies always failed. Thus, national competition authorities (and international ones like the European Union), which are bound to territorially-defined jurisdictions that cover only a part of the relevant geographic markets, have to deal with companies competing on international and intercontinental scales. Twenty years ago, competition authorities from countries all around the world decided to form an informal cooperative forum in order to facilitate cooperation among competition authorities and create a “soft” process of convergence of competition rules, practices, and enforcement styles: the International Competition Network (ICN)¹. In the ongoing absence of binding global competition rules and laws, it attempts to coordinate national and supranational competition policies by providing (consensually-derived) best practice recommendations and exercising peer pressure on deviating regimes.

Among the permanent challenges for every competition policy regime, the ever-changing phenomenon of market competition provides the most fundamental one. The very thing that competition laws and authorities aim to protect and to provide an institutional framework for is subject to permanent evolution, for instance, through innovative company behavior, changing consumption habits, new technologies, etc. The ubiquitous process of digitization represents the currently most prominent challenge for competition policy regimes (inter alia, *Budzinski & Stöhr 2019a; Haucap et al. 2019; Schweitzer & Welker 2019; Budzinski & Kuchinke 2020*). Most recently, four of the more relevant competition regimes have commissioned extensive expert reports on how competition laws and policies need to change in order to cope with the effects of digitization. *Kerber (2019)* provides an excellent summary and comparison of these reports, demonstrating similarities like a need for substantial changes as well as considerable differences with respect to the suggested solutions. Furthermore, virtually every other active competition policy regime is discussing reform needs and options in the face of digitization as well (inter alia, *Barreto et al. 2019; Steenbergen et al. 2019*).

¹ I have elsewhere discussed the fundamental pros and cons, success stories and limits of the ICN approach (*Budzinski 2004; Budzinski 2008a: 142-148; Budzinski 2015: 130-139*). See about the origin and development of the ICN generally also the chapters in *Lugard (2011)*. New empirical analyses about the records of the ICN present, inter alia, *Abu Karky (2019)* and *Townley et al. (2019)*.

The implications of the considerable changes brought by digitization also affect international competition policy. First, competition on online markets and particularly competition on markets for digitized goods is inherently global and geographically limited only by limits to internet access or geo-blocking strategies by the companies themselves. The business behavior of companies like Alphabet-Google, Facebook (including Instagram and WhatsApp), Amazon, WeChat, Apple, Spotify, and others is notoriously difficult to isolate regarding a certain national territory. Second, market structures on these markets are often narrow on a global scale and, accordingly, international market power by those companies is often higher than in the traditional offline world, *inter alia*, because of direct and indirect network effects as well as data-based business models (*Budzinski & Kuchinke* 2020). Third, antitrust policies and practices, which used to work quite well to remedy market power and preserve consumer welfare, may now display and cause opposite effects because the nature of consumption has changed (see for instance the striking example discussed by *Budzinski et al.* 2019).

As these developments influence the (in-)effectiveness of national competition policies towards international anticompetitive arrangements and behavior, the effects of digitization provide challenges for the ICN in the transition to its third decade as well. This essay aims to discuss how digitization changes the needs for international competition policy from an economic perspective (sections 2-5). Furthermore, it concludes some implications for the ICN's third decade.

2 Cross-border Externalities of National Competition Policies

If the geographical area of competition exceeds the geographical scope of competition rules and policy, the occurrence of cross-border externalities becomes likely even if all competition policy regimes in all jurisdictions would execute their competition policy according to the same law, the same standards, and the same underlying economic theories. Competition policy regimes are most typically inbound-focused in the sense that they address every anticompetitive conduct or arrangement that restricts competition within their borders, *i.e.*, harms domestic (consumer) welfare. This so-called *effects doctrine* rules that anticompetitive arrangements or conducts are subject to national competition laws whenever they affect domestic markets irrespective of their geographic origin (*inter alia*, *Griffin* 1999; *Fox* 2003; *Budzinski* 2008a: 32-49, 168-173). At the same time, anticompetitive effects originating from domestic companies but adversely affecting 'only' markets abroad are usually not subject to national competition laws. Consequently, each jurisdiction tends to focus only on domestic effects, ignoring possible effects abroad.

Economic theory derives that differences in the economy and market conditions between countries, like for instance an asymmetric allocation of producers and consumers across jurisdictions within a relevant international market or different sizes of domestic (partial) markets, already represent sufficient conditions to generate cross-border negative externalities (*Barros & Cabral 1994; Head & Ries 1997; Kaiser & Vosgerau 2000; Neven & Röller 2000; Tay & Willmann 2005; Haucap et al. 2006; Mehra 2011; Choi & Gerlach 2012, 2013; Beinlich et al. 2020*). Even if there is no difference in laws, standards, and theories, the decisions of national authorities cannot be fully compatible with each other, thus causing frictions in the protection of competition on the supranational markets. Even if national competition authorities act in the best interest of protecting competition, the inbound focus and the accompanying ignorance of effects on competition abroad lead to a reduction of global welfare compared to a situation where the geographic scope of anticompetitive effect and regulating regime were congruent. Note that negative externalities from national competition policy decisions can be both due to under-enforcement and over-enforcement, always compared to what would be the optimal decision to the affected country abroad (*Beinlich et al. 2017*).

The problem of cross-border externalities is aggravated when national competition regimes intentionally seek to harm other countries in order to increase their domestic welfare – or, more often, the rents of powerful national lobbies and vested interests. Strategic competition policy represents a strategy similar to strategic trade policy and belongs to the so-called beggar-my-neighbor policies, seeking to redirect rents from foreign to domestic parties (*Fox 2000; Budzinski 2008a: 53-64; De Stefano & Rysman 2010; Motta & Ruta 2012*). In competition policy, the attempt to create so-called ‘national champions’, i.e. domestic companies with market power on international markets, belongs to such strategies. The policy intention here is that domestic companies may exploit consumers in foreign countries (welfare loss abroad) with the profits ending up ‘at home’ (domestic welfare gain). A permissive merger control towards domestic mergers accompanied by a strict approach towards mergers between foreign companies would serve such a purpose as would selective non-enforcement of anti-cartel rules towards domestic companies, domestic antitrust exceptions for so-called (and however picked) “key” industries or exempting pure export cartels from an otherwise effective cartel prohibition. According to economic theory, strategic competition policies (like strategic trade policies) decrease world welfare due to (deliberately) causing negative externalities but regularly do not increase overall domestic welfare or the welfare of domestic consumers. Instead, only some domestic parties, i.e. powerful companies or industries, benefit – at the expense of both foreign and domestic consumers. The reasoning underlying strategic competition policy then merely serves the purpose to conceal successful lobbying activities in an imperfect political decision process (inter alia, *Kerber & Budzinski 2003, 2004*).

Cross-border externalities from diverging and mutually incompatible decisions of national competition authorities regarding the same case may cause jurisdictional conflicts, in particular (but not only) in the case of strategic competition policy (*Campbell & Trebilcock* 1993, 1997; *Neven & Röller* 2003; *Haucap et al.* 2006; *Beinlich et al.* 2017). Literature lists an impressive number of jurisdictional conflicts on competition policy issues involving a multitude of countries (inter alia, *Klodt* 2005: 45-65; *Budzinski* 2008a: 40-49). For instance, the European antitrust authorities' challenge of the mergers between the U.S. companies Boeing and McDonnell Douglas (*Fox* 1998; *Kovacic* 2001) as well as GE and Honeywell (*Reynolds & Ordovery* 2002; *Gerber* 2003) caused negative externalities on trade and diplomatic relations between the two jurisdictions.

The ongoing process of digitization implies more international and intercontinental markets as well as broader international markets. Probably, only digital markets where digital goods are traded can become truly global markets because as soon as physical goods are involved, costs of geographic distance play some role (even if they are ordered digitally) and limit the geographic reach of markets. And, at the same time, the decrease and eventual absence of costs of distance limit the scope for truly national or regional markets. It would be a gross over-exaggeration to claim that *all* markets are going to be digital and global, however, the number of purely digital markets with (almost) global scope is increasing. Moreover, the digital elements of the trade of physical goods facilitate its internationalization as well. Therefore, the likelihood of mutually incompatible decisions because of differences in the economy and market conditions between countries increases and, thus, problems from cross-border externalities caused by national competition policies become more relevant and more pressing. In particular, the asymmetry of the allocation of producers and consumers has increased with the (almost worldwide) dominance of U.S.-based companies like Alphabet-Google, Amazon, Facebook, Apple, Netflix, and others in markets like search engines, social media services, online marketplaces, shopping comparisons services, streaming, etc. The current wave of national antitrust proceedings against the mentioned internet giants in a multitude of jurisdictions is likely to cause welfare-decreasing externalities from both under- and over-enforcement with respect to (side-) effects abroad. Just as the preceding period of virtually no national antitrust interventions against obvious anticompetitive conduct by these companies decreased welfare through under-enforcement.

Furthermore, a new uprising of strategic competition policies appears to be on the horizon, fuelled by a general comeback of protectionist policies, (not only) driven by the U.S. In the EU, for instance, politicians are calling for reforming competition policy to promote "European Champions" or allowing exemptions from merger control for "strategic industries" (see *Budzinski & Stöhr* 2019b for a discussion with

further references). While one of the cases motivating these – so far unsuccessful – new initiative is firmly rooted in traditional industries (the Siemens-Alstom-merger), similar patterns of reasoning are surfacing with respect to the digital economy and the (real or perceived) dominance by American firms. Furthermore, the merger-and-acquisition activities by Chinese government funds cause concerns about strategic intentions and, consequently, debates about establishing defense measures in competition law and policy.

In summary, the problem of cross-border externalities from national competition policies is likely to significantly increase due to the process of digitization.

3 Costs and Burden of Multiple Procedures

If national competition authorities treat antitrust cases in international markets each by each in a non-coordinated way, then multiple competition policy procedures of the same case are conducted parallel to each other. Global players often face antitrust proceedings with respect to mergers and acquisitions, cartel offences, or abuse of market power from (sometimes by far) more than twenty jurisdictions at the same time on the same case and conduct. These multiple procedures on the same case cause administration and transaction extra costs that reduce welfare in all affected jurisdictions. First, costs for taxpayers increase if virtually the same facts of the case are investigated in a parallel effort by multiple competition authorities. Most of the doubling, tripling and multiplying of investigation costs merely increases the 'production costs' of competition policy without yielding additional 'output', insights or benefits. Second, if companies face multiple procedures they have to provide information to multiple competition authorities in multiple languages with multiple legal experts of multiple law systems and by paying multiple notification, submission and consultancy fees. Thus, the transaction costs for companies accompanying an international merger, cooperation agreement or strategy exert a relevant burden on companies (overview: *ICN 2002*). While this may represent a welcome additional deterrence of anticompetitive arrangements and conduct, the additional costs from multiple procedures also fall on unproblematic and procompetitive cases, thus discouraging some beneficial strategies and arrangements (inter alia, *Evenett 2002*; *De Loecker et al. 2008*). In balance, it seems difficult to argue that there is no harm for welfare from additional administrative and transactional costs burdened on taxpayers and companies.

The ICN has been active in developing best practices for many elements of antitrust procedures and, through this soft and voluntary process of harmonization, seeks to alleviate the burden from multiple procedures. However, since the ICN as a voluntary cooperation network of competition authorities does not have executive power to

allocate any given case to one single jurisdiction, the results of these efforts are limited – but still highly valuable. Obviously, the effects of digitization further increase the burden from multiple procedures because of the increase in international and intercontinental business activities. In the absence of more far-reaching cooperation towards an international competition policy regime (*Fox* 2000; *Cabral* 2003, 2005, 2017; *First* 2003; *Budzinski* 2008a, 2015), the ICN way becomes even more valuable and necessary because of the increase in multiple procedure cases. However, as I argue in section 5, the process of digitization is also likely to increase the diversity of competition policies. Since especially the dealing with data-based business models and strategies (*Budzinski & Kuchinke* 2020) also requires new procedures, the soft harmonization process will likely be challenged here. It may be considered, though, that in the absence of powerful agencies vis-à-vis the global digital giants, multiple costs of national procedures may recapture some of the deterrence effect lost by the asymmetry of power.

Notwithstanding, altogether the problem of the costs for companies and taxpayers from multiple procedures can be expected to aggravate with the ongoing digitization of the economy.

4 Loopholes in the Protection of Competition

Protecting competition requires an effective competition policy regime. While – also thanks to the activities of the ICN – more and more countries (but not all) possess competition laws and enforcement agencies nowadays, not all of these regimes are effective and sufficiently powerful. In theory, the inbound-focused effects doctrine allows every country to protect competition in its domestic markets as well as within its part of international markets. However, whether a national competition authority is also able to effectively enforce its competition law against global player companies from abroad, depends on several factors: (i) a national competition policy regime must exist, (ii) the national competition authorities must be workable (and not just paper tigers), and (iii) the relevance of the domestic markets must be high enough to make international companies comply with rulings of the national competition authorities. Ultimately, domestic enforcement power against antitrust violations from abroad relies on the power to restrain access to domestic markets, be it by monetary sanctions on domestic turnovers or be it by prohibiting domestic sales. Thus, when facing rulings or sanctions by a national competition authority, any international company must weigh the importance of that national market for its business with the costs of complying with the national (antitrust) laws. In tendency, comparatively wealthy industrialized countries enjoy a lot of power to enforce their

competition laws, whereas comparatively poorer developing countries struggle (*Gal* 2009). Consequently, loopholes arise in particular where companies competing on international or intercontinental markets restrict competition with negative effects only in smaller and poorer countries. Then, the inbound-focused regimes of the more powerful countries do not capture the negative effects and the smaller authorities are not sufficiently powerful to effectively combat the incoming anticompetitive arrangements and conduct. The literature offers an impressive list of examples (*Jenny* 2003a, 2003b; *Levenstein & Suslow* 2004).

Notwithstanding, umbrella effects limit the scope of the loopholes (albeit not eroding them). Smaller competition policy regimes benefit from decisions by larger authorities effectively combating an anticompetitive arrangement that would also have affected the smaller regimes' jurisdiction. If European or American antitrust authorities, for instance, break up a cartel or prohibit a merger because it adversely affected consumers in their domestic markets, this arrangement becomes ineffective in most cases also for the smaller competition policy regime's domestic markets. Therefore, competition on their markets is indirectly protected by the actions of the bigger regimes and, to some extent, the smaller regimes may hide under the umbrella of the big regimes. However, if a certain arrangement or conduct only affects markets in smaller competition policy regimes, no umbrella effects are available.

The ICN is contributing to the reduction of such loopholes through its activities to empower smaller competition policy regimes and increase their effectiveness. In the course of the process of digitization, more powerful (American, Chinese, etc.) companies confront smaller regimes and it will be interesting to witness whether these – with the help of the ICN – empowered and better equipped regimes of smaller and poorer countries will be able to enforce their antitrust laws against internet giants. However, there is reason for skepticism. As far as we can observe by now, the digital economy seems to go along with a shift in the type of anticompetitive conduct. Digital companies do not seem to engage in cartels as much as traditional industries – so far, at least. Mergers are an issue but often it is about so-called killer acquisitions of potential future competitors (i.e. taking upcoming mavericks off the market) and not so often mega-mergers among equals. The most relevant type of antitrust violation relevant for the digital economy, however, appears to be abuse of market power. Due to direct and indirect network effects, market power positions are more likely to surface in the digital economy and the decrease of the costs of geography (i.e. costs of distance) implies that powerful positions are often

international in nature.² Consequently, smaller competition policy regimes will be confronted more often with particularly powerful companies (enjoying strong market power with an almost global reach). Unfortunately, strategies abusing market power represent the area of competition policy, where umbrella effects often do not occur because a certain practice (e.g. access or use of personalized data, forced bundling and tying, or some types of remedies against an artificial blocking of compatibility) may be prohibited in one country but still be executed in another.

A new type of enforcement problems, generating new loopholes, may be the availability and costs of data- and information-technology-related specialists. Notoriously, companies are willing and/or able to pay experts at considerably higher salaries than competition authorities. Already sophisticated economic expertise proves to be (sometimes too) expensive for smaller and developing jurisdictions (*Budzinski & Beigi* 2015) and the market for data specialists is considerably scarcer. Therefore, the process of digitization is likely to aggravate already existing expert-knowledge-financing problems of authorities and due to a lack of availability of top specialists, even the ICN procedures may find it difficult to provide help (in terms of best practice recommendations). In summary, problems of loopholes for internationally powerful companies with respect to smaller and poorer competition policy regime are likely to increase through digitization.

5 Diversity of Societies and Economics

Real-world competition regimes differ not only with respect to their economy and market structures (section 2), their intentions (section 2), their procedures (section 3), and their power towards multinational companies (section 4). They also (i) pursue different goals and standards and (ii) apply different economic theories, concepts and methods. Firstly, different countries and societies want their competition policy to achieve different goals and measure pro- and anticompetitiveness of arrangements and conduct according to different standards. Even though economic science points to welfare as the preferable ultimate goal of competition policy and is predominantly skeptical about adding other goals, democratic societies entail the right to trade some degree of efficiency or (economic-material) welfare against goals they view to be more important (like market integration, economic development, fairness, high employment, international competitiveness, climate policy, etc.) – at

² Note that there is no automatism or inevitability for dominant positions to emerge in digital markets. Competition among online platforms is possible and desirable and economic research is pointing out (and further researching) the conditions for sustainable competition among online services, like for instance compatibility and inter-operability, low switching costs, multi-homing, etc. (inter alia, *Haucap & Heimeshoff* 2014; *Haucap & Stühmeier* 2016; *Budzinski & Stöhr* 2019a; *Budzinski & Kuchinke* 2020).

least if there is transparency about the welfare costs of doing so. And, furthermore, even within economics it is not perfectly clear what the 'right' welfare standard is: consumer welfare vs. total welfare; allocative welfare vs. dynamic welfare, protection of the competitive process vs. maximizing efficiency, etc. (inter alia, *Farrell & Katz* 2006; *Kerber* 2009; *Vanberg* 2011; *Werden* 2011).

Secondly, there is no and there cannot be a consensus on a unifying theory of competition within economics (*Budzinski* 2008b). This is particularly true with respect to both the evolution of science (theory innovation and development) and the dynamics of the phenomenon, market competition, itself: companies innovate on pro- as well as on anticompetitive behavior. Therefore, different competition policy regimes will legitimately base their theories of competitive harm on diverging economic approaches – probably not always but at least in some of the cases. Consequently, the dividing line between procompetitive and anticompetitive arrangements and conduct will not be exactly the same in each jurisdiction. The same is true for investigational and analytical methods, which also change in line with scientific evolution and market dynamics.

Altogether, the diversity of societies and economics justifies some diversity of competition policy regimes. There is no one-size-fits-all model for each country and jurisdiction and for all times. This limits the scope for reducing the problems discussed in section 2 and 3.³ Moreover, it points to a benefit of having some diversity, even in terms of welfare. If several competition regimes experiment with different theories and methods, then this offers scope for dynamic institutional learning. In case of diversity, competition regimes learn from their own successes and failures and, additionally, they learn from other regimes' successes and failures – and, therefore, from more cases in any given frame of time. This mutual learning speeds up the learning process, offers potential to dynamically improve competition policy, and thus increases welfare (*Kerber & Budzinski* 2003, 2004). This is particularly true if there is no ultimate academic consensus and if new ideas, concepts, solutions need to be injected into the policy process in the course of time. However, these fundamental benefits of a system with decentralized elements do not imply that the same case must be exposed to multiple procedures and conflicting decisions. Instead, sophisticated lead-jurisdiction models offer scope for combining welfare benefits of competition policy coordination with welfare gains from mutual institutional learning and diversity (*Campbell & Trebilcock* 1993, 1997; *Trebilcock & Iacobucci* 2004; *Budzinski* 2008a, 2009, 2018).

³ Notwithstanding, this does not imply that action to reduce these problems is not valuable. There *is* ample scope for reduce the burdens and welfare losses of uncoordinated national competition policies. However, in the absence of an uniform worldwide competition policy regimes, these problems will never be reduced to zero.

Throughout its first two decades, the ICN has employed its best practice approach to contribute to less diverging interpretations of goals, concepts and theories among competition authorities. This was particularly done by aiming to develop a common competition culture among the participating antitrust agencies and by developing and suggesting informal standards for the use of economic theories and methods in competition policy proceedings.

Goals, theories and methods of competition policy are particularly affected by the process of digitization. With respect to goals, the digital economy leads to a stronger amalgamation between consumer welfare pursued by competition policy and consumer welfare pursued by consumer protection policy (inter alia, *Bhattacharya & Buiten* 2018; *Buiten* 2018). The German Facebook case represents a striking example: the German competition authority investigated, inter alia, whether a permanent violation of data protection and privacy standards (as a part of consumer protection policy) can constitute an abuse of market power and, respectively, can be interpreted as an indication for existing market power (see on the case *Buiten* 2019). Similar questions on the interface of antitrust policy and consumer protection policy are discussed in many countries including the consolidation of agency competencies in these two areas. Furthermore, the rise of the digital economy is accompanied by the emergence and innovation of new business strategies, next to platform strategies in particular data-based strategies like zero-priced service offers financed by revenues from sophisticated analyses of the personalized data collected from the service's users and data-based individualized search and recommendation systems. These market phenomena require new economic concepts and theories (contemporary overview: *Budzinski & Kuchinke* 2020) and express themselves in innovative pro- and anticompetitive arrangements and conduct. Some features of digital markets like the paying-with-data character further require new methods for analysis since "classical" price- and turnover-based measures may not work adequately anymore. Other issues include – but are not limited to – changing consumption behavior (e.g. desire for a one-stop shop at one platform for everything accompanying walled garden strategies by companies), a new importance of compatibility and inter-operability among digital services, or data stocks as entry barriers (including access to data as a possible precondition for competition). Obviously, economic theory is developing parallel to the new market phenomena and there are considerable dynamics of new insights.

With respect to the diversity issue, the process of digitization entails pros and cons. On the pro side, the diversity of competition policy regimes allows for a process of experimenting for adequate rules for competition in a digitized world. Different concepts and methods can be applied and mutual learning, which is particularly fruitful in times of considerable change, can help antitrust authorities to get to grips

with the challenges from the digital economy. On the contra side, however, regimes are drifting away from each other. While the understanding of competition and the borderline between pro- and anticompetitive arrangements and conduct is converging regarding traditional industries, it may be diverging with respect to digital industries.

Germany, for instance, is currently discussing a 10th amendment⁴ of its competition law based upon a proposal that includes significant changes in addressing abusive behavior. In the digital economy, relative market power vis-à-vis vertically dependent companies, a new concept of intermediary power, as well as paramount significance for competition across markets shall suffice in the future for abuse control to intervene (instead of requiring market dominance in the traditional sense). Moreover, the various expert reports from antitrust regimes regarding how to deal with the digital economy show considerable differences – in particular regarding the ways to combat anticompetitive arrangements and conduct within the digital economy (*Barreto et al. 2019; Haucap et al. 2019; Kerber 2019; Schallbruch et al. 2019; Steenbergen et al. 2019*). Shall killer acquisitions of small maverick start-ups without considerable turnover by internet giants be prohibited? Do transaction-value-based thresholds capture these mergers? How to include concepts of economic dependence into competition law, based on what theories and by using which methods (*Bougette et al. 2019*)? These and many other relevant questions will be answered by different competition policy regimes in different ways. And before the process of mutual learning from parallel experimentation has not taken place, it will be difficult to derive best practices. Theoretical and empirical economics provide some guidance but due to the significant underlying dynamics (both of market behavior and of economic insights), the scientific learning process is not concluded yet as well. And, of course, this development entails a feedback loop to the issues discussed in section 2: the increasing divergence of approaches is likely to create more incompatible decisions and more jurisdictional conflicts.

6 The Role of the ICN in Its Third Decade

Altogether, the process of digitization entails a number of challenges for international competition policy. First, the digitization of markets and goods increases the number of cross-border, interjurisdictional cases regarding cartels, mergers and acquisitions, as well as anticompetitive market behavior. Second, digital platforms and data-based business models increase the probability of dominant companies on intercontinental scales as well as problems of economic dependency

⁴ See *Budzinski and Stöhr (2019a)* on how already the recent 9th amendment represents a departure from the common competition policy framework in the EU.

on few global player companies. Third, the economics of digital platforms and data-based competition strategies partly differ from traditional standard economics and are still being developed in the academic world. Consequently, the previous convergence of competition policy practices across jurisdictions tends to shift towards a process of divergence with respect of how to deal with innovative pro- and anticompetitive conduct in the digital world. Altogether, digitization challenges international competition policy by an increase of externalities and jurisdictional conflicts, increasing costs from multiple procedures, more loopholes, and generally diverging regimes. In particular, if these developments are accompanied by a revival of strategic competition policies, the current “system” of national competition policy regimes dealing with international and intercontinental business behavior may face tough times. On the other hand, only a decentralized system of competition policies offers the necessary openness and flexibility to deal with the underlying dynamics of the markets themselves as well as of the academic knowledge about the digital economy.

Thus, the process of digitization is already challenging and will further challenge the role of the ICN in its third decade. Its fundamental approach to identify best practices and create a soft harmonization process by peer pressure towards adapting the published (and consensually agreed upon) best practices rests on experience with the targeted industries and the surfacing pro- and anticompetitive strategies and arrangements. However, the novel character of business models and strategies – pro- and anticompetitive ones – in the digital economy implies that best practices are not yet found. As a consequence, the ICN needs to move forward from focusing on comparing existent policies towards developing and pondering new solutions. And it is already starting to embrace such approaches on its way into its third decade. It will be interesting to see how the ICN will be able to withstand the uprising of uncooperative and strategic policy approaches that quickly may include strategic competition policies.

Still, while the ICN approach is definitely superior to an uncoordinated approach, scientific insight from economics favor an enhanced integration of competition policy regimes vis-à-vis the increasing international and intercontinental character of competition. Concepts for reducing the (welfare) costs of multiple and conflicting proceedings and decisions as well as for closing loopholes without jeopardizing a beneficial diversity and openness have been proposed (*Trebilcock & Iacobucci* 2004; *Budzinski* 2008a, 2009, 2018). However, it remains unclear whether a window of opportunity to move towards such scenarios will emerge during the ICN’s third decade and whether the ICN, in such a case, can play the role of a facilitator towards more enhanced and more binding forms of cooperation.

References

- Abu Karky, H. (2019), The Impact of the International Competition Network on Competition Advocacy and Global Competition Collaboration, in: *European Competition Law Review*, Vol. 40(10), 490-501.
- Barreto, A., Morita Sakowski, P. A. & Park, C. (2019), The First Report of the BRICS Competition Authorities Working Group on the Digital Economy, in: *The Antitrust Chronicle*, Vol. 3(2), 66-70.
- Barros P. P. & Cabral, L. M. (1994), Merger Policy in Open Economies, in: *European Economic Review*, Vol. 38(5), 1041-1055.
- Beinlich, H., Nocke, V. & Schutz, N. (2017), International Aspects of Merger Policy: A Survey, in: *International Journal of Industrial Organization*, Vol. 50(C), 415-429.
- Beinlich, H., Nocke, V. & Schutz, N. (2020), Merger Policy in a Quantitative Model of International Trade, in: *The Economic Journal*, forthcoming, <https://doi.org/10.1093/ej/uez061>.
- Bhattacharya, S. & Buiten, M. C. (2018), Privacy as a competition law concern? Lessons from Facebook/WhatsApp, in: *Essays in Law and Economics in Honour of Roger Van den Bergh*, Antwerp: Intersentia, 115-134.
- Bougette, P., Budzinski, O. & Marty, F. (2019), Exploitive Abuse and Abuse of Economic Dependence: What Can We Learn from an Industrial Organization Approach? In: *Revue d'Economie Politique*, Vol. 129(2), 261-286.
- Budzinski, O. (2004), The International Competition Network - Prospects and Limits on the Road towards International Competition Governance, in: *Competition and Change*, Vol. 8(3), 243-266.
- Budzinski, O. (2008a), *The Governance of Global Competition: Competence Allocation in an International Multilevel Competition Policy System*, Cheltenham: Edward Elgar.
- Budzinski, O. (2008b), Monoculture versus Diversity in Competition Economics, in: *Cambridge Journal of Economics*, Vol. 32(2), 295-324.
- Budzinski, O. (2009), An International Multilevel Competition Policy System, in: *International Economics and Economic Policy*, Vol. 6(4), 367-389.
- Budzinski, O. (2015), International Antitrust Institutions, in: R. D. Blair & D. D. Sokol (eds.), *The Oxford Handbook of International Antitrust Economics*, Vol. 1, Oxford: Oxford University Press, 119-146.
- Budzinski, O. (2018), Lead Jurisdiction Concepts: Prospects and Limits for Rationalizing International Competition Policy Enforcement, in: *Global Economy Journal*, Vol. 18(2), doi.org/10.1515/gej-2016-0025.
- Budzinski, O. & Beigi, M. (2015), Generating Instead of Protecting Competition, in: M. S. Gal et al. (eds.), *Economic Characteristics of Developing Jurisdictions: Their Implications for Competition Law*, Cheltenham: Elgar, 223-247.
- Budzinski, O., Gaenssle, S. & Kunz-Kaltenhäuser, P. (2019), How Does Online Streaming Affect Antitrust Remedies to Centralized Marketing? -The Case of

- European Football Broadcasting Rights, in: *International Journal of Sport Finance*, Vol. 14(3), 147-157.
- Budzinski, O. & Kuchinke, B. A. (2020), *Industrial Organization of Media Markets and Competition Policy*, in: B. von Rimscha (ed.), *Handbook Economics and Management of Media and Communication*, Berlin: DeGruyter, forthcoming.
- Budzinski, O. & Stöhr, A. (2019a), *Competition Policy Reform in Europe and Germany - Institutional Change in the Light of Digitization*, in: *European Competition Journal*, Vol. 15(1), 15-54.
- Budzinski, O. & Stöhr, A. (2019b), *Public Interest Considerations in European Merger Control Regimes*, Ilmenau Economics Discussion Paper 25 (130).
- Buiten, M. C. (2018), *Regulating Data Giants: Between Competition Law and Data Protection Law*, in: K. Mathis (ed.), *New Developments in Competition Law and Economics*, Berlin: Springer, 265-294.
- Buiten, M. C. (2019), *Facebook v Bundeskartellamt: A Data Protection Violation as an Exploitative Abuse of Dominance*, conference paper.
- Cabral, L. M. (2003), *International Merger Policy Coordination*, in: *Japan and the World Economy*, Vol. 15(1), 21-30.
- Cabral, L. M. (2005), *An Equilibrium Approach to International Merger Policy*, in: *International Journal of Industrial Organization*, Vol. 23, 739-751.
- Cabral, L. M. (2017), *Competition Policy in the Global Era*, in: *New Zealand Economic Papers*, Vol. 51(2), 100-108.
- Campbell, N. & Trebilcock, M. J. (1993), *International Merger Review – Problems of Multi-Jurisdictional Conflict*, in: E. Kantzenbach, H.-E. Scharrer & L. Waverman (eds.), *Competition Policy in an Interdependent World Economy*, Baden-Baden: Nomos, 129-163.
- Campbell, N. & Trebilcock, M. J. (1997), *Interjurisdictional Conflict in Merger Review*, in: L. Waverman, W. S. Comanor & A. Goto (eds.), *Competition Policy in the Global Economy*, London: Routledge, 89-126.
- Choi, J. P. & Gerlach, H. (2012), *International Antitrust Enforcement and Multimarket Contact*, in: *International Economic Review*, Vol. 53(2), 635-657.
- Choi, J. P. & Gerlach, H. (2013), *Multi-Market Collusion with Demand Linkages and Antitrust Enforcement*, in: *The Journal of Industrial Economics* 61(4), 987-1021.
- De Loecker, J. et al. (2008), *Merger Review: How Much of Industry Is Affected in an International Perspective*, in: *Journal of Industry, Competition and Trade*, Vol. 8(1), 1-19.
- De Stefano, M. & Rysman, M. (2010), *Competition Policy as Strategic Trade with Differentiated Products*, in: *Review of International Economics*, Vol. 18(4), 758-771.
- Evenett, S. J. (2002), *How Much Have Merger Review Laws Reduced Cross-Border Mergers and Acquisitions? In: J. W. Rowley (ed.), International Merger Control: Prescriptions for Convergence*, London: International Bar Association, 39-55.

- Farrell, J. & Katz, M. L. (2006), The Economics of Welfare Standards in Antitrust, in: *Competition Policy International*, Vol. 2, 3-28.
- First, H. (2003), Evolving Toward What? – The Development of International Antitrust, in: J. Drexl (2003), *The Future of Transnational Antitrust: From Comparative to Common Competition Law*, Berne: Staempfli/Kluwer, 23-51.
- Fox, E. M. (1998), Antitrust Regulation Across National Borders – The United States of Boeing versus the European Union of Airbus, in: *The Brookings Review*, Vol. 16(1), 30-32.
- Fox, E. M. (2000), Antitrust and Regulatory Federalism: Races Up, Down, and Sideways, in: *New York University Law Review*, Vol. 75(6), 1781-1807.
- Fox, E. M. (2003), Can We Solve the Antitrust Problems by Extraterritoriality and Cooperation? In: *The Antitrust Bulletin*, Vol. 48(2), 355-376.
- Gal, M. S. (2009), Antitrust in a Globalized Economy: The Unique Enforcement Challenges Faced by Small and Developing Jurisdictions, in: *Fordham International Law Journal*, Vol. 33(1), 1-56.
- Gerber, D. J. (2003), The European Commission's GE/Honeywell Decision: US Responses and their Implications, in: *ZWeR Journal of Competition Law*, Vol. 1(1), 87-95.
- Griffin, J. P. (1999), Extraterritoriality in U.S. and EU Antitrust Enforcement, in: *Antitrust Law Journal*, Vol. 67(1), 159-199.
- Haucap, J., Müller, F. & Wey, C. (2006), How to Reduce Conflicts over International Antitrust, in: *Conferences on New Political Economy*, Vol. 23, 307-343.
- Haucap, J. & Heimeshoff, U. (2014), Google, Facebook, Amazon, eBay: Is the Internet Driving Competition or Market Monopolization? In: *International Economics and Economic Policy*, Vol. 11(1), 49-61.
- Haucap, J. & Stühmeier, T. (2016), Competition and Antitrust in Internet Markets, in: J. Bauer & M. Latzer (eds.), *Handbook on the Economics of the Internet*, Edward Elgar: Cheltenham, 183-210.
- Haucap, J., Kerber, W., Schweitzer, H. & Welker, R. (2019), Modernizing the Law on Abuse of Market Power in the Digital Age: A Summary of the Report for the German Ministry for Economic Affairs and Energy, in: *The Antitrust Chronicle*, Vol. 3(2), 39-46.
- Head, K. & Ries, J. (1997), International Mergers and Welfare under Decentralized Competition Policy, in: *Canadian Journal of Economics*, Vol. 30(4), 1104-1123.
- ICN (2002), Report on the Costs and Burdens of Multijurisdictional Merger Review, Napoli, <http://www.internationalcompetitionnetwork.org/costburd.doc> (accessed 15.01.2004).
- Jenny, F. (2003a), Competition Law and Policy: Global Governance Issues, in: *World Competition*, Vol. 26(4), 609-624.
- Jenny, F. (2003b), International Cooperation on Competition: Myth, Reality and Perspective, in: *The Antitrust Bulletin*, Vol. 48(4), 973-1003.

- Kaiser, B. & Vosgerau, H.-J. (2000), Global Harmonisation of National Competition Policies, in: H.-J. Vosgerau (ed.), *Institutional Arrangements for Global Economic Integration*, Houndmills: Palgrave Macmillan, 35-59.
- Kerber, W. (2009), Should Competition Law Promote Efficiency? Some Reflections of an Economist on the Normative Foundations of Competition Law, in: J. Drexel et al. (eds.), *Economic Theory and Competition Law*, Cheltenham: Edward Elgar.
- Kerber, W. (2019), Updating Competition Policy for the Digital Economy? An Analysis of Recent Reports in Germany, UK, EU, and Australia, available at SSRN: <http://dx.doi.org/10.2139/ssrn.3469624>.
- Kerber, W. & Budzinski, O. (2003), Towards a Differentiated Analysis of Competition of Competition Laws, in: *ZWeR Journal of Competition Law*, Vol. 1(4), 411-448.
- Kerber, W. & Budzinski, O. (2004), Competition of Competition Laws: Mission Impossible? In: R. A. Epstein & M. S. Greve (eds.), *Competition Laws in Conflict - Antitrust Jurisdiction in the Global Economy*, Washington, D.C.: AEI Press, 31-65.
- Klodt, H. (2005), *Towards a Global Competition Order*, Berlin: Liberal.
- Kovacic, W. E. (2001), Transatlantic Turbulence: The Boeing-McDonnell Douglas Merger and International Competition Policy, in: *Antitrust Law Journal*, Vol. 69(2), 805-874.
- Levenstein, M. C. & Suslow, V. Y. (2004), Contemporary International Cartels and Developing Countries: Economic Effects and Implications for Competition Policy, in: *Antitrust Law Journal*, Vol. 71(2), 801-852.
- Lugard, P. (2011, ed.), *The International Competition Network at Ten*, Antwerp: Intersentia.
- Mehra, P. (2011), Supranational Agency: A Solution for Conflict in International Mergers, in: *Homo Oeconomicus*, Vol. 27(4), 545-574.
- Motta, M. & Ruta, M. (2012), A Political Economy Model of Merger Policy in International Markets, in: *Economica* 79, 115-136.
- Neven, D. J. & Röller, L.-H. (2000), The Allocation of Jurisdiction in International Antitrust, in: *European Economic Review*, Vol. 44(4-6), 845-855.
- Neven, D. J. & Röller, L.-H. (2003), On the Scope of Conflict in International Merger Control, in: *Journal of Industry, Competition and Trade*, Vol. 3(4), 235-249.
- Reynolds, R. J. & Ordovery, J. A. (2002), Archimedean Leveraging and the GE/Honeywell Transaction, in: *Antitrust Law Journal*, Vol. 70(1), 171-198.
- Schallbruch, M., Schweitzer, H. & Wambach, A. (2019), A New Competition Framework for the Digital Economy, in: *The Antitrust Chronicle*, Vol. 3(2), 33-38.
- Schweitzer, H. & Welker, R. (2019), Competition Policy for the Digital Era, in: *The Antitrust Chronicle*, Vol. 3(2), 16-24.
- Steenbergen, J., Snoep, M. & Barthelmé, P. (2019), Benelux Competition Authorities on Challenges in a Digital World, in: *The Antitrust Chronicle*, Vol. 3(2), 54-58.

- Tay, A. & Willmann, G. (2005), *Why (no) Global Competition Policy is a Tough Choice*, in: *The Quarterly Review of Economics and Finance*, Vol. 45(2-3), 312-324.
- Townley, C., Tavares, M. & Guidi, M. (2019), *Influence in the International Competition Network (ICN): Who Seeks It, How Do They Do This and Why?* Available at SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3415067 (accessed November 11th 2019).
- Trebilcock, M. J. & Iacobucci, E. (2004), *National Treatment and Extraterritoriality: Defining the Domains of Trade and Antitrust Policy*, in: R. A. Epstein & M. S. Greve (eds.), *Competition Laws in Conflict: Antitrust Jurisdiction in the Global Economy*, Washington, D.C.: AEI Press, 152-176.
- Vanberg, V. J. (2011), *Consumer Welfare, Total Welfare and Economic Freedom: On the Normative Foundations of Competition Policy*, in: J. Drexel et al. (eds.), *Competition Policy and the Economic Approach*, Cheltenham: Edward Elgar.
- Werden, G. J. (2011), *Consumer Welfare and Competition Policy*, in: J. Drexel et al. (eds.), *Competition Policy and the Economic Approach*, Cheltenham: Edward Elgar.