

Position Paper on National and European Champions in Merger Control

Vienna, 2019

Imprint

Owner, publisher and editor:

Austrian Federal Competition Authority, Radetzkystraße 2, 1030 Vienna
Vienna, 2019.

Date: November 2019

Reprints of extracts are only permitted if reference is made to the source, all other rights are inadmissible without the media owner's written consent.

Please note that all information in this publication, although carefully collected, is given without guarantee, and any liability on the part of the Austrian Federal Competition Authority or the author is hereby excluded. Interpretations of the law constitute the non-binding opinion of the author and do not in any way anticipate decisions of the independent courts.

Feedback: If you would like to comment on this publication, please e-mail us at wettbewerb@bwb.gv.at.

Inhalt

Executive Summary	4
The BWB's Guiding Principles	9
1 Introduction	10
2 Competitiveness, competition and national champions	12
1.1 Competitiveness and productivity.....	12
1.2 Productivity development and economic policy discourse.....	14
1.3 Competition and competition policy.....	18
1.4 National "champions"	22
1.5 Political economy considerations.....	27
2 Legal considerations relating to European merger control	30
2.1 Legal foundations	30
2.2 Significance of transparent, non-discriminatory merger control.....	33
3 Alternatives for action	37
4 Conclusion	39
Literature	41

Executive Summary

In the current debate and for the purposes of this position paper, national or European champions are understood to be companies that are supported to grow, in the expectation that this will make them more successful against foreign companies. This form of state support may for instance entail the approval of potentially anticompetitive mergers or the granting of state aid. National or European champions are to be distinguished from companies that are capable of competing successfully on the market by their own means.

There has recently been intense discussion about the creation of European champions in connection with the planned merger of Siemens and Alstom (COMP/M.8677). During the merger proceedings, it was argued by the two companies that the merger was necessary in order to preserve European competitiveness, in particular against China. This position was also supported by the German and French economic affairs ministers. In the end, however, the merger was prohibited by the European Commission on 6 February 2019.

On 19 February 2019, the German and French economic affairs ministers presented a *Franco-German Manifesto for a European industrial policy*.¹ This set out demands for a relaxation of European merger control and state aid rules, which was to make the creation of European champions possible in the future. Even though they are markedly less concrete, the statement issued in December 2018 by the Friends of Industry,² a group made up of eighteen EU Member States' industry ministers, and the draft *National Industrial Strategy 2030*³ published by the German Economic Affairs Minister at the beginning of February 2019 also point in the same direction.

However, leading competition economists and lawyers do not believe the creation of what are known as national and European champions, and the measures proposed in the

¹ https://www.bmwi.de/Redaktion/DE/Downloads/F/franco-german-manifesto-for-a-european-industrial-policy.pdf?__blob=publicationFile&v=2.

² https://www.bmwi.de/Redaktion/DE/Downloads/F/friends-of-industry-6th-ministerial-meeting-declaration.pdf?__blob=publicationFile&v=6.

³ <https://www.bmwi.de/Redaktion/EN/Publikationen/Industry/national-industry-strategy-2030.html>.

Manifesto will achieve the desired results.⁴ Some companies and business organisations have also commented critically on the debate.⁵

An open discussion about this topic may, however, help challenge assumptions and goals, and highlight options for action as a way of moving towards evidence-based economic policymaking.

With this in mind, the terms “national”, “European” and “champions” certainly deserve to be challenged. It is to be noted in connection with the planned Siemens/Alstom merger, for example, that approx. 70% of the ownership interests in the “German” champion Siemens are not in German hands. When Brexit is realised, Siemens will presumably be a company with more than 50% of its shares held by investors outside the EU.⁶

What speaks against the promotion of national or European “champions” at the detailed level?

- **Size is sometimes an advantage, but frequently also a disadvantage:**

Larger companies can sometimes generate cost advantages thanks to economies of scale and economies of scope. These advantages of size are, however, frequently very limited,⁷ and industrial policy frequently fails to pick out the most successful

⁴ Open letter from forty-seven leading competition economists, “More, not less, competition is needed in Europe” (10 February 2019), <https://www.competitionpolicyinternational.com/wp-content/uploads/2019/02/Open-letter-on-European-champions-with-signatures.pdf>; open letter from more than ninety prominent competition lawyers and economists (30 April 2019), https://res.cloudinary.com/gcr-usa/image/upload/v1556637328/Open_letter_on_EU_competition_policy_FINAL_dtavjw.pdf; Jenny et al. (2019); Fuest et al. (2019); Mundt (2019).

⁵ Cf. for instance ntv.de, “Streit um Industriestrategie: Wirtschaft ätzt gegen Altmaier” (5 May 2019), <https://www.ntv.de/wirtschaft/Wirtschaft-aetzt-gegen-Altmaier-article21005621.html>; Süddeutsche.de, “Wirtschaft empört sich offen über Altmaier” (8 April 2019), <https://www.sueddeutsche.de/wirtschaft/altmaier-kritik-industriestrategie-1.4400963>; DIE FAMILIENUNTERNEHMER e.V. (German Family Business Association), “Familienunternehmer warnen vor deutsch-französischer Industrie-Hybris” (20 February 2019), <https://www.familienunternehmer.eu/presse-news/pressemitteilungen/detail/article/familienunternehmer-warnen-vor-deutsch-franzoesischer-industrie-hybris.html>; Association of German Chambers of Commerce and Industry (DIHK), *Industriestrategie 2030: Turbo oder Bremse?*, DIHK-Newsletter (14 March 2019), http://www.hihk.de/blob/wi_hessen/4390904/c059a54abe21e45c5a9e5b846fa61da8/KW-11_2019_Industriestrategie-2030---Turbo-oder-Bremse-data.pdf.

⁶ Cf. Siemens's shareholder structure: Siemens, “Aktionärsstruktur” (accessed August 2019), <https://new.siemens.com/global/de/unternehmen/investor-relations/aktie-anleihen-rating/aktionarsstruktur-stimmrechtsmitteilungen.html#Aktionarsstruktur>.

⁷ Since the 1990s, there has consequently been a massive liberalisation of former state and private monopolies in the telecommunications, energy supply and transport sectors. Most recently, for instance, a comprehensive

businesses.⁸ This means the promotion of winners soon turns into the rescue and restructuring of companies that have got into financial trouble.

- **Foreign investors and integration into international value chains benefit the domestic economy:**

Internationally active companies are more productive on average than companies that do not take part in foreign trade. Domestic suppliers and customers profit from integration into global value creation chains, and become more productive themselves. Empirical investigations show that national champions are frequently created in order to prevent foreign takeovers. Over the long term, however, foreign investors are deterred by this practice. Preventing foreign takeovers may therefore have a negative impact on the development of a country's productivity.

- **Protectionist merger control harms small companies and companies from small EU Member States such as Austria:**

In the early days of European merger control, there were repeated attempts by EU Member States to exert influence on merger control decisions through legal avenues, but also by making direct interventions. Empirical investigations show that interventions were made in favour of large companies more frequently than in favour of small companies. Furthermore, large Member States were more successful with their interventions than small Member States.

The institutionalisation of a European champions policy would increase the influence of the Member States over European merger control. Only a few companies from big Member States, would profit from this. SMEs and companies from smaller Member States would not enjoy preferential regulatory treatment, but would later have to compete against European champions with market power or, as customers, pay higher prices.

- **The preferential treatment of European champions undermines legal certainty and judicial protection:**

liberalisation of European rail passenger transport was adopted as part of the Fourth Railway Package; cf. https://ec.Europe.eu/transport/modes/rail/packages/2013_de.

⁸Cf. for instance the failed attempt to use public funds to build up a European competitor to Google with the company Quaero: <http://en.www.quaero.org.systranlinks.net/31-decembre-2013-le-programme-quaero-sacheve/>; <https://www.heise.de/newsticker/meldung/EU-Kommission-genehmigt-Millionen-Beihilfe-fuer-Quaero-189893.html>.

The European Commission's merger control decisions are published, and are subject to the full jurisdiction of the European Court of Justice (ECJ); the companies involved in mergers have extensive opportunities to seek judicial protection.

A politicisation of European merger control, in particular as a result of the involvement of the Council discussed in the "Franco-German Manifesto", would limit legal certainty and the affected companies' opportunities to seek judicial protection. The Business and Industry Advisory Committee to the OECD (BIAC) has highlighted on numerous occasions that legal certainty in merger control is of the greatest importance for the companies concerned. The Federation of Austrian Industries is one of the BIAC's members.

- **Protectionist merger control would provoke retaliatory measures, and would harm European and Austrian companies abroad:**

Austrian investors own numerous holdings in companies abroad. In 2018, Austrian outward direct foreign investment was worth about €203bn or 53% of Austrian gross domestic product (GDP). 28% of this money flowed to states outside the EU.⁹ Fair treatment of Austrian companies abroad is therefore of great importance.

Countries with long-established competition laws such as the US, which is an important trading partner for Austria, could respond to discrimination against their companies in European merger control with countermeasures not only in merger control but, for example, in the field of commercial law as well. This too would be detrimental to both European and Austrian businesses.

- **National champions encourage rent-seeking**

Empirical investigations also show that the promotion of national champions frequently entails a higher risk of corruption. Corruption has negative impacts on productivity, and is therefore an indicator for the World Competitiveness Index.¹⁰ If private investment is displaced by public subsidies, there is a danger of public funds being dissipated.

⁹ Austrian National Bank (OeNB), "Outward direct investment positions broken down by region", <https://www.oenb.at/isaweb/report.do?lang=EN&report=9.3.01>, accessed 22 October 2019.

¹⁰ Cf. Ades and Di Tella (1997); Ades and Di Tella (1999).

The desire for fair treatment by foreign regulators and protection from subsidised companies is a legitimate concern for European business, and should be a central policy objective for the next European Commission. However, the creation of supposed national or European champions is not a suitable way of protecting against arbitrary regulatory decisions, and would ultimately harm European and Austrian companies more than it would benefit them.

Initiatives in other fields¹¹ are far better suited for this purpose, and are already being set in train: for instance, trade policy measures such as antidumping tariffs and the screening of foreign direct investment in accordance with the planned Foreign Direct Investment Regulation may help to protect European companies against unfair competition from state-subsidised companies, and keep R&D capacities in Europe. European public procurement law too could offer scope here for reforms intended to put in place fair, reciprocal arrangements. However, such measures are also associated with the risk of escalating trade conflicts, and could be used to give cover to anticompetitive patterns of behaviour. This makes it all the more important to preserve competition in the internal market by pursuing an effective European competition policy.

The long-term goal should be to establish the tried-and-tested European competition rules or comparable standards in the EU's trading partners as well, thereby creating a level playing field. European competition law ensures European companies are able to operate on the internal market without suffering discrimination.

It is not possible to protect fair international competition by shielding companies from competition:

No athlete will improve their performance and therefore their ability to keep up with the best, both nationally and internationally, by resorting to regulatory tricks that stop strong rivals from other countries participating in competition. There is just as little hope of (European) companies' competitiveness being enhanced by shielding them from competition; on the contrary:

European merger control already provides the European Commission with the tools needed to foster fair competition and prevent companies from gaining dominant market positions, while conducting transparent proceedings and also taking account of circumstances outside Europe (e.g. international developments within affected markets).

¹¹ Many other trade and economic policy measures are being discussed at the moment; cf. for instance European Political Strategy Centre (2019); Jenny et al. (2019); Fuest et al. (2019); Mundt (2019).

Problems relating to market access or the subsidisation of domestic companies in some foreign jurisdictions are to be resolved by trade policy measures or action under public procurement law, not by softening competition.

The BWB's Guiding Principles

Throughout its existence, the **Austrian Federal Competition Authority** has advocated **transparent, non-discriminatory merger control** that is not geared towards vested interests with influence on day-to-day politics, but decides whether a merger can be cleared, has to be prohibited or should be allowed to go ahead subject to conditions in the light of the impacts it would have on the Austrian economy and the consumer.

At the same time, the BWB works for international standards in competition enforcement: the goal must be a level playing field. The BWB consequently contributes actively to various international forums, such as the OECD, the International Competition Network and UNCTAD. In addition to this, the BWB has concluded memorandums with a large number of jurisdictions (including Russia, Turkey, Ukraine, Albania, Montenegro and Kosovo) that make it possible to spread Austrian and European best practice.

Furthermore, the BWB is a founding member of the international Framework on **Competition Agency Procedures (CAP)**, under which competition authorities from all over the world have committed themselves to abide by transparent, non-discriminatory rules of conduct since May 2019.

More information about national merger control in Austria can be found at <https://www.bwb.gv.at/zusammenschluesse/>.

1 Introduction

On 6 February 2019, the European Commission blocked the planned merger between **Siemens and Alstom** (COMP/M.8677). During the merger proceedings, it was argued by the two companies that the merger was necessary in order to preserve European competitiveness, in particular against China. This position was also supported by the economic affairs ministers of Germany and France.

On 19 February 2019, the German and French economic affairs ministers presented a **Franco-German Manifesto for a European industrial policy**.¹² This set out demands for a relaxation of European merger control and state aid rules. Even though they are markedly less concrete, the statement issued in December 2018 by the **Friends of Industry**,¹³ a group made up of eighteen EU Member States' industry ministers, and the **draft National Industrial Strategy 2030**¹⁴ published by the German Economic Affairs Minister at the beginning of February 2019 also point in the same direction.

All three documents set the aim of promoting innovation, key industries and value chains, as well as adapting trade and public procurement rules, and suggest a revision of European competition and state aid rules as a means of doing this. The *Franco-German Manifesto*, which contains the most concrete proposals, demands that consideration be given to state control of companies and public subsidies in European merger control - a proposal probably aimed in particular at state owned enterprises (SOEs) from China. In addition to this, it demands that the European Merger Regulation be amended so that global competitive conditions, potential future competitors and long-term future developments are taken into account to a greater extent in the competitive assessment of mergers. Finally, it is proposed that the European Council be given the power to override decisions taken by the European Commission in merger control proceedings.

However, leading competition economists and lawyers do not believe the creation of what are known as national and European champions, and the measures proposed in the *Manifesto* will achieve the desired results.¹⁵ Some companies and industry associations

¹² https://www.bmwi.de/Redaktion/DE/Downloads/F/franco-german-manifesto-for-a-european-industrial-policy.pdf?__blob=publicationFile&v=2.

¹³ https://www.bmwi.de/Redaktion/DE/Downloads/F/friends-of-industry-6th-ministerial-meeting-declaration.pdf?__blob=publicationFile&v=6.

¹⁴ <https://www.bmwi.de/Redaktion/EN/Publikationen/Industry/national-industry-strategy-2030.html>.

¹⁵ Open letter from forty-seven leading competition economists, "More, not less, competition is needed in Europe" (10 February 2019), <https://www.competitionpolicyinternational.com/wp->

have also commented critically on the debate.¹⁶ An open discussion about this topic may, however, help challenge assumptions and goals as a way of moving towards **evidence-based economic policymaking**, and highlight options for action. With this in mind, the sections that follow seek to bring objectivity to the debate and contribute to the understanding of the aims of competition law and merger control.

content/uploads/2019/02/Open-letter-on-European-champions-with-signatures.pdf; open letter from more than ninety prominent competition lawyers and economists (30 April 2019), https://res.cloudinary.com/gcr-usa/image/upload/v1556637328/Open_letter_on_EU_competition_policy_FINAL_dtavjw.pdf; Jenny et al. (2019); Fuest et al. (2019); Mundt (2019).

¹⁶ Cf. for instance ntv.de, “Streit um Industriestrategie: Wirtschaft ätzt gegen Altmaier” (5 May 2019), <https://www.ntv.de/wirtschaft/Wirtschaft-aetzt-gegen-Altmaier-article21005621.html>; Süddeutsche.de, “Wirtschaft empört sich offen über Altmaier” (8 April 2019), <https://www.sueddeutsche.de/wirtschaft/altmaier-kritik-industriestrategie-1.4400963>; DIE FAMILIENUNTERNEHMER e.V. (German Family Business Association), “Familienunternehmer warnen vor deutsch-französischer Industrie-Hybris” (20 February 2019), <https://www.familienunternehmer.eu/presse-news/pressemitteilungen/detail/article/familienunternehmer-warnen-vor-deutsch-franzoesischer-industrie-hybris.html>; Association of German Chambers of Commerce and Industry (DIHK), *Industriestrategie 2030: Turbo oder Bremse?*, DIHK-Newsletter (14 March 2019), http://www.hihk.de/blob/wi_hessen/4390904/c059a54abe21e45c5a9e5b846fa61da8/KW-11_2019_Industriestrategie-2030---Turbo-oder-Bremse-data.pdf.

2 Competitiveness, competition and national champions

1.1 Competitiveness and productivity

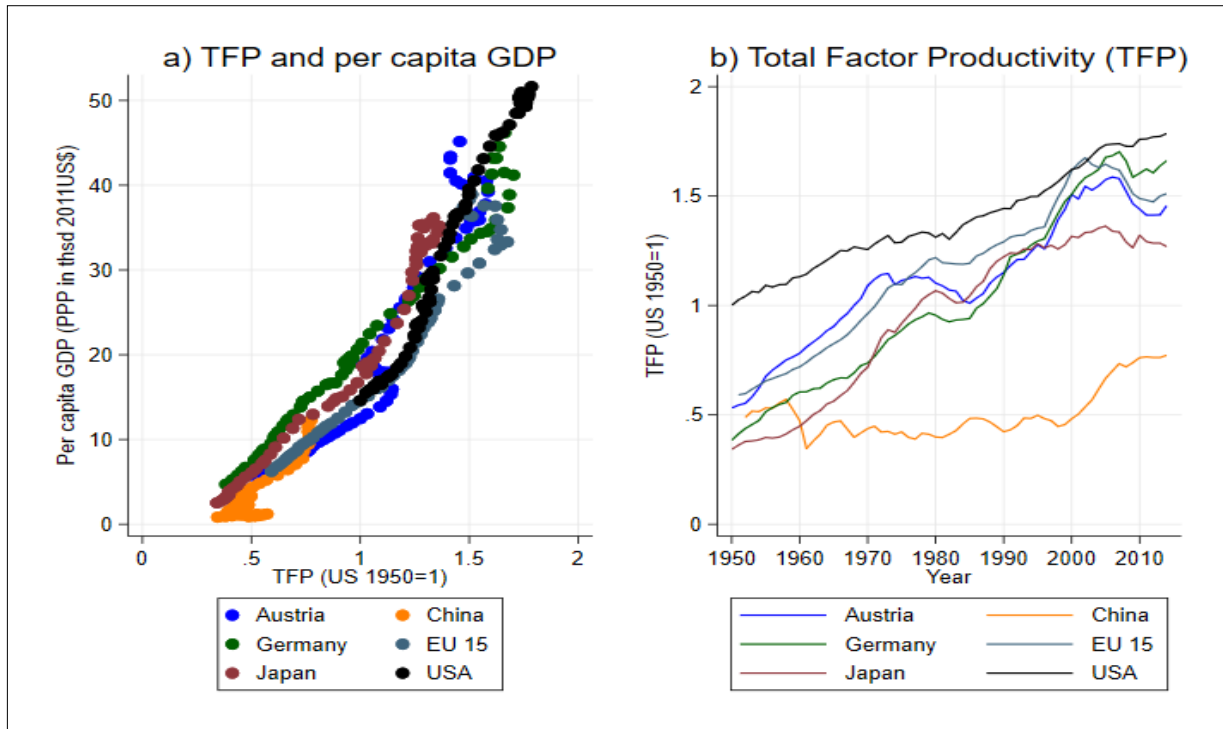
The term “competitiveness” came into fashion in the 1980s, and frequently denoted a struggle between nations for limited resources. Krugman (1994) makes the point that economies do not compete in the same way as businesses and, in particular, that a country’s prosperity (per capita GDP) does not depend on its ratio of imports to exports (balance of trade). He claims the term competitiveness is therefore a meaningless and ultimately dangerous concept.

It is to be noted that there is no single, generally accepted definition of the term “competitiveness” in economics. A survey of the literature by Siggel (2010) distinguishes microeconomic definitions of competition based on unit labour costs, macroeconomic definitions based on real effective exchange rates (REERs) and multidimensional definitions based on the World Economic Forum’s Global Competitiveness Index.¹⁷

Aiginger et al. (2013) distinguish between price, quality and outcome competitiveness. Price competitiveness is understood in terms of, among other things, wage and capital costs, as well as productivity. The authors understand qualitative competitiveness in terms of training, innovation and other factors that may be helpful in the manufacture of higher-value products. They understand outcome competitiveness in terms of per capita GDP and “beyond-GDP” goals such as income justice, environmental protection, well-being and work-life balance.

¹⁷ The methodology and indicators used to calculate this index can be viewed at: <http://reports.weforum.org/global-competitiveness-report-2018/appendix-c-the-global-competitiveness-index-4-0-methodology-and-technical-notes/>.

Figure 1 Productivity and economic development



Source: Penn World Table 9, calculations by BWB

In the long run, a country’s ability to raise its inhabitants’ standard of living depends almost exclusively on the development of its productivity. This is true irrespective of whether an economy engages in a great deal of foreign trade or very little (Krugman, 1997). A range of authors consequently equate competitiveness with productivity. For example, Sala-i-Martin (2010), who worked for many years as an economic adviser to the World Economic Forum, defines competitiveness as “the set of institutions, policies, and factors that determine the level of productivity of a country.”

Productivity is understood as efficiency in production, that is to say the difference between the volume or value of input factors such as labour, fixed assets and intermediates, and the volume or value of goods produced or services provided. Productivity is represented below using **total factor productivity (TFP)**. TFP quantifies the share of economic output that cannot be explained by the deployment of labour and capital, and it is therefore regarded as a measure of technological progress.

Figure 1b shows the development of TFP and per capita gross domestic product (GDP) over time. It is evident that **productivity and economic development** are in fact **very closely correlated**. A simple regression analysis reveals that, over the period from 1950 to 2014, TFP explains 98% of the variation in per capita GDP in the US and Germany, 88%

of per capita GDP in Austria and 77% of per capita GDP in the EU-15 states.¹⁸ **Productivity is therefore a meaningful yardstick for the assessment of industrial policy measures.**

1.2 Productivity development and economic policy discourse

Figure 1a shows the development of TFP in a number of industrialised states and China from 1950 to 2014. Around 1950, the US's productivity was nearly twice as high as that of Austria and Germany. Since then, productivity has grown by somewhat less than 1% a year in the US. During this period, however, there have been several structural breaks: while productivity grew very fast in the 1950s and 1960s, it went into decline as of the mid-1970s. A decade of strong productivity growth followed from the middle of the 1990s, then there was a fall in growth rates from 2005 on.

1950–1973:

In the 1950s and 1960s, TFP growth was very strong in the US. In Europe and Japan, there were in fact even greater increases in productivity thanks to the reconstruction efforts undertaken in those countries.

The European states and Japan pursued a sectoral industrial policy during this period. Direct subsidies, the regulation of the financial markets and sector-specific regulatory regimes were used to promote investment and rebuild production capacities.

But competition law was also strengthened during this period. After a phase of state-sanctioned cartelisation in the US during the early 1930s, there was a revival of cartel law by the late 1930s. Furthermore, with the 1950 Celler-Kefauver Act, merger control was extended to asset deals and non-horizontal mergers (Sawyer, 2019). In the Federal Republic of Germany, the Act against Restraints of Competition (GWB) was passed in 1957, although this legislation was initially only directed against cartels and the abuse of market power. The establishment of the European Coal and Steel Community in 1951 also saw provision made for a prohibition on cartels and merger control in the coal, iron and steel industries. The founding Treaties of the European Economic Community provided for the prosecution of cartels and abuses of market power as well, but the introduction of merger control failed in the face of resistance from a number of Member States. As of 1966, the European Commission articulated the view that mergers could be prosecuted

¹⁸ The "EU-15" are the fifteen states that had joined the European Union prior to 2004, i.e. Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy, Ireland, Luxembourg, the Netherlands, Portugal, Sweden, Spain and the UK.

as abuses of market power. This was confirmed by the ECJ in *6/72 Continental Can* (McGowan and Cini, 1999).

With the 1947 GATT agreement, and the Annecy, Torquay, Geneva II, Dillon and Kennedy rounds, a strong expansion of world trade took place in the 1950s and 1960s. Apart from sectoral industrial policy, there were therefore many fields in which Europe saw markets opening as well during the 1950s and 1960s.

1973–1995:

In the 1970s and early 1980s, a decline in productivity was experienced in the US and Europe, while productivity rose further in Japan.

In the 1960s, **overcapacities** had built up in many subsidised sectors, and the industrialised states increasingly found themselves confronted with the problems of placing their products on the world market, and restructuring declining industries and state-owned companies that were in financial difficulties. The rising costs of sectoral interventions came under criticism, and doubts were increasingly expressed about the state's capacity to supplant the functions of the market. In the 1980s and 1990s, **the focus of industrial policy was redirected from sectoral to "horizontal" measures**, such as the privatisation of state-owned companies, the opening of regulated markets and the creation of the common internal market, which were aimed at increasing productivity by boosting competition (Cf. Peneder, 2016).

Competitiveness and strategic trade policy in Japan:

In the 1970s and 1980s, Japan achieved major successes as an exporter. This prompted fears in the USA and Europe about losing "competitiveness" compared to Japan. According to Krugman (1997), the economies of Japan and West Germany were very similar before German reunification. Both were densely populated countries with high rates of savings that had to earn large balance of trade surpluses in order to be able to import oil and other commodities. However, while Germany was also one of the biggest importers of industrial products, Japan had very low import levels.

According to Krugman et al. (2018, 333), the proponents of an interventionist foreign trade policy argued that **Japan's export successes** had been attributable to the deliberate promotion of individual branches of industry. The **semiconductor industry** was often mentioned as an example. Japan moved into the manufacture of semiconductor chips at the end of the 1970s. The sector was supported in a targeted fashion by the Japanese

government through the funding of R&D expenditure. The authors explain that, although these subsidies were not very high, it was argued by some commentators that Japanese trade policy essentially consisted of “tacit protectionism”: as soon as Japanese producers were able to manufacture a particular semiconductor chip, Japanese companies stopped buying foreign chips, even if they were better and cheaper. Other commentators pointed out that the semiconductor industry was characterised by a falling learning curve, which meant production costs went down as the cumulative number of units produced grew greater. It was also argued that quality control was an important element in semiconductor production, and that Japan had had a comparative advantage in this field.

In the mid-1980s, Japan’s sales figures rose above those of the USA for one kind of semiconductor chip, random access memories (RAMs). RAMs were the most frequently produced semiconductor chips, and it was therefore argued that dominance in the field of RAMs would lead to positive externalities when it came to the manufacture of other chips, in the form of transfers of knowledge for instance. It was consequently anticipated by some commentators that dominance with regard to RAMs would be extended to other fields. While the manufacture of RAMs was not especially profitable, it was expected in addition to this that big profits could be generated in future as a result of competitors exiting the market and continued market concentration.

As Krugman et al. (2018) note, **neither the expected externalities nor the hoped-for profits materialised**. Japanese firms did not manage to extend their dominance in the field of RAMs to other areas. American firms remained market leaders, when it came to microprocessors for example. The number of RAM manufacturers rose again, in particular thanks to companies from South Korea and other threshold countries entering the market. By the end of the 1990s, RAMs had the status of a commodity product. The development of the semiconductor industry therefore shows how difficult it is to select suitable sectors for a sectoral industrial policy.

1995–2005:

From the middle of the 1990s, the USA and Europe went through a decade of strong productivity growth. In Japan, productivity growth collapsed as of the beginning of the 1990s, and the country experienced a phase of economic **stagnation** in the **1990s and 2000s** (the “two lost decades”). The fears of being outstripped by Japanese export industry were dispelled. In China, by contrast, there was a decade of strong productivity growth that set in at the beginning of the 2000s.

2005–2014:

From 2005 on, there was a global stagnation of productivity; in 2008, it fell in all the countries under discussion. The USA and Germany recovered better from this slump than other countries.

Investigations conducted by the OECD (2015) found that the most efficient companies in the world did not suffer any productivity losses. However, the diffusion of new technologies and business practices to less efficient companies slowed down. One possible starting point for action to enhance productivity therefore lies in improving diffusion by adopting an open foreign trade policy, participating in global value chains and encouraging the international mobility of skilled workers. The functioning of the product, labour and financial markets, and the liberalisation of the service sector are also mentioned as crucial factors.

While there are consequently many approaches to the improvement of productivity development, the current debate is threatening to tip over into populism, as the *Siemens/Alstom* case has shown.

Competition policy and China:

To a certain extent, the debate going on at the moment about competitiveness against China is reminiscent of the debate about Japan in the 1980s and 1990s. Even though China is a member of the WTO, it is apparent that the Chinese market is not as open to European and American companies as Western markets are for China. Furthermore, some commentators accuse China of not playing by the international rules and favouring domestic companies, among other things by granting subsidies and applying merger control guidelines in a discriminatory fashion.

According to Mariniello (2013), only 15% of **merger notifications in China** during the period from 2008 to 2013 involved purely Chinese companies, 40% involved Chinese and non-Chinese companies, and 45% involved exclusively non-Chinese companies. All the mergers that were prohibited or only approved subject to obligations exclusively involved foreign companies. Furthermore, the obligations imposed were frequently aimed at shielding domestic companies from foreign competition: In *Inbev/Anheuser-Bush* and *Walmart/Niu Hai*, the merger parties were prohibited from moving into a particular area of business. In *Novartis/Alcon*, the parties were forbidden from placing a Novartis product on the market again. In *Marubeni/Gavilon*, the parties were forbidden from exploiting synergies that would have lowered wholesale costs and made Marubeni more competitive. By way of comparison: 47% of the merger notifications received by the European Commission over the same period involved purely European companies, 37% involved European and non-European companies, and just 16% involved exclusively non-European companies. 60% of the mergers that were approved subject to obligations involved exclusively European companies. However, it is also mentioned that China has only had competition legislation since 2008, and the competent authorities still have to gain experience in their role (Mariniello, 2013).

Despite China's actual or perceived economic success, productivity remains far below the productivity levels in Europe and the USA (cf Figure 1b). According to recent OECD findings, the Chinese economy is afflicted by a range of structural problems, and China would have to open its markets in order to guarantee sustainable productivity and economic growth (OECD, 2019).

Mariniello et al. (2015) note that the response to discriminatory merger control in threshold countries such as China should not lead to the creation of additional scope for discretion in European merger control, because this could bring about a politicisation of merger control, its hijacking by special interests ("regulatory capture") and arbitrary decision-making, and would furthermore not remedy the problems faced by European companies on the Chinese market. Instead, the authors suggest that the international coordination of competition policy through the International Competition Network (ICN) and the OECD be further intensified. In addition to this, fair competition policy and non-discriminatory merger control should be incorporated into bilateral trade agreements and, ultimately, the WTO rules.

1.3 Competition and competition policy

Effective competition has advantages for consumers, for example in the form of low prices, high-quality products, a wide selection of goods and services, and innovation (Horizontal Guidelines).¹⁹ However, competition also makes an essential contribution to the development of an economy's productivity (Syverson, 2011; OECD, 2015a). Furthermore, since higher prices frequently affect all income segments, but stocks in companies are held mainly by the highest income segments, competition causes a reduction in wealth inequality (OECD, 2014). Finally, competition leads to lower prices, higher demand, more production and therefore greater demand for labour as an economic factor (OECD, 2015b, cf. also Gugler and Yurtoglu, 2004).

Competition and productivity:

Competition has impacts on a country's average productivity through innovation, diffusion and shifts in market share. Figure 2 summarises these effects schematically.

Innovation:

Innovation takes place when companies have the incentive and the resources to innovate. Companies that find themselves close to the productivity frontier, in other words that are among the most efficient companies in their sector, can further increase their competitive advantage over their rivals by innovating. Competition therefore creates an incentive to invest in R&D. Under certain circumstances, by contrast, inefficient companies that are further away from the relevant market's productivity frontier will even reduce what they spend on R&D because this spending would not be enough for them to reach the leading edge of the market (cf. Aghion et al., 2005, with further citations). Innovation therefore leads to productivity increases in the most efficient companies in particular, while attempts to "reinvent the wheel" become less attractive.²⁰

Diffusion:

Nonetheless, competition increases inefficient companies' willingness to adopt better technologies and management practices in order to pre-empt their exit from the market

¹⁹ Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 2004, 31/03.

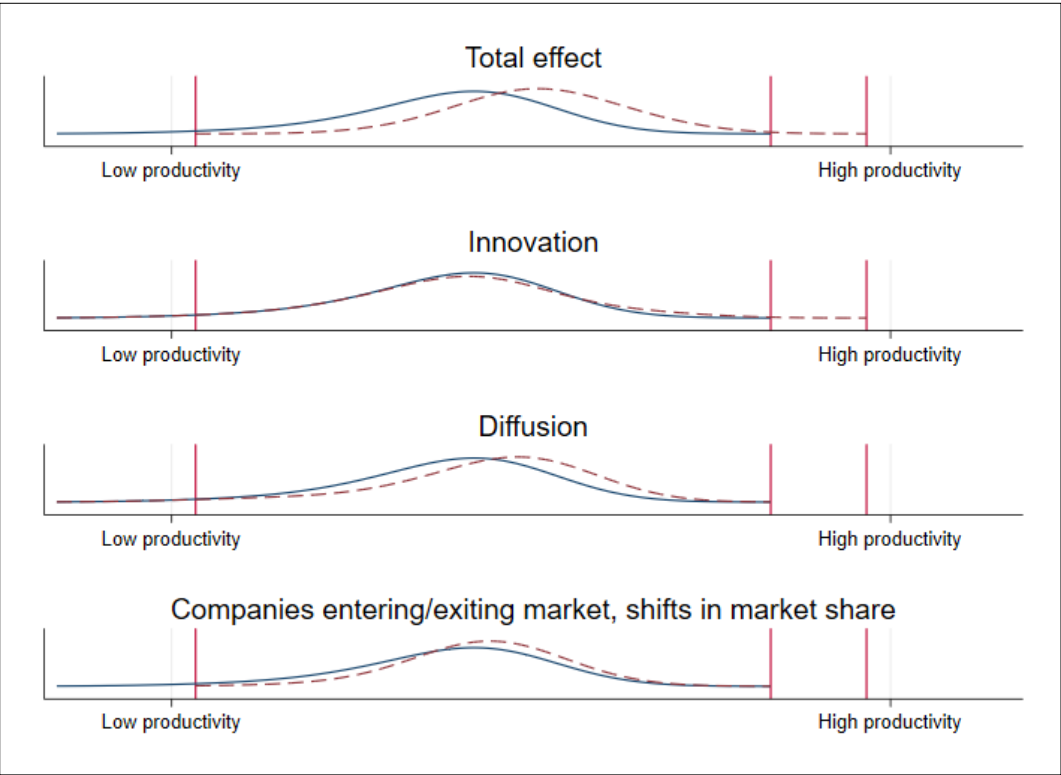
²⁰ The impact of mergers on incentives for innovation was a subject of controversial discussion in *COMP/M.7932 Dow/Dupont*, and has in the meantime been investigated by a series of studies (cf. Federico, Langus and Valletti, 2017; Federico, Langus and Valletti, 2018, with further citations).

or a hostile takeover (Djankov and Hoekman, 2000, with further citations). This means even inefficient companies become more productive.

Shifts in market share:

Hsieh and Klenow (2009) highlight the fact that there are wide variations in the distribution of productivity among countries’ companies.²¹ Competition brings about shifts in market share in favour of efficient companies and the exit of inefficient companies from the market. This results in a rise in the average level of production (cf. also Foster et al., 2008).

Figure 2 Impacts of competition on the distribution of productivity



Source: BWB. The graphs show the average distribution of productivity of all firms in an economy (blue solid line) and the impacts of an increase in competition (red dashed line) driven by innovation, diffusion, companies entering and exiting the market, and shifts in market share.

Using a productivity decomposition, it is possible for the growth in productivity to be decomposed into company-internal growth (driven by innovation and diffusion) and

²¹ Access to microdata is indispensable for the analysis of productivity at the company level, and consequently represents an important precondition for evidence-based economic policymaking (cf. Falk et al., 2015).

growth driven by shifts in market share (towards more productive surviving companies, companies exiting and entering the market). In a series of studies, shifts in market share, including companies entering and exiting the market, make up about one third of all productivity growth (cf. also OECD, 2009). For example, Foster et al. (2008) examine American industrial enterprises over a period from 1977 to 1997, and find that about 65% of TFP growth is based on company-internal growth and 35% on shifts in market share, companies entering the market and companies exiting the market (to be precise: 17%, 14% and 4%). Melitz and Polanec (2015) investigate the productivity growth of Slovenian firms during a period from 1995 to 2000, and find that 72% of TFP growth is to be attributed to company-internal growth and 28% to shifts in market share, companies entering the market and companies exiting the market (to be precise: 22%, 7% and -1%).

Competition policy and productivity:

A literature review produced by the OECD (OECD, 2014) summarises a series of *empirical* studies that look at the quality and impacts of competition policy. Particular mention is made of two studies by Voigt (2009) and Bucchirossi et al. (2013):

Voigt (2009) measures the quality of competition policy using a number of indicators: the *quality of competition laws*, the application of *economic methods* in competition analysis, and the *de jure* and *de facto* independence of competition agencies. In a comparative international study of twenty-one OECD states (including Austria), sixteen transition countries and seventy developing countries, the author shows that **higher-quality competition policy leads to greater productivity growth** and is correlated with lower levels of corruption.

Bucchirossi et al. (2011) develop a “**Competition Policy Index**” (CPI) for the OECD, which is intended to measure the quality of competition policy. The quality dimensions they use are drawn from a survey of academic studies. In the field of merger control, the index is high in particular when there is an independent competition authority, there are no opportunities for the government to exert influence on merger control decision-making (no ministerial approval), and a division of powers is instituted both between the investigating and adjudicating bodies, and between the competition authority and the appeal court (Bucchirossi et al., 2011, 172–172 and 203).

Bucchirossi et al. (2013) investigate twenty-two sectors in twelve OECD countries during the period from 1995 to 2005, and show that good competition policy (a high CPI) has positive impacts on productivity growth. On the basis of the average value of the relevant

variables, the study is able to show that a **1% improvement in competition policy raises productivity growth by 4.48%.**

Duso (2014, 695) mentions two concrete examples in order to illustrate the results reached by Bucchirossi et al. (2013): In the *UK*, a new Competition Act was introduced in 2001, leading to an improvement in CPI by 4.6%. This gave rise to an improvement in TFP growth by 20% (4.6 times 4.48). In the food industry, the CPI explained about one third of the increase in TFP growth. In the *Netherlands*, an increase in the budget for competition enforcement and the appointment of well-qualified staff in 2001 brought about an improvement in CPI by 16.4%. In this way, TFP growth was increased by 75% (16.4 times 4.48). In the Dutch textiles industry, TFP growth rose from 1.2% to 3.6% between 2001 and 2002. According to the author's estimates, the improvement of competition policy enforcement led to an increase in productivity growth from 1.2% to 2.1% (1.2 times 1.75), and is therefore responsible for more than one third of total productivity growth.

The implication is that horizontal measures aimed at raising levels of competition, in particular an improvement in competition policy, demonstrably result in productivity increases and therefore sustainable economic development.

1.4 National “champions”

The idea of creating national champions by merging smaller businesses is usually rooted in the belief that large companies would be more competitive and/or more productive. Furthermore, it is believed that organic corporate growth is not sufficient to achieve sufficient scale and that companies do not have enough incentives to merge or are being held back by merger control from mergers that would increase their efficiency (OECD, 2009). The underlying assumptions require closer analysis.

Size can be an advantage, but not always:

In some cases, companies are able to increase their efficiency and reduce their costs by relocating their production to more efficient production facilities, producing in larger quantities (economies of scale) or going beyond a particular minimum volume (minimum efficient scale). Sometimes, efficiency advantages are also reaped if particular products are produced together (economies of scope). When it comes to complex products manufactured in small numbers, such as aircraft, costs may also fall with each unit that is produced (learning curve). The costs of distribution can be reduced by the density of the

distribution network (cf. for instance Röller et al., 2000). Furthermore, especially on platform markets, higher sales figures or larger numbers of customers may increase the attractiveness of a company's offer (direct and indirect network effects; cf. for instance Belleflamme and Peitz, 2015).

Larger production units can, however, also entail inefficiencies, for instance due to the increased effort absorbed by communication and administration, overcapacities, and disruption to the supply chain and distribution systems. As a rule, these disadvantages increase with size. In extreme cases, though, it would be possible for rising economies of scale and economies of scope to outweigh the disadvantages of larger production units until just one company was able to cover its costs operating on the market. In this context, economists talk of a subadditive cost function or a natural monopoly (Baumol, 1977). For a long time, this argument was used to justify the existence of state and private monopolies in the energy supply, transport and telecommunications sectors. Evans and Heckman (1984; 1986) investigated the cost structure of AT&T, a company that held a monopoly over large parts of the American telephone market from 1913 to 1982. The authors were able to show that the company was not a natural monopoly at the levels of output achieved between 1958 and 1977. That is to say, several companies would also have survived on the market. It would therefore have been possible to break up the monopoly at an earlier date, and the outcome of this would have been lower prices and higher quality for customers.

In practice, companies frequently have to grow beyond a minimum size (minimum efficient scale), if they are to be able to cover their costs operating on the market. Above this level, however, hardly any more economies of scale are gained. Companies that have managed to enter the market have usually passed this threshold. Furthermore, as explained above, effective competition results in efficient companies growing organically and inefficient companies shrinking.

Impacts of mergers on profits and efficiency:

Gugler et al. (2003) compare the development of merged companies' sales and profits with a control group of unmerged companies. Their sample includes mergers in industrialised and developing countries during the period from 1981 to 1998. As Table 1 shows, 57% of mergers increase profits. 29% of mergers increase profits and sales, and are classified by the authors as increasing efficiency. 28% increase profits and reduce sales. In these mergers, the increase in profits is attributed to an increase in market power. 43% of mergers reduce profits, of which 15% result in an increase in sales, whereas

28% result in a reduction of sales. These results indicate that **mergers are by no means a guarantee of greater competitiveness and greater efficiency.**

Table 1 Impacts of mergers (after five years)

	Increased profits	Reduced profits	Total
Increased sales	29%	15%	44%
Reduced sales	28%	28%	56%
Total	57%	43%	100%

Source: Gugler et al., 2003, Table 10.

European merger control:

Duso et al. (2013) investigate the effects of the reform of European merger control. With the introduction of Regulation (EC) 139/2004, a “more economic approach” started to be taken to European merger control. An efficiency defence was introduced, a chief economist was appointed with a supporting team, the timetable for the negotiation of remedies was improved, guidelines for horizontal and vertical mergers were published, and the market dominance test was replaced with the SIEC test.²² The authors investigate the impacts of the European Commission’s merger control decisions on the stock prices of merger parties and their competitors.²³ They find that the reform of European merger control has led to *greater predictability*, and that the *probability of errors* in the examination of mergers has been *reduced*. Furthermore, the imposition of remedies, the withdrawal of merger notifications and, above all, the blocking of mergers send out *signals* that reduce the number of anticompetitive merger proposals without having negative impacts on the number of procompetitive merger proposals. At the same time, the authors find that **remedies are less effective than the prohibition of mergers** in

²² Austria and Italy are the only EU Member States that still apply the old market dominance test introduced by Regulation (EEC) 4064/89, and have not yet made the transition to the “significant impediment to effective competition” (SIEC) test (on the origins of the SIEC test and its economic interpretation, cf. for instance Röller and Strohm, 2005). However, countervailing factors drawn from the new Merger Regulation, such as the efficiency defence and rescue mergers, are now examined in their national merger control proceedings as part of the market dominance test (cf. for instance Urlsberger in Petsche, Urlsberger and Vartian; § 12 Austrian Federal Cartel Act (KartG)).

²³ Anticompetitive horizontal mergers increase competitors’ profits (Clougherty and Duso, 2009).

countering anticompetitive effects. The authors conclude from the perspective of individual and general deterrence, highly anticompetitive mergers should be blocked rather than remedied.

It is almost impossible to identify national “champions” objectively:

A series of empirical analyses of company data have shown that most employment, sales and productivity growth is generated by a small number of high growth firms (HGFs). There are high growth firms not just in research and technology-intensive sectors, but in other sectors as well. Furthermore, HGFs’ growth is **not very persistent**: as a rule, this means the high growth firms of today will not be the high growth firms of tomorrow. It is therefore **very difficult to say *ex ante*** which companies and which sectors will be the **most successful**, and will make the greatest contributions to productivity growth and employment (Coad et al., 2014, with further citations).

This is why the creation of national champions in the past led to the continued subsidisation and restructuring of stricken companies rather than the creation of market leaders (OECD, 2009). However, the subsidisation of ailing companies prevents shifts in market share in favour of more productive companies and in consequence – as shown above – reduces productivity growth.

In summary, it is possible to state that larger companies are not necessarily more cost-efficient, and that mergers do not inevitably deliver higher profits and greater efficiency. It is difficult to pick out the most promising companies and sectors in advance. Furthermore, the preservation of existing national “champions” not only pushes up public debt, but also results in significant losses of productivity growth.

International companies also strengthen a country’s attractiveness as a place to do business:

The goal of creating national champions is inspired by the **assumption that domestic companies give their home countries more advantages than foreign companies** (Spector, 2009).

A long series of empirical investigations show, however, that **multinational companies are more productive** than other companies, and that they are responsible for a large proportion of global R&D expenditure and innovative activities (Stiebale 2016, with further citations). Foreign direct investment by multinational companies leads to an increase in productivity in the target country not only thanks to the establishment of local

subsidiaries, but also thanks to productivity increases among local suppliers and customers (Javorcik, 2004). Such spillover effects are a significant reason why governments **support foreign companies that wish to establish operations in their countries** (greenfield investments).

However, empirical studies suggest that foreign takeovers do not cause any worsening of performance for the countries from which the target companies originate either.

Gugler and Yurtoglu (2004) investigate the impacts of mergers on *short-term* levels of employment in Europe and the USA during the period from 1987 to 1998. In Europe, merging companies have lower average labour productivity. On average, mergers result in a reduction in the level of employment by 10% over the first three years, and a rise in labour productivity to the level of non-merging companies. In this respect, no statistically significant difference is found between domestic and cross-border mergers. There is a difference, however, with regard to the competition impacts of mergers: while procompetitive (output-increasing) mergers lead to higher levels of employment, anticompetitive (output-decreasing) mergers reduce employment.

Bena et al. (2017) investigate corporate takeovers in thirty countries during the period from 2001 to 2010, and find that, *over the long term*, takeovers by foreign institutional investors result in higher levels of employment, more investment and greater productivity. **An industrial policy that is fundamentally directed against foreign companies would therefore reduce productivity and be counterproductive.**

Cross-border mergers and innovation:

A series of studies look at the impact of foreign takeovers on target companies' R&D spending and innovation, arriving at mixed results (cf. Stiebale, 2016).

For a sample of 133 cross-border takeovers from the years 1990 to 2009, Szücs (2014) finds that the growth in the *target company's* R&D expenditure goes down by 7–10%, while the *acquirer's* expenditure only goes down minimally. This fall could indicate that the target company's research agendas are not progressed, and the merged company merely exploits existing patents (cf. also Wagner, 2011).

Stiebale (2016) investigates the impacts of 941 cross-border takeovers of European companies on the numbers of patents registered by the target company and the acquirer (weighted by number of citations). On average, merged companies register 20% more patents a year over the course of three years after the merger. Whereas innovative

activity in the acquirer's country increases, the number of patents registered in the target company's country goes down by 40%. The author makes the point that the acquirer usually displays a higher level of innovation than the target company prior to the merger. This could imply that the acquirer's research facilities are more efficient than those of the target company, and that the reallocation of research activity enhances its efficiency. When foreign takeovers in R&D-intensive fields are assessed, the issues therefore have to be considered carefully in order not to have an adverse effect on global innovative activity.

The impact of mergers on incentives for innovation has recently been investigated by the European Commission, e.g. in the merger cases COMP/M.7278 *GE/Alstom*, COMP/M.7932 *Dow/Dupont* and COMP/M.8677 *Siemens/Alstom* (on the analytical framework applied, cf. also Federico, Langus and Valletti, 2017; Federico, Langus and Valletti, 2018). The **impacts on the R&D activities** engaged in by the merger parties and their competitors, on customers and on possible licensees were **to be taken comprehensively into consideration** in these investigations. In this respect, no conflict is found between competition policy and industrial policy.

1.5 Political economy considerations

Nationally oriented tendencies in merger control:

Dinc and Erel (2013) investigate political responses to major merger bids in the EU-15 states during the period from 1997 to 2006. Their dataset covers the twenty-five biggest mergers – measured in terms of the value of the target company – for each Member State, as well as reports in the business press about governments' responses. The majority of the merger bids exceeded the turnover thresholds set in the Merger Regulation, and were therefore to be notified to the European Commission. The authors show that there was nevertheless a range of options open to Member State governments with which to **intervene against takeovers**, including the application of the exemption provisions set out in Art. 21(4) Regulation (EC) 139/2004 (Merger Regulation), the "moral persuasion" of foreign acquirers that a takeover would not be looked upon benevolently, the exercise of veto rights over former state enterprises, the prevention or delay of takeovers by national regulatory authorities and/or the financing of domestic acquirers. In many cases, domestic companies were prevailed upon to buy the target company or acquire a minority holding with veto rights. Some of these domestic takeovers were also financed by public pension funds or government-owned banks. In addition to this, attempts were made to preventively create national champions that would be too big to take over by merging domestic companies.

The authors show that the governments of the Member States opposed 9% of the takeover bids in the sample, and attempted to intervene against these takeovers. About 24% of the mergers that were opposed involved takeovers by domestic companies, while 76% involved takeovers by foreign companies, in particular companies from other Member States. Conversely, Member States supported 10% of takeover bids, intervening in favour of domestic companies in 83% of these cases, while interventions were only made in favour of foreign companies (in particular companies from other Member States) in 17% of the cases.

Interventions were more likely when large mergers were proposed: A 10% increase in company value increased the probability of public opposition by 0.19 percentage points, whereas the probability of public support went up by 0.34 percentage points.

Member States' interventions had a significant effect on the probability that a merger bid would ultimately be implemented. This effect was even greater when the merger bid was opposed than when it was supported.

Furthermore, interventions against foreign takeovers have a **deterrent effect**. The probability of a foreign takeover attempt was 50% lower in the first year after the intervention, more than 75% lower in the second year and more than 25% lower in the third year.

Bias in favour of large Member States:

Duso et al. (2007) investigate the impacts of merger control decisions on the stock prices of merger parties' competitors. Their analysis focusses on the unilateral effects on horizontal mergers. Mergers that reduce competitors' stock prices are classified as procompetitive because this is indicative of efficiency gains achieved thanks to the merger. By contrast, if competitors' stocks rise in price, this suggests less intense competition, higher prices and therefore higher profits for all market participants, in which case a merger is therefore classified as anticompetitive. The authors speak of *type I errors* if procompetitive mergers have been prohibited or only approved subject to obligations, and of *type II errors* when anticompetitive mergers have been cleared.

The authors investigate 167 horizontal EU mergers during the period from 1990 to 2002, that is to say prior to the introduction of the new Merger Regulation in 2004. Eighty-seven of these cases were categorised as anticompetitive and eighty as procompetitive. The authors find that, during the period covered by the study, about 30% of all cases were

cleared although they were anticompetitive (*type II errors*). By contrast, only 18% of cases were approved subject to obligations although they were procompetitive (*weak type I errors*), and only three mergers (less than 2% of cases) were blocked although they were procompetitive (*strong type I errors*). Two of these three decisions to prohibit mergers were later overturned by the ECJ. These results show the probability of a procompetitive merger being blocked was already very low previous to the introduction of the new Merger Regulation while, as mentioned above, Duso et al. (2013) came to the conclusion that the new Merger Regulation and the “more economic approach” taken to merger control had further reduced the probability of errors in European merger control.

However, the authors also found that institutional and political factors influenced the European Commission’s decisions. While companies were not in a position to intervene directly, procedural issues, and national and industry-level effects had an influence on the probability of errors. In particular, mergers that involved companies from large Member States (Germany, France, Italy, Spain and the UK) had a lower probability of *type I errors* (blocking/conditional approval of procompetitive mergers) and a (statistically insignificant) higher probability of *type II errors* (clearance of anticompetitive mergers) than mergers that only involved companies from smaller Member States. In this sample, the European Commission’s decisions therefore exhibited a (weak) **bias in favour of large Member States**.

Danger of “rent-seeking”:

Ades and Di Tella (1997) investigate the impacts of the promotion of national champions on levels of investment and the development of corruption. The authors’ dataset includes cross-sectional data from thirty-two industrialised and transition countries, including Austria, in the 1980s and 1990s. Corruption is measured by the World Competitiveness Report (WCR) “corruption index” and a corruption index based on interviews with German exporters that counts the proportion of contracts involving the payment of kickbacks. As a measure for the promotion of national champions, the authors use a WCR “procurement index”, which reflects the extent to which public procurement procedures are open to foreign bidders, and a WCR “fiscal index”, which reflects the extent to which all the companies in a country are treated equally for fiscal purposes, as well as the level of state subsidies paid to (industrial) companies. Irrespective of which measure was used, the promotion of national champions caused a significant increase in the level of corruption.

Subsequently, the authors investigate how an interventionist industrial policy affects levels of investment. The authors find that an interventionist industrial policy leads to

greater investment. At the same time, however, there is a dissipation of funding and/or a displacement of private investment, so the increase in levels of investment is less than the public funds that are spent for this purpose. **An interventionist industrial policy accordingly achieves less than it costs.**

Ades and Di Tella (1999) investigate the connection between corruption and competition. Their dataset includes cross-sectional data from fifty-two industrialised and transition countries, including Austria, in the 1980s and 1990s. Data on levels of corruption are once again sourced from the World Competitiveness Report. The authors find that countries with fewer barriers to market entry, higher shares of imports and effective cartel laws display significantly lower levels of corruption than other countries.

In summary:

The empirical literature shows that the preferential treatment of what are termed national “champions” in merger control is frequently directed against companies from other Member States and results in the deterrence of foreign investors. While the promotion of national or European champions would be advantageous for some, politically well-connected companies, a climate of political action for action’s sake in merger control would primarily have disadvantages for smaller companies, companies that operate in other Member States and export-oriented industries.

Following the introduction of the new Merger Regulation, European merger control has become more predictable and less error-prone. By contrast, a politicisation of European merger control could give rise to bias in favour of larger Member States. Promoting national champions and hindering competition may, in addition to this, encourage corruption and displace private investment.

2 Legal considerations relating to European merger control

2.1 Legal foundations

European competition law prohibits restrictive trade practices (Art. 101 Treaty on the Functioning of the European Union, TFEU), the exclusion of competitors or exploitation of customers by means of the abuse of a dominant position on the market (Art. 102 TFEU), preferential treatment for individual firms with state aid that distorts competition (Art. 105 TFEU) and anticompetitive mergers (Regulation (EC) 139/2004, Merger Regulation).

European merger control was introduced in 1989, and has developed into an important instrument of European competition policy. While the prosecution of cartels and abuses of market power is concerned with companies' behaviour in the past, merger control is forward-looking and is intended to prevent the accumulation of market power. This future orientation is important because abusive practices towards consumers and other market participants on the part of companies with market power are difficult to assess and prove, and often take a very long time to remedy.

The introduction of European merger control was discussed when the EEC was founded, but this was ultimately ruled out by differences between the founding States. Prior to the introduction of European merger control in 1989, it was possible for mergers to be scrutinised retrospectively under the case law of the ECJ with the instruments of the prohibition of abuse of dominance (ECJ 6/72 *Continental Can*) and the prohibition of cartels (ECJ 142/84 and 156/84 *Philip Morris*). The possibility of retrospective prohibition signified a major legal uncertainty, so that in the end businesses pressed for the rapid introduction of European merger control (McGowan and Cini, 1999).

Competence

European merger control appraises mergers with a Community dimension. By contrast, smaller mergers and mergers that only have impacts on individual Member States are subject to national merger control. International mergers are frequently subject to merger control in other jurisdictions too, in particular the USA, Canada and Australia, as well as Brazil, India and China.

Yardstick for examination

The Merger Regulation (Regulation (EC) 139/2004) prohibits mergers that “**significantly impede**” **effective competition** in the Common Market or a substantial part of it. Mergers that do not significantly impede effective competition are to be approved (Art. 2 Merger Regulation). Under certain circumstances, the European Commission's competition concerns may be allayed if companies commit to comply with particular “obligations” (Art. 6(2), 8(2) Merger Regulation).

The majority of mergers are approved

During the period from 2007 to 2017, the European Commission reviewed 3,457 mergers. 93% of the mergers examined were approved without obligations, while approval was given subject to obligations, the merger notification was withdrawn or the merger was blocked in 7% of cases. **Only eight mergers were prohibited**, which corresponds to about 0.2% of all the reviewed mergers (DG Competition, 2018).

Global competitive conditions and efficiencies are taken into consideration

The first step in the competition review of a merger is the definition of the **relevant product and geographic markets**. The relevant markets are not laid down normatively, but defined empirically. The starting point is the substitutability of products and services from the customer's point of view. The geographic market is worldwide in scope if – taking into consideration technological and regulatory barriers to market entry – customers are able to switch at given prices to alternative products sold by providers from all over the world.

Potential competition from companies that are highly likely to enter the relevant markets in future is also to be taken into account pursuant to Art. 2(1)(a) Merger Regulation. Furthermore, a **long time horizon** of ten or more years is applied in **R&D**-intensive sectors such as the pharmaceuticals industry or the agrochemicals industry (cf. for instance M.7932 – *Dow/DuPont*).

Possible **efficiency gains** are also to be taken into consideration (Art. 2(1)(b) Merger Regulation), if it is to be expected that these efficiency gains will also be passed on to consumers – for instance in the form of price reductions. There is therefore nothing to prevent the creation of European champions, provided the procompetitive effects outweigh possible anticompetitive effects.

Predictability, transparency and judicial protection

The Merger Regulation provides for a **high standard of evidence** when mergers are examined. Based on the case law of the ECJ, the European Commission has developed a series of **guidelines** with the intention that they will make it possible to pursue a consistent **approach** to the review of mergers that is **predictable** for companies.

The **transparency** of European merger control is also supported by the publication of the European Commission's decisions.

Furthermore, European merger control offers merger parties, as well as affected third parties and the Member States **extensive opportunities to seek judicial protection**, for instance in the form of action for annulment pursuant to Art. 263 TFEU and action for failure to act pursuant to Art. 264 TFEU. Not only that, when incorrect decisions are taken, there is the option of action for damages against the EU pursuant to Art. 268 TFEU (cf. for instance ECJ C-440/07 *Schneider Electric*).

Consideration of non-competition interests

European merger control deals exclusively with a merger's competition impacts. Pursuant to Art. 21(4) Merger Regulation, however, Member States are able to adopt national provisions that allow them to examine mergers with a Community dimension in parallel to the European Commission's usual merger control proceedings, scrutinising them from the perspectives of **public security, plurality of the media** and **prudential rules**. Subject to the approval of the European Commission, the introduction of provisions concerning the consideration of other justified interests is permissible. The planned Regulation establishing a framework for the screening of foreign direct investments into the Union would also be applicable to mergers.

As Motta and Peitz (2019) highlight, though, these measures could at the most result in further obligations or the **prohibition of a merger that was unproblematic in competition terms**, but not the approval of a merger that was problematic from a competition point of view.

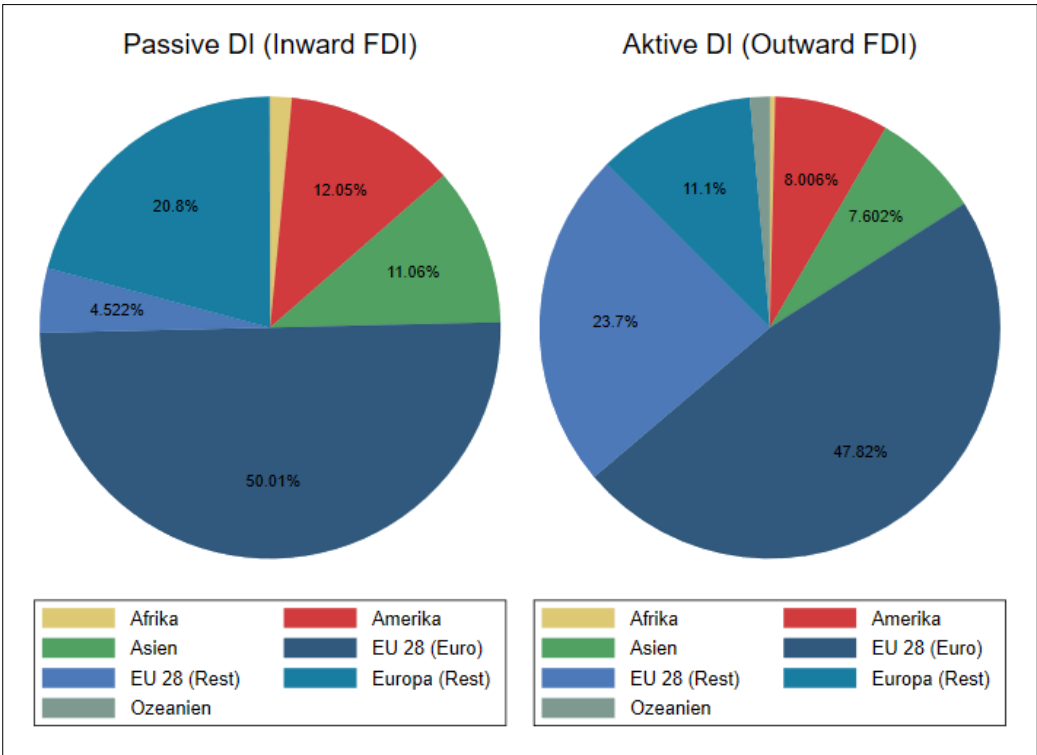
In Austria, for example, there are provisions on media plurality, so a parallel merger procedure that relates only to media plurality may be initiated.

2.2 Significance of transparent, non-discriminatory merger control

Protectionist merger control may provoke retaliatory measures, and harm European and Austrian companies abroad. Fair treatment of Austrian companies abroad is of great importance because Austrian investors own numerous holdings in companies abroad.

Foreign direct investments are transactions that involve the acquisition of cross-border holdings in companies that amount to a share of at least 10% of their voting stock. Such transactions include, in particular, mergers and takeovers. In 2018, Austrian direct investment abroad (outward foreign direct investment) was worth about €203bn or 53% of Austrian gross domestic product (GDP). Foreign direct investment in Austria (inward foreign direct investment) was worth about €176bn (46% of GDP). As Figure 3 shows, 83% of outward foreign direct investment flowed to Europe, 72% to the EU-28, 48% to the euro area and 24% to the rest of the EU. 28% of Austrian outward foreign direct investment flowed to countries outside the EU, with about 11% going to the rest of Europe, about 8% each to the Americas and Asia, and the remainder to Oceania and Africa.²⁴

Figure 3 Austrian foreign direct investment (2018)



Internationally, the **significance of competition law** has increased ever more. In 1990, there were fewer than fifty countries with competition laws; in 2000, they were in place

²⁴ Austrian National Bank (OeNB), "Inward direct investment positions broken down by region", <https://www.oenb.at/isaweb/report.do?lang=EN&report=9.3.31>; OeNB, "Outward direct investment positions broken down by region", <https://www.oenb.at/isaweb/report.do?lang=EN&report=9.3.01> (accessed 22 October 2019).

in more than a hundred countries. At present, more than 140 jurisdictions have competition legislation (Bradford et al., 2018; Federal Trade Commission, FTC²⁵).

Numerous non-EU countries have modelled their competition legislation on EU law. This means European competition law has an **exemplary function**. If the European authorities go over to discriminating in merger control and giving European champions preferential treatment, this may also have impacts on the practice of non-EU countries with recently adopted competition legislation. European and Austrian exporters that are active in these countries would be disadvantaged by this. Austrian companies' dependence on certain foreign competition authorities is significantly greater than the dependence of companies from those countries on the Austrian authorities. For example, Austrian direct investment in **China** (€34bn) is more than six times higher than Chinese direct investment in Austria (€560m).²⁶

Countries with strong competition laws, such as the USA, an important trading partner and the biggest recipient of Austrian direct investment outside the EU, could also respond to discrimination against their companies in European merger control with **countermeasures not just in merger control but, for example, in the field of commercial law as well**. This too would be detrimental to European companies.

At the same time, a politicisation of European merger control would also lend respectability to **protectionism in national merger control**. For Austrian companies that are operating very successfully in the **new EU Member States**, increasing protectionism in national merger control would therefore be a major disadvantage.²⁷ 25% of Austrian foreign direct investment flows to Czechia, Poland, Hungary, Romania, Bulgaria and Croatia. Conversely, these countries hardly own any holdings in companies in Austria (0.2%).²⁸

European merger control enjoys an outstanding reputation internationally, and the European Commission is very careful to treat all companies equally. However, particularly

²⁵ Cf. <https://www.ftc.gov/policy/international/competition-consumer-protection-authorities-worldwide>.

²⁶ OeNB, "Inward direct investment positions broken down by region"; OeNB, "Outward direct investment positions broken down by region".

²⁷ To date, there has been, and still is, hidden discrimination against companies from other Member States in many areas of the economy; cf. for instance ECJ, 5 February 2014, C-385/12 *Hervis* concerning a Hungarian special tax that particularly affected the subsidiaries of foreign companies, among them the Austrian Hervis group. Numerous attempts by Member States to thwart takeovers by companies from other Member States are also well documented (cf. Dinc and Erel, 2013).

²⁸ OeNB, "Inward direct investment positions broken down by region"; OeNB, "Outward direct investment positions broken down by region".

in the early years of European merger control, there were many attempts by EU Member States to exert influence on merger control decisions through legal avenues, but also by making direct interventions. Empirical investigations show that interventions were made in favour of large companies more frequently than in favour of small companies. Furthermore, large Member States were more successful with their interventions than small Member States (Duso et al., 2007; Dinc and Erel, 2013).

Non-discriminatory, transparent merger control is of great significance for legal certainty and judicial protection. Empirical studies prove that European merger control became more transparent, more objective and more predictable for companies when the reform associated with the introduction of the new Merger Regulation was carried out in 2004 (Duso et al., 2013). The European Commission's **merger control decisions are published**, and are subject to the full jurisdiction of the ECJ.

A politicisation of European merger control, in particular as a result of the involvement of the Council discussed in the *Franco-German Manifesto*, would reduce the predictability of merger control and limit the opportunities for affected companies to seek judicial protection. The Business and Industry Advisory Committee to the OECD (BIAC), to which the Federation of German Industries, the Movement of Enterprises of France and the Federation of Austrian Industries also belong, has made the point on a number of occasions in the past that legal certainty and the non-discriminatory examination of mergers are of the greatest importance for the companies affected. It has also been emphasised that mergers should exclusively be reviewed on the basis of competition criteria (BIAC, 2009; BIAC, 2016). Mariniello et al. (2015) also argue against politicisation, and advocate a strengthening of the rule of law in merger control.

3 Alternatives for action

A level playing field under European standards

In calling for a level regulatory playing field, the European business community is entrusting European and national policymakers with an important task. A “race to the bottom” would not be a satisfactory solution in this regard, and would in the end be detrimental to European consumers and economic development.

The empirical research shows that Member States intervene more frequently in favour of large than small companies, and that large Member States have been more successful with their interventions (Dinc and Erel, 2013; Duso et al., 2007). A politicisation of European merger control would therefore culminate in merger control failing in precisely the cases where the greatest competition concerns are to be assumed, while small companies and companies from small Member States would hardly profit. The implication is that a politicisation of European merger control would also be detrimental to most European companies.

The long-term goal should consequently be to establish the tried-and-tested European competition rules or comparable standards in the EU’s trading partners as well.

Measures in the context of trade policy

Trade policy measures such as **antidumping tariffs** may help in the short term to prevent unfair competition from state-subsidised companies. In this respect, it is to be taken into consideration that punitive tariffs may also provoke countermeasures that escalate into a trade war. It is also to be taken into consideration that antidumping measures are sometimes demanded by companies in order to give cover for anticompetitive patterns of behaviour. For example, when it investigated the *sodium ash* cartel, the European Commission found that the cartel’s members regularly engineered antidumping measures to ensure they would be sheltered from US and Eastern European imports on the European market, and in this way protect their excessive cartel prices (DGIV/33.133 *Solvay/ICI*, 19 December 1990). Since sodium ash is an important commodity for glass production, the punitive tariffs that were imposed caused damage to the European glass industry in the end.

The **screening of foreign direct investment** in accordance with the planned **FDI Directive** could be deployed in order to contain takeovers of innovative European companies by foreign investors. In this respect, it is to be taken into account that European companies profit from integration into international value chains, and that the prohibition of direct investment could also deter future investors. The various interests therefore have to be weighed up carefully as far as this instrument is concerned as well.

Further measures that have been discussed in the field of trade and innovation policy, some of which still remain to be evaluated, include for example a revision of the public procurement directives to align them with the **International Procurement Instrument** proposed by the European Commission, **structural changes to the WTO**, for instance in connection with the privileged status of transition countries, **antidumping measures for services** and the promotion of **basic research**.²⁹

Creation of an international rulebook

European competition law ensures that European companies are able to operate free of discrimination on the internal market. International agreements and an extension of the WTO rules to the field of competition law could help to create a level playing field between the EU and other trading partners such as China as well. European competition and state aid rules would therefore be a model for international cooperation.

Deeper cooperation under the auspices of international bodies

European competition authorities are represented at international organisations in order to improve cooperation on cross-border cases and drive ahead efforts to make competition enforcement more coherent. This is being done by adopting recommendations and best practice guidelines, as well as engaging in general exchanges of experience.

Within the EU, the European Commission and the national competition authorities are closely linked in the **European Competition Network (ECN)**. The significant international bodies in this field include the **Organisation for Economic Cooperation and Development (OECD)** Competition Committee and the **United Nations Conference on Trade and Development (UNCTAD)** Intergovernmental Group of Experts on Competition Law and Policy. The **International Competition Network (ICN)**, which was founded in 2001 by

²⁹ Cf. for instance European Political Strategy Centre (2019); Jenny et al. (2019); Fuest et al. (2019).

fourteen competition authorities and now numbers 139 members, including fifty from Europe, has also gained a great deal of significance in this connection.

The BWB has been an active member of international bodies since its establishment, and maintains numerous cooperation agreements with competition authorities from non-EU countries. Furthermore, the BWB is a founder member of the Framework on **Competition Agency Procedures (CAP)** established by the ICN, under which competition authorities from all over the world have committed to abide by transparent, non-discriminatory rules of conduct since May 2019.³⁰

Export nations such as Austria especially profit from an international consensus in favour of the independent, non-discriminatory enforcement of competition law.

4 Conclusion

The blocking of the merger between Siemens and Alstom has triggered a debate about European competitiveness.

Competitiveness is frequently equated to productivity, or the set of institutions, policies, and factors that determine a country's level of productivity. Empirical studies demonstrate that competition and the effective enforcement of competition law have positive impacts on the development of productivity and, furthermore, give rise to a just distribution of income and high levels of employment.

A politicisation of European merger control, in particular as a result of the involvement of the Council discussed in the *Franco-German Manifesto*, would limit legal certainty and the opportunities for affected companies to seek judicial protection. The Business and Industry Advisory Committee to the OECD (BIAC), to which the Federation of Austrian Industries belongs, has made the point on a number of occasions that legal certainty in merger control is of the greatest importance for the companies concerned.

European merger control already provides the European Commission with all the tools needed to foster fair competition and prevent companies from gaining dominant market

³⁰

https://www.bwb.gv.at/en/news/detail/news/bwb_joins_the_international_competition_network_for_framework_on_competition_advocacy_procedures/.

Cf.

positions, while conducting transparent proceedings and also taking account of circumstances outside Europe (e.g. international developments within affected markets).

The creation of supposed national or European champions holds the danger of arbitrary regulatory decision-making and, as a result of this, would ultimately harm European and Austrian companies more than it would benefit them. In calling for a level international regulatory playing field, however, the European business community is entrusting European and national policymakers with an important task. The long-term goal must therefore be to establish the tried-and-tested European competition rules or comparable standards in the EU's trading partners as well.

Problems relating to market access or the subsidisation of domestic companies in some foreign jurisdictions are not to be resolved by softening competition. Instruments in other fields of law are far better suited for this purpose, and initiatives are already under way to create and deploy a range of such regulatory tools.

Literature

- Ades, A. and Di Tella, R. (1997), “National Champions and Corruption: Some Unpleasant Interventionist Arithmetic”, *Economic Journal*, 107(443), 1023–1042.
- Ades, A. and Di Tella, R. (1999), “Rents, Competition, and Corruption”, *American Economic Review*, 89(4), 982–993.
- Aghion, P., Bloom, N., Blundell, R., Griffith, R. and Howitt, P. (2005), “Competition and Innovation: An Inverted-U Relationship”, *Quarterly Journal of Economics*, 120(2), 701–728.
- Aghion, P., Cai, J., Dewatripont, M., Du, L., Harrison, A. and Legros, P. (2015), “Industrial policy and competition”, *American Economic Journal: Macroeconomics*, 7(4), 1–32.
- Aiginger, K., Bärenthaler-Sieber, S. and Vogel, J. (2013), *Competitiveness under New Perspectives*, Working Paper 44, WWWforEurope.
- Bartelsman, E., Haltiwanger, J. and Scarpetta, S. (2013), “Cross-Country Differences in Productivity: The Role of Allocation and Selection”, *American Economic Review*, 103(1), 305–334.
- Baumol, W. J. (1977), “On the Proper Cost Tests for Natural Monopoly in a Multiproduct Industry”, *American Economic Review*, 809–822.
- Belleflamme, P. and Peitz, M. (2015), *Industrial Organization: Markets and Strategies*, Cambridge University Press.
- Bena, J., Ferreira, M. A., Matos, P. and Pires, P. (2017), “Are foreign investors locusts? The long-term effects of foreign institutional ownership”, *Journal of Financial Economics*, 126(1), 122–146.
- BIAC (2009), “Note by BIAC”, in OECD (2009), *Roundtable on Competition Policy, Industrial Policy and National Champions*, DAF/COMP/GF(2009)9.
- BIAC (2016), “Note by BIAC”, in OECD (2016), *Public Interest Considerations in Merger Control*, DAF/COMP/WP3/WD(2016)33.

- Bradford, A., Chilton, A. S., Megaw, C. and Sokol, N. (2018), "Competition Law Gone Global: Introducing the Comparative Competition Law and Enforcement Datasets", *Journal of Empirical Legal Studies* (forthcoming).
- Buccirossi, P., Ciari, L., Duso, T., Spagnolo, G. and Vitale, C. (2011), "Measuring the deterrence properties of competition policy: The Competition Policy Indexes", *Journal of Competition Law and Economics*, 7(1), 165–204.
- Buccirossi, P., Ciari, L., Duso, T., Spagnolo, G. and Vitale, C. (2013), "Competition Policy and Productivity Growth: An Empirical Assessment", *Review of Economics and Statistics*, 95(4), 1324–1336.
- Cabral, L. M. (2005), "An equilibrium approach to international merger policy", *International Journal of Industrial Organization*, 23(9–10), 739–751.
- Clougherty, J. A. and Duso, T. (2009), "The impact of horizontal mergers on rivals: Gains to being left outside a merger", *Journal of Management Studies*, 46(8), 1365–1395.
- Coad, A. and Hözl, W. (2012), "Firm growth: empirical analysis", *Handbook on the Economics and Theory of the Firm*, 324–338.
- Coad, A., Daunfeldt, S. O., Hözl, W., Johansson, D. and Nightingale, P. (2014). "High-growth firms: introduction to the special section", *Industrial and Corporate Change*, 23(1), 91–112.
- Cohen, S. S., Di Minin, A., Motoyama, Y. and Palmberg, C. (2009), "The Persistence of Home Bias for Important R&D in Wireless Telecom and Automobiles", *Review of Policy Research*, 26(1–2), 55–76.
- Criscuolo, C. and Martin, R. (2009), "Multinationals and US productivity leadership: evidence from Great Britain", *Review of Economics and Statistics*, 91(2), 263–281.
- Dinc, S. and Erel, I. (2013), "Economic Nationalism in Mergers and Acquisitions", *Journal of Finance*, 68(6), 2471–2514.
- Djankov, S. and Hoekman, B. (2000), "Market discipline and corporate efficiency: evidence from Bulgaria", *Canadian Journal of Economics*, 190–212.

Duso, T., Gugler, K. and Szücs, F. (2013), “An Empirical Assessment of the 2004 EU Merger Policy Reform”, *Economic Journal*, 123(572), F596–F619.

Duso, T. (2014), “Eine bessere Wettbewerbspolitik steigert das Produktivitätswachstum merklich”, *DIW-Wochenbericht*, 81(29), 687–697.

European Commission, Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings (Horizontal Guidelines), OJ C 2004, 31/03.

Duso, T., Neven, D. J. and Röller, L. H. (2007), “The political economy of European merger control: evidence using stock market data”, *Journal of Law and Economics*, 50(3), 455–489.

European Political Strategy Centre (2019), *EU Industrial Policy after Siemens-Alstom*, https://ec.Europe.eu/epsc/publications/other-publications/eu-industrial-policy-after-siemens-alstom_en.

Evans, D. S. and Heckman, J. J. (1984), “A Test for Subadditivity of the Cost Function with an Application to the Bell System”, *American Economic Review*, 74(4), 615–623.

Evans, D. S. and Heckman, J. J. (1986), “A Test for Subadditivity of the Cost Function with an Application to the Bell System”, *American Economic Review*, 76(4), 856–858.

Faccio, M. (2010), “Differences between politically connected and nonconnected firms: A cross-country analysis”, *Financial Management*, 39(3), 905–928.

Falk, M.; Hölzl, W. and Oberhofer, H. (2015), “Die Bedeutung von unternehmensbezogenen Individualdaten für die empirische Wirtschaftsforschung und wirtschaftspolitische Beratung”, *WIFO-Monatsberichte*, 2015, 88(11), 845–857.

Federal Ministry for Economic Affairs and Energy (BMWi) and Ministry for the Economy and Finance (MINEFI) (2019), *A Franco-German Manifesto for a European industrial policy fit for the 21st Century*, 19 February 2019.

Federico, G., Langus, G. and Valletti, T. (2017), “A simple model of mergers and innovation”, *Economics Letters*, 157, 136–140.

- Federico, G., Langus, G. and Valletti, T. (2018), "Reprint of: Horizontal mergers and product innovation", *International Journal of Industrial Organization*, 61, 590–612.
- Foster, L., Haltiwanger, J. and Syverson, C. (2008), "Reallocation, Firm Turnover, and Efficiency: Selection on Productivity or Profitability?", *American Economic Review*, 98(1), 394–425.
- Fuest, C., Wambach, A., Motta, M., Peitz, M., Röhl, K. H., Rusche, C., Dullien, S., Wolff, G. B., Kempf, D. and Mundt, A. (2019), "Zäsur in der europäischen Wettbewerbs- und Industriepolitik: Freie Fahrt für europäische Champions?", *ifo Schnelldienst*, 72(08), 03–26.
- DG Competition (2018), *Annual Activity Report 2017*, European Commission, Ares(2018)1717409 – 28/03/2018.
- Gerard, D. (2008), "Protectionist threats against cross-border mergers: Unexplored avenues to strengthen the effectiveness of Article 21 ECMR", *Common Market Law Review*, 45(4), 987–1025.
- German Monopolies Commission (2015), *Politischer Einfluss auf Wettbewerbsentscheidungen: Wissenschaftliches Symposium anlässlich des 40-jährigen Bestehens der Monopolkommission am 11. September 2014 in der Rheinischen Friedrich-Wilhelms-Universität Bonn*, Nomos, Baden-Baden.
- Griffith, R., Redding, S. and Simpson, H. (2004), "Foreign Ownership and Productivity: New Evidence from the Service Sector and the R&D Lab", *Oxford Review of Economic Policy*, 20(3), 440–456.
- Gugler, K., Mueller, D. C., Yurtoglu, B. B. and Zulehner, C. (2003), "The Effects of Mergers: An International Comparison", *International Journal of Industrial Organization*, 21(5), 625–653.
- Gugler, K. and Yurtoglu, B. B. (2004), "The effects of mergers on company employment in the USA and Europe", *International Journal of Industrial Organization*, 22(4), 481–502.
- Hsieh, C. T. and Klenow, P. J. (2009), "Misallocation and Manufacturing TFP in China and India", *Quarterly Journal of Economics*, 124(4), 1403–1448.

- Javorcik, S. B. (2004), “Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers Through Backward Linkages”, *American Economic Review*, 94(3), 605–627.
- Jenny, F., Neven, D., Buhart, J., Henry, D., Funke, T., Heim, M., Midões, C., Levy, N., Little, D. R., Mostyn, H., Lianos, I., Motta, M., Peitz, M., Osti, C., Papp, A., Wik, C., Hugmark, K., Vahvaselkä, J. and Winckler, A. (2019), *Which competition and industrial policies for the new EU Commission after Siemens/Alstom?*, 24 April 2019, *Revue Concurrences*, N° 2-2019, Art. N° 89966.
- Krugman, P. (1994), “Competitiveness: A Dangerous Obsession”, *Foreign Affairs*, 73, 28.
- Krugman, P. R. (1994), *The Age of Diminished Expectations: US Economic Policy in the 1990s*, MIT Press.
- Krugman, P. R. (1997), *The Age of Diminished Expectations: US Economic Policy in the 1990s*, MIT Press.
- Krugman, P., Obstfeld, M. and Melitz, M. (2018), *International Trade: Theory and Policy, Global Edition*, 11th edn, Pearson Higher Education.
- Mariniello, M. (2013), *The Dragon Awakes: Is Chinese Competition Policy a Cause for Concern?*, Bruegel Policy Contribution, 2013/14.
- Mariniello, M., Neven, D. and Padilla, A. J. (2015), *Antitrust, Regulatory Capture and Economic Integration*, Bruegel Policy Contribution, 2015/11.
- Marx, L. M. and Zhou, J. (2014), “The Dynamics of Mergers among (Ex) Co-Conspirators in the Shadow of Cartel Enforcement”, available at SSRN 2410948.
- McGowan, L. and Cini, M. (1999), “Discretion and Politicization in EU Competition Policy: The Case of Merger Control”, *Governance*, 12(2), 175–200.
- Melitz, M. J. and Polanec, S. (2015), “Dynamic Olley-Pakes productivity decomposition with entry and exit”, *RAND Journal of Economics*, 46(2), 362–375.
- Motta, M. (2004), *Competition Policy: Theory and Practice*, Cambridge University Press.

- Motta, M. and Peitz, M. (2019), “Challenges for EU merger control”, in Jenny et al. (2019), *Which competition and industrial policies for the new EU Commission after Siemens/Alstom?*, *Revue Concurrences*, N° 2-2019, Art. N° 89966, 44–49.
- Motta, M. and Onida, F. (1997), “Trade Policy and Competition Policy”, *Giornale degli Economisti e Annali di Economia*, 67–97.
- Motta, M. and Ruta, M. (2012), “A Political Economy Model of Merger Policy in International Markets”, *Economica*, 79(313), 115–136.
- Mundt, A. (2019), “Je größer, desto besser? Europäische Champions werden nicht durch wettbewerbsbeschränkende Fusionen geschaffen”, *ifo Schnelldienst*, 8/2019, vol. 72, 25 April 2019, 24–26.
- Nightingale, P. and Coad, A. (2013), “Muppets and gazelles: political and methodological biases in entrepreneurship research”, *Industrial and Corporate Change*, 23(1), 113–143.
- OECD (2009), *Roundtable on Competition Policy, Industrial Policy and National Champions*, DAF/COMP/GF(2009)9.
- OECD (2014), *Factsheet on how competition policy affects macro-economic outcomes*.
- OECD (2015a), *The Future of Productivity*.
- OECD (2015b), *Does competition create or kill jobs? Background note by the Secretariat*, DAF/COMP/GF(2015)9.
- OECD (2016), *Roundtable on Public Interest Considerations in Merger Control*, DAF/COMP/WP3(2016)3.
- OECD (2019), *OECD Economic Surveys: China 2019*, OECD Publishing, Paris, https://www.oecd-ilibrary.org/economics/oecd-economic-surveys-china-2019_eco_surveys-chn-2019-en.
- Peneder, M. (2016), “Competitiveness and industrial policy: from rationalities of failure towards the ability to evolve”, *Cambridge Journal of Economics*, 41(3), 829–858.

- Petsche, A., Urlesberger, F. C. and Vartian, C. (2016), *KartG Kartellgesetz: WettbG, NVG und strafgesetzliche Bestimmungen*, 2nd edn, Manz, Vienna.
- Röller, L. H. and Strohm, A. (2005), "Ökonomische Analyse des Begriffs 'significant impediment to effective competition'", in *Münchener Kommentar zum Wettbewerbsrecht 2007*, Munich.
- Röller, L. H., Stennek, J. and Verboven, F. (2000), *Efficiency gains from mergers*, Discussion Paper, WBZ Berlin Social Science Center, Research Area Market Processes and Corporate Development.
- Rosenthal, S. S. and Strange, W. C. (2003), "Geography, Industrial Organization, and Agglomeration", *Review of Economics and Statistics*, 85(2), 377–393.
- Sakakibara, M. and Porter, M. E., "Competing at Home to Win Abroad: Evidence from Japanese History", *Review of Economics and Statistics*, vol. 83(2), 2001.
- Sala-i-Martin, X. (2010), "The Economics behind the World Economic Forum's Global Competitiveness Index", in De Grauwe, P. (ed.), *Dimensions of Competitiveness*, Cesifo Seminar Series, MIT Press, 1–18.
- Sawyer, L. P. (2019), *US Antitrust Law and Policy in Historical Perspective*, Harvard Business School, Working Paper 19-110.
- Siggel, E. (2010), "Concepts and Measurements of Competitiveness: Toward an Integrated Approach", in De Grauwe (ed.), *Dimensions of Competitiveness*, 95.
- Syverson, C. (2011), "What Determines Productivity?", *Journal of Economic Literature*, 49(2), 326–365.
- Spector, D. (2009), "Background Note", in OECD (2009), *Roundtable on Competition Policy, Industrial Policy and National Champions*, DAF/COMP/GF(2009)9.
- Stiebale, J. (2016), "Cross-border M&As and innovative activity of acquiring and target firms", *Journal of International Economics*, 99, 1–15.
- Szücs, F. (2014), "M&A and R&D: Asymmetric effects on acquirers and targets?", *Research Policy*, 43(7), 1264–1273.

Voigt, S. (2009), "The Effects of Competition Policy on Development – Cross-Country Evidence Using Four New Indicators", *Journal of Development Studies*, 45(8), 1225–1248.

Wagner, M. (2011), "To explore or to exploit? An empirical investigation of acquisitions by large incumbents", *Research Policy*, 40(9), 1217–1225.

Bundeswettbewerbsbehörde

Radetzkystraße 2, 1030 Wien

+43 1 245 08 - 0

wettbewerb@bwb.gv.at

bwb.gv.at