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MARKET AND GOVERNMENT FAILURES

The changing relationship between industrial policy and competition policy interventions

Among the public policy instruments, the study seeks to follow past changes in competition policy and industrial policy. In various periods, one was preferred over the other; the pendulum swung one way, then the other. One common trait of all the periods was that the changes clearly reflected ideological and political trends and various groups' ability to protect their own interests, and the end result of interventions was often not what was originally intended. The study briefly discusses the periods when monopolies emerged, the inception of competition regulation and the coexistence of competition and industrial policy in the last hundred years and its experiences.

INTRODUCTION

Over the past decade, the practice of competition regulation – and sometimes its principles – has been the subject of constant debate. The intensity of the debate and the central issues have been different in the United States and Europe. With regard to mergers, the focus has been on restrictions in America and on the relaxation of rules in Europe, but opinions were sometimes the same when it comes to specific sectors or implemented or planned mergers. Company size – specifically, the limit of what is considered large company has been a central issue on both continents. The school of thinking that demands the complete renewal of competition regulation – sometimes called 'hipster antitrust' due to some exaggerated positions – was analysed by Tünde Gönczöl (*Gönczöl* [2019]). The most heavily discussed EU decision blocking a merger (*Alstom-Siemens* case) and its background, including member state interests, was analysed by Gergely Csorba (printed in the present volume). Zombor Berezvai's study undertook the task of describing the interrelationships, argumentation and contradictions of competition law and various areas of public policy, most notably industrial policy, and sketching out the resolution of these contradictions (*Berezvai* [2020]).

The immediate triggers for the disputes were economic developments that were considered unfavorable – or of concern. In the United States, for example, the share of profit in GDP rose from 7.5 percent in 1985 to 11 percent in 2016, the price-cost ratio increased, industrial concentration, especially in information technology, increased, "superstar" companies emerged, wages as a share of GDP declined, and income inequality increased (*Shapiro* [2019] pp. 70–72). Many considered the reform of competition regulation to be the most appropriate to address the "problems", while for others it was clear that these issues affected a much wider range of public policy. Most of these economic processes were generally also characteristic of developed economies, but no increase in concentration was observed for the largest economies in the European Union as a whole (*Valletti* [2018]). Therefore, some EU member states started voicing increasingly strong concerns about the sustainability of competition with large corporations outside Europe. The proposals and manifestos demanding the reform of competition regulation, issued primarily by France and Germany and supported by a varying group of other member states, were analysed in detail by *Heim* [2019], and, in this volume by *Csorba* [2020].

The renewal and reform of competition regulation is mostly understood as the increase of the intensity and number of interventions, the more consistent enforcement of the existing rules, but in some places also the redefinition of its goals. However, all this is not a new phenomenon. Competition regulation is one of the tools the state uses in order to achieve its public policy objectives, just like monetary or budgetary policy, or even industrial policy (a term which has many interpretations itself). From the intertwined ensemble of economy and society, the set of tools (legal frameworks, regulations) that reflects the acceptable, established compromise at the given moment is applied in accordance with the current ideological, political and special interest situation. The embodiment of the state, of the government and of the political power constantly intervene in issues affecting the economy and society, even if they do not do so, as this also creates an opportunity for a certain action by other parties.[1] The least that could be expected is Coase's requirement for governments/representatives to at least consider all the advantages and drawbacks of their interventions before making decisions (*Coase* [1955] p. 437).

In the study, competition policy refers to the intention of governments or authorities to protect competition from anti-competitive business conduct in the interests of consumers. A simplified definition of industrial policy could be that it covers all government intervention that only affects industry, or at least intends to affect it. In terms of its tools, competition policy has the potential to enforce, advocate and promote competition. The instruments of industrial policy are more numerous than this, they can be subsidies, tax breaks, lending, customs duties, coercion of mergers, prevention of foreign acquisitions, etc. As a common feature of both, we would like to emphasize that they are an intervention in the functioning of the economy, the markets, and at the same time they provide a choice for the actors who want to intervene. In this sense, the study deals with market and government failures: all interventions – both competition and industrial policy – are about the correction of

[1] Debates about the separation or coexistence of the economy and society, discourses of the state or market that seem somewhat outdated, views promoting the primacy of planning or market spontaneity, issues of efficiency versus equality can all be seen as about the manner and extent of public intervention.

a perceived market failure, just as the failure of an intervention (government failure) triggers another intervention.

The study first provides an overview of the competition landscape as it was before competition laws emerged, followed by a discussion of the role of various interest groups in the creation of competition laws. The third part analyses the attempts made to suspend competition in critical periods, during economic crises, and the fourth part examines the ways in which competition and industrial policy can coexist. Finally, we make an attempt at providing a summary.

MONOPOLIES BEFORE COMPETITION LAWS

Trade, whether long-distance or local, can only ever operate if certain rules were followed. The rules can protect merchants or customers. In Roman law, very early (probably in the 2nd century BC), sanctions were formulated to penalize those who tried to create a monopoly through acquisitions and thus sought to raise prices by artificial shortages. Over time, the sanctions became more severe, ranging from confiscation to revoking trading rights, deportation and even capital punishment – illustrating the difficulties of enforcement. The range of products involved also expanded: initially the grain trade was the most "endangered" area, but subsequently, most foodstuffs, and finally all products fell into this range (*Cowen* [1950] pp. 126–128).

Thus, achieving a monopoly by business machinations was seen as illegal; however if the "supreme power", e.g. the emperor himself gave permission to do the same thing, it was seen as rightful activity. From the 3rd century AD – especially in periods of financial instability – emperors started giving out special privileges and monopolies in order to increase the revenues of the treasury. By this time, the most important areas of industry and trade were organised into personal monopolies guaranteed by the state. Naturally, the disquiet caused by price hikes made it necessary to issue price control decrees, but this only made the dual nature of public authority more perceptible.

The best-known decree (edict) was issued by Eastern Roman emperor Zeno in 483 AD. He abolished the distinction between legal and illegal monopolies, and, in a move that was repeated later by others, nullified previously awarded monopoly rights and even abolished the emperor's right to award such privileges. The edict banned and penalised all price fixing agreements made between individuals, including what we now call cartels, as well as agreements on retail price (*Cowen* [1950] p. 128., *Szilágyi–Tóth* [2017] p. 59).

The revision of Roman law made under Justinian included all these elements. The difference between law as written and law as enforced is clearly illustrated by the fact that both Justinian himself and subsequent emperors found a way to issue monopoly rights despite the formal ban. State monopolies were not awarded to private persons anymore, but to public servants, allowing the state's agent to "lawfully" carry out the activity.

In modern history, similar events took place in the Low Countries and England (*Miller* [1907], *Cowen* [1950], *Letwin* [1954]). Rulers often resorted to handing out monopoly rights in order to finance wars, or to solidify their power as the rents from monopolies enriched the treasury. In England, this practice peaked under Queen Elizabeth I. Her royal permissions ranged from growing and selling currant to making iron, steel, glass, beer, sulphur etc. and even to aqua-vitae (*Miller* [1907] p. 2). These activities benefited the treasury and the select few, but they were disliked by many and hurt the purses of many more.

After an unsuccessful protest against the practice in Parliament in 1597, a long list was compiled in 1601 on monopolies and exclusive rights to be abolished. Although the sovereign had the power to determine the general principles of trade policy and issue decisions on the minting of money, on weights and measures, on holding fairs and on ports, but the line of demarcation between royal and parliamentary powers was unclear, and there was great temptation to cross the boundary. Due to the myriad of grants given out by the sovereign, there was hardly any family in the country that did not suffer their burden. After the chief minister's carriage was attacked, Elizabeth, with a sudden about-face, became the leader of those demanding reform, thus deflating the protest movement (*Macaulay* [1848/1906] pp. 47–48).

However, real changes took more time. Some monopolies were left intact despite the reform, and many saw the Queen's reversal as no more than a publicity stunt; thus, the conflict between the monarch and Parliament ended up as a court case over the legality of the granting of monopolies. The 1603 *Darcy versus Allin* lawsuit became known as the *Case of Monopolies* (*Miller* [1907], *Letwin* [1954], *Calabresi–Price* [2012]). The plaintiff, Edward Darcy, a Groom of the Chamber received exclusive rights from the Queen for the manufacturing, importing and sale of playing cards, for which he paid a yearly fee. Haberdasher Thomas Allein felt that the monopoly was injurious, and started selling playing cards himself. The Mayor of London supported (and perhaps even encouraged) this move, and promised to pay any legal fees (a promise that was only fulfilled after Allein took legal action against the mayor) (*Letwin* [1954] p. 366).

In the Darcy lawsuit, the justification given for the monopoly was that playing cards are not necessities, but rather a means of idle time-wasting, and their moderate and appropriate use must be overseen by the Queen. The law placed matters of leisure and entertainment under the Queen's oversight, as people are prone to excess in these areas. Thus, the lawsuit was not focused on fact of the monopoly, but rather on proving the noble intentions behind it. Allein argued that this exclusivity was a monopoly in conflict with common law, and it was in fact banned by several Acts of Parliament.

In the end, the judges at the Court of Queen's Bench unanimously decided that the monopoly was invalid. They cited four main justifications. 1) Every trade that prevents idleness and helps workers and their families support themselves promotes the public good; therefore, exclusivity is in conflict with common law and the freedom of subjects. 2) Grant of a monopoly may cause the prices to be raised and the quality to deteriorate, and those who had been involved with the trade may become impoverished. 3) The Queen intended to permit this monopoly for the public good, but she must have been deceived because such a monopoly can be used only for the private gain of the monopolist. 4) Allowing a trade to be monopolized would have set a dangerous precedent, and it lacked any legal basis, as it gave special rights to a person (and his family) who had no expertise in the manufacturing of playing cards (*Miller* [1907] pp. 6–7, *Letwin* [1954] p. 363).

The court separated the issue of the manufacturing of playing cards from the issue of their use; thus, so the aspects of trade and business, the maintenance of the possibility of competition were the main focus of the decision. The flaw in our account of the case is that it is not based on any court documents (the keeping of which was not yet regular practice at the time), but on the descriptions of notable contemporary lawyer Sir Edward Coke. Coke represented the Queen and the granted monopoly in the lawsuit, even though his account, written after the fact, indicates that he personally sympathised more with the opposing side's position (*Calabresi–Price* [2012] pp. 12–14). After Elizabeth's death, James I rose to power. He openly stated that he saw himself as being above the law, and he reinstated monopolies for a time. In the ensuing debates, a temporary compromise was reached in 1610, and Parliament voted an annuity for the king in exchange for giving up the granting of monopolies (and the income they generated).

However, some monopolies survived until very recently, such as the postal monopoly. The first *Master of the Posts* was awarded a monopoly to organise postal activities in 1516. Subsequently, the title became *Postmaster General.* The monopoly was later reinforced several times, most recently in 1953 (*Groenewegen–Vries* [2016] p. 250). Local officers were required to investigate those who infringed the monopoly in order to be able to uncover any treason or sedition in time. This means that the monopoly allowed for letters to be intercepted or censored (*Hemmeon* [1912] pp. 189–190).

Apart from serving the royal court, the post also became available to the general public in 1635, and it was placed under direct state control after the civil war. Previously, the Government had tried to prevent communication between its adversaries; from this point on, it focused on gaining access to the information they were sending – it is no accident that the British called Cromwell's Postmaster General the *Spymaster General*. The importance of the post office is clearly illustrated by the fact that after the fall of the republican government, during the restoration, a good portion of the staff at the postal service was replaced and Republicans were removed (*Marshall* [1994] pp. 79–80). The arguments for maintaining the monopoly changed over the centuries, from tracking sedition and treason to generating revenue and promoting social goals. From the 17th century on, there were multiple attempts at breaking the monopoly and opening up access to the market. New entrants generally improved or would have improved the level of service available. The monopolist took over these ideas and companies, or, more often – and worse – put up barriers to entry and repressed them, reducing consumer welfare (*Coase* [1961], *Groenewegen–Vries* [2016]).

The twists and turns of the British economic history of the 17th and 18th centuries provide numerous other instances of intentions to limit monopolies (and ways to get around those limitations) (*Madarász* [2011], *North–Weingast* [1989]). On the continent, a ban on cartels issued during the French Revolution in 1791 was even entered into Napoleon's *Code Civil*, although the statute was not applied through most of the 19th century (*Lyons* [2009]). These illustrative examples show that monopolies emerged by abusing the laws of the market, or through the state's arbitrary decision. Initially, monopoly – in keeping with the original meaning of the word – meant an exclusive seller of a product, but later, when rulers started handing out exclusive rights, those also covered manufacturing. But what about self-organised market entities, economic operators and institutions – such as guilds – that sought to foreclose competitors in local communities, supported by local authorities? For a long time, the literature considered guilds to be a form of monopoly, but more thorough examination of the increasing number of original documents found revealed that guilds rarely got to the point of regulating wholesale trade; guilds from other cities making the same products were allowed to sell at local markets, and product stockpiling and quantity and price manipulation were punishable offences everywhere (*Richardson* [2001] pp. 218–219). Guilds operated as monopsonist player more on the local labour market.

The meaning of the word 'monopoly' changed a lot over time. For Adam Smith, it included a range of political, legal and economic restrictions, and was not necessarily considered a harmful phenomenon. Temporary monopolies related to patents and copyrights allowed the emergence of novelties. Smith also held that certain organisational innovations and more audacious moves by companies – such as the case of the new trading companies involved in trade in the colonies – also deserved temporary exclusive rights (*Richardson* [2001] pp. 221–222). The term 'monopoly' subsequently came to mean the polar opposite of perfect competition; i.e. a situation when a single person or organisation can determine either the price or the quantity of a product sold on a market. Still, monopolies could take many shapes; Marshall called them protean (*Marshall* [1890] p. 456). Monopolies could be seen as good or bad; good because of their innovative activities and the idea – proposed later – that competition inevitably leads to the growth of the best, most effective competitors, and thus concentration is proof of strong competition. The only problem is that – apart from some extreme cases – these two market behaviours and their outcomes are difficult to tell apart. The first competition laws were made in the second half of the 19th century – when companies grew to a large size extremely quickly – specifically in order to decide this matter.

THE BIRTH OF COMPETITION LAWS

By the last quarter of the 19th century, markets grew gradually, but, considering historical time scales, very quickly, due to infrastructure service providers (railway, telegraph, and, from the turn of the century, electricity). In the sectors that had the appropriate technology, this allowed for mass production, exploiting the economies of scale, mass trade and previously unseen company sizes. In good part due to this, the prices fell constantly, and economies – both in Europe and in America – had to endure quite significant price fluctuations. These changes became complete along with innovations in the organisational structure of companies (*Chandler* [1962], [1977], [1990], *Landes* [1969]).

While the fundamental characteristics of economic processes and the birth of large companies were similar in Europe and America, there were significant differences in terms of the legal system and the methods of corporate governance. In the United States, corporations run by managers setting up new organisational structures were the dominant force, in Great Britain, family businesses grew large, and in Germany, large companies formed cross-ownership networks with banks and each other. There were also differences between the two countries within the Anglo-Saxon legal system, and the continental German legal system provided a different legal framework for the interpretation of industrial concentration. (*Motta* [2004], *Freyer* [1992], *Fohlin* [2005], *Webb* [1982], *Haucap et al.* [2010] and *Kühn* [1997]).

The seeking of compromise and the possibility of bargaining was more deeply rooted in the development of British law than in American law, where inter-company agreements restricting competition were more stringently banned. At the same time, in Germany, the protection of the freedom of contract even allowed for the enforcement of competition-limiting contracts. Although the British courts tended not to penalise the anti-competitive agreements, they did not provide an arena for enforcing them. In order to protect themselves from ever stronger competition and price drops, large British companies made deals with suppliers and retailers; at the same time, in the United States, large companies tried to expand vertically in both directions, eliminating intermediary links from the chain and integrating these market elements into the corporate structure. One form of horizontal agreement was the "trust", which set up an inter-company association with a central governing body. Participants maintained the appearance of independence, but in practice, they gave up by entrusting their shares to the management organisation as the trusted asset manager. The goals of such associations included reducing competition between members and consolidating prices (*Motta* [2004] pp. 1–2).

Self-regulation, a popular concept in Britain, was applied to manufacturing, various professions (doctors, lawyers, engineers, auditors) and finance as well. A whole suite of laws opened up the opportunity for self-regulation. These only laid down the general regulatory framework, and relied extensively on the cooperation, mutual agreement and mutual oversight of those subject to the regulations. Thus, weak cartel agreements became widespread in Great Britain, while American managers preferred to centralise and assimilate smaller companies whenever possible.

These differences already indicate that attitudes toward large corporations may have varied from country to country, but a number of other factors also contributed to the fact that the first competition laws were enacted not in Britain but in America. Even in the 1920s, the majority of the US population still lived in rural areas, whereas the situation was the reverse in Great Britain by the time large companies appeared. American rural voters had an interest in keeping small businesses going, and large companies appeared in and around cities. This division created regional tensions between states as well. The majority of voters saw large companies as hotbeds of corruption, resulting in lawsuits started by various states in the 1880s. Due to the differences in state-level laws on large companies, the managers always moved the headquarters of public companies to the location that offered the best conditions, while production was left at the original location. The protection of internal market positions is reflected in the continuous raising of American import duties; while the British economy, at least in its international relations, has operated on the principles of free trade. In Britain, family firms themselves managed the transition into large companies, and managers were more part of the "establishment"; thus, few interest groups advocated for state intervention (*Freyer* [1992] pp. 15–23).

The railways, despite their vital role in connecting local and regional markets, could also be a hindrance to market access due to their fare system. The populist Grange movement of the agricultural areas of America became the main campaigner against the railway fare structure, but they were also dissatisfied with the way public companies operated in general. On their initiative, various states introduced fare regulation, and later on, the Grange movement also played a role in the birth of antitrust laws. The movement became a (short-lived) party with the fight against political corruption as its central policy goal, and its leader published a weekly newspaper called The Anti-Monopolist (*Phillips Sawyer* [2019] pp. 4–6). By the 1890s, a coalition emerged in America made up of various groups, as dictated by the differences between the states: the supporters of small businesses, those hoping to increase their voter base and those who were harmed by large companies. With their support, the Sherman Act was submitted. The national parties were also dissatisfied with inefficient and unpredictable state regulation (more than a dozen states had some kind of competition laws by this point), and they wanted to make sure that the cross-border large companies, which were becoming active in more and more fields and in some instances attempted to obtain monopoly position, would not be able to use anti-competitive methods.

The proposed text – as a compromise – contained the general rules on interstate commerce that had based on common law; thus, Congress approved the bill almost unanimously. However, the fact that bills on raising tariffs were awaiting debate also contributed to this broad support. The first section of the Act bans trusts and all other forms of conspiracy aimed at restraining trade or commerce among several states, while the second considers monopolizing (or trying to monopolize) interstate trade or commerce to be illegal. This Act made it possible for the Department of Justice to bring charges against offenders, and to claim damages. The same was also possible through private enforcement. The practical meaning of the general wording, as in the case of other laws, has been revealed in court practice.

What was on the minds of the representatives and senators when they voted for the law can be guessed from some sporadic account, but the debates have not subsided since then about what the main intent was when the law was drafted. Was increasing consumer welfare the primary objective at the time of adoption? Or was it the protection of small businesses? Perhaps increasing economic efficiency, or maybe stopping the flow of wealth from consumers to large businesses? All sorts of positions and combinations of positions were voiced in the course of economic and legal debates (*Hovenkamp* [1989]), prompting future Fed chairman Alan Greenspan to compare the world of antitrust regulations to Alice's Wonderland, where everything seemingly exist, yet apparently doesn't, simultaneously. It is a world in which competition is lauded as the basic axiom and guiding principle, yet "too much" competition is condemned as "cut-throat." It is a world in which actions designed to restricting competition is a crime unless the government does it, and the businessman learns that one of his actions was illegal only when the judge convicted him (*Greenspan* [1967]).

Initially, the courts interpreted the text of the Act literally, and, in the 1895 *E. C. Knight* case, they did not scrutinise the company that controlled 90% of the country's sugar refining capacity, stating that the Act only covers interstate trade, not the processing industry. Law enforcers were mainly interested in the contractual or tacit agreements between companies, and thus it was a natural reaction for companies to "flee" into horizontal and vertical mergers, in part in reaction to the law, kicking off what is called the Great Merger Movement (1895–1904). In this wave of mergers, 1800 companies merged into 160, a third of which ended up with over 70% market share – and half of them with over 40% (*Lamoreaux* [2019] p. 98).

There were areas of the economy where local or state concessions were awarded for introducing a specific type of service (e.g. railway, telephone, electricity, gas supply and water services). In addition to the technical parameters of the service, concessions also had an effect on the competitive landscape. Local concession regulation matured into state-level regulation in the United States in the early 20th century. At the time when the state-level regulation of network services was introduced, it was common for a long-established railway regulator to receive the task of overseeing other services as well – in some cases, without even changing the regulator's name. Elsewhere, the new regulatory body (commission) was responsible for overseeing all network service providers, including the railways.

The idea of a permanent supervisory body soon came up with regard to competition issues as well. During Theodore Roosevelt's presidency, in 1903, the *Bureau of Corporations* was set up as part of the *United States Department of Commerce and*

Labor, tasked with examining the situation of industry and especially monopolistic practices. Although the Department of Justice was responsible for filing formal charges, it was not until 1919 that a special competition unit, the *Antitrust Division* was established within the Department. During subsequent lawsuits, it emerged that the Sherman Act can also be applied to mergers, and in the 1911 *Standard Oil* lawsuit, the Supreme Court, finding that various methods had been used to restrict competition, decided to break up the company. Actions in competition cases, until more recent legislative acts in 1914, could be seen more as a broadly agitated antitrust movement, not characterized by a professional procedure according to developed principles (*Winerman* [2003]).

The 1912 presidential election was a watershed event in antitrust regulation, with each candidate advocating for different antitrust policies. For instance, the eventual winner, Woodraw Wilson proposed a programme of getting competition "under control" and punishing monopolies. Theodor Roosevelt was a supporter of regulated monopolies operating under oversight. Wilson's campaign was heavily influenced by the views of his advisor, Boston lawyer Louis D. Brandeis, who stressed the "curse of bigness", advocating the breaking up of monopolies and decentralising economic power. As a compromise between Wilson's and Roosevelt's approach, the Clayton Act was finally adopted in 1914, setting up a new authority, the Federal Trade Commission (FTC). In order to ensure efficient operation, the *Bureau of Corporations* was merged into the FTC (*Phillips Sawyer* [2019] pp. 10–11, *Winerman* [2003] p. 4).

When the FTC was set up, debates centred around whether to issue detailed legal provisions in order to suppress monopolistic, anti-competitive tendencies, or to set up an independent agency with broad powers, with only the general principles laid down in legislation. Eventually, a compromise was reached again, and the legal provisions included specific wording on some types of anti-competitive practices (price discrimination, exclusive agreements, tying, mergers that significantly reduce competition etc.) and the real power of the agency had to be supported by court decisions. The FTC started up when World War I broke out. Initially, it only did fact-finding work, but it shifted to full investigations by 1918. The FTC's findings were met with resistance from members of the business community and Republican members of Congress, as well as unfavourable court decisions. The courts held that defining the concept of anti-competitive practices was up to them, and they felt that the definition should be much narrower, than that of the FTC, thus overturning many of the FTC's decisions (*Davis* [1962] pp. 440–441).

The 1924 presidential election marked another turning point in the history of the FTC, as the winner was Calvin Coolidge, a Republican who stood for increased efficiency and against hamstringing businesses. He appointed as an FTC member William E. Humphrey, a former representative who had been one of the most vocal critics of the FTC, and, according to the press of the time, the greatest defender and friend of large corporations. This and other appointments transformed the FTC's operation; changing its rules of procedure made its work less transparent, it was allowed to enter into informal agreements with companies, public access to documents under examination became more restricted, the cases of large companies that failed to comply with previous FTC decisions were not re-opened, and a new department was set up within the FTC designed to encourage industry self-regulation. As the FTC's own report said in 1927, its new task was "Helping business to help itself" (*FTC* [1927] p. 1). The business world agreed to this change of direction, but the forces that previously had supported setting up the FTC now advocated abolishing it. They felt that the scenario they had seen with the railways was about to be repeated: the regulator might end up serving the interests of those it is supposed to be regulated, and not the public interest. Those who were dissatisfied with the FTC's work proposed setting up parallel inquiry committees (*Davis* [1962] pp. 451–455, *Winerman–Kovacic* [2011] pp. 713–715). The 1929 economic crisis, however, suddenly put the emphasis on rescuing companies.

COMPETITION AND CRISIS MANAGEMENT

Governments' reaction to crises – apart from direct aid – has been to suspend to some extent the principles and practice of competition regulation.[2] This happened in the US in 1933, in the fourth year of the crisis, as the market had still not spontaneously sorted itself. After the election of Franklin D. Roosevelt (1933), Congress adopted a series of laws in order to implement the *New Deal* programme. In addition to labour, social security, banking, financial and other reforms, the National Industrial Recovery Act (NIRA) was also adopted. The *National Recovery Administration* (NRA) was set up to implement the Act.

The idea for such an organisation was not without precedent: the FTC's role had also shifted towards making deals with members of the business community and organising conferences on business practices with broad participation. By this point, public services were overseen by committees everywhere, and the experience gained by control bodies set up during World War I was also there to draw on. The idea of the central planning of economic processes was becoming more and more popular; some even proposed organising American industry into very large monopolistic trusts run under strong government regulation. Many saw the Depression and its length as evidence of the destructive nature of excessive competition (*Lyon et al.* [1935] pp. 4–6).

Subject to presidential approval, the NRA was allowed to exempt from antitrust laws the sectors that adopted the *Codes for Fair Competition*. Among other things,

[2] During the 2020 coronavirus pandemic, partial price controls were introduced covering certain products of which there were shortages. Additionally, in some countries, such as the United Kingdom, some sectors (e.g. retail) requested a suspension of competition laws in order to allow them to cooperate. Contrary opinions were soon voiced too: fixed prices undermine meeting the excess demand, as eliminating price signals weakens profit motivations.

the Codes included sectoral wage rules (minimum wage, working hours) and price controls (minimum price, cost-dependent minimum price, other price fixing mechanisms). Over the course of a year and a half, more than 500 Codes were drawn up, overseen by sectoral "code authorities". Both the approval process of Codes and the torrent of complaints about compliance proved to be a heavy burden for the new organisation. The NRA was supposed to protect small businesses, but Codes, which supported the emergence of cartels, did nothing to promote that objective. The NRA was seen as a temporary institution, set up only for crisis management, estimated to last two years (June 1933 to June 1935). However, shortly before the two-year deadline, the Supreme Court declared the operation of the NRA illegal in a decision issued regarding the interpretation of one of the Codes, finding that the issuing of Codes was an unconstitutional delegation of legislative powers. The organisation was dissolved, and by the late 1930s, the FTC returned to taking a more forceful approach to tackling anti-competitive behaviours (*Alexander* [2001]).

The Brookings Institute, which monitored and documented the operation of the NRA from its inception, drew up a detailed report on its activities in 1935. The Brookings Institute analysts found that the costs and prices, which were influenced by the NRA, were determined in an arbitrary and random manner, and the results were often the opposite of what was desired; there were serious doubts as to whether any overall positive effect could be shown (*Lyon et al.* [1935] pp. 881–887). Subsequent analyses also questioned whether the intervention helped resolve the economic crisis; some even felt that introducing anticompetitive governmental measures contributed to slowing down the economic recovery (*Lőrincz* [2014] pp. 41–42, *Cole–Ohanian* [2004]).

In addition to legislation and institutions affecting the entire economy, there were also attempts to save large groups of struggling businesses. For instance, in Italy, the Institute for Industrial Reconstruction *(Istituto per la Ricostruzione Industriale, IRI)* was set up in early 1933. The state-owned holding company took over industrial stocks with the plan to gradually return them to the private sector later. The financial resources made available to banks, which held many industrial shares, amounted to 10% of GNP in 1933 (*Ciocca–Toniolo* [1984] p. 134). The IRI, like the NRA, was meant to be a temporary institution, but it soon became clear that the state of the economy was not congruent with the declared IRI plans, and it was made permanent in 1937.[3] The model was copied by others later: Spain's *Instituto Nacional de Industria* (INI) was set up in 1941, and Italy created the *Ente Nazionale Idrocarburi* (ENI) to support the energy industry in 1953.[4]

[3] By the 1950s, IRI controlled 80 percent of shipbuilding, 40 percent of railway rolling stock manufacturing, 60 percent of raw iron production and more than 40 percent of steel production (*Foreman-Peck* [2006] p. 42).

[4] War can also push the economy away from the ideal of competition-based operation. During World War I, several countries nationalised companies, generally temporarily. For instance, the US nationalised AT&T, the telecommunications company.

During the great 1930s reshuffling of the banking system and industrial financing, most European countries adopted new banking laws (*Cassesse* [1984]). One thing these new laws had in common was excluding the activities of banks from the scope of commercial law in many respects, thus allowing direct forms of state control and, when necessary, intervention. Forms of credit flow were regulated, short- and long-term lending were regulated separately, new requirements were introduced in order to ensure liquidity, limits were put on the amount of industrial stocks banks could hold etc. State control over banks also meant that the state was forced to make decisions on the fate of lots of companies.

In December 1931, a new institution was set up in the United States as well: the *Reconstruction Finance Corporation* (RFC). The RFC provided loans to banks, railways and state and local governments, and later on – as deposit insurance had not yet been introduced – also participated in the compensation of bank deposit holders. After 1941, the RFC participated in the financing of large military investments. It was abolished in 1957. As the above shows, similar crisis management mechanisms were used in various countries, but the differences in their economic environment significantly affected their lifespan (*Kindleberger* [1984]).

Crisis cartels were strengthened as part of the crisis response in the United States, Italy and other countries, including Germany[5]. Market structures were clearly shifting, but there were other measures pointing in the direction of cartel growth, too. In Italy, a ban on setting up new factories and expanding existing ones was put into place, and corporatist trade unions were set up by the state with the power to sign regional wage agreements. In Germany, wages were frozen in the year Hitler took power, and the number of cartels was raised with an eye towards the state taking control (*Cole–Ohanian* [p. 2013]).

The dividing line between bank bailouts and corporate bailouts was fuzzy during the 1929–1933 crisis, partly due to the characteristics of banking systems. During the 2008 crisis, strong attempts were made to apply the methods used in the banking bailouts to the corporate sector, but they met great resistance. Attempts were also made during the 2008 crisis in the United States to set up a new institutional framework for corporate bailouts. After the adoption of the law aimed at rescuing the finance sector (*Emergency Economic Stabilization Act of 2008*), partly inspired by that Act, proposals have been made on how to make troubled companies more viable in the long run by supplementing the Bankruptcy Act (*Pearl* [2008]). However, the consolidation of the banking sector itself also required a series of decisions that distorted competition.

[5] The highest court of the German Empire held in 1897 that business freedom and the freedom of contract meant that cartels did not violate the business interests of other market operators. This kicked off a period of fast cartel growth, with 385 cartels by 1905, 550-600 by 1911 and 1500 by 1923. Although the Government tried to curb abuses of economic power, the only measure they managed to put into place was cartel registration. By 1933 – the time of the Great Depression – there were 3000 to 4000 cartels in Germany (*Kühn* [1997] pp. 116–117).

Between 2008 and 2010, € 1.5 trillion was spent in the European Union on bank bailouts (state guarantees, recapitalisation, asset impairment, liquidity support), which amounted to 12.5% of GDP at the time (*Lannoo–Napoli* [2010] pp. 10–12). The European Commission did make an attempt to avoid competition-distorting aid (for instance, aid could not be used for acquisitions), and it gradually shaped the support approval system through its decisions, but even so, various member states took some measures that were seen as distorting competition, and which ended up before the European Court of Justice.[6] Some bank bailouts took the shape of nationalisation. Where such ownership shares stayed in the state's hands for longer periods, the distortion to competition was assessed to be greater. (*Igan et al.* [2019] p. 9).

The "too big to fail" principle[7] was an important argument for the bailout of the banking sector, and some wanted to apply it to other sectors as well. Bankruptcy and liquidation organisations applied this principle to large American auto makers, and demanded an amendment of the Bankruptcy Code. Other experts, while admitting that the crisis of the motor industry could lead to widespread losses due to the central role of the industry in the economy (massive supplier network, large dealership and service network), felt that it did not have the potential to cause systemic collapse. If companies are not eliminated in accordance with bankruptcy law, then the market-cleaning power of competition cannot be realised, and companies with poor management or a poor business model are not allowed to fail (*Committee on Banking...* [2009] pp. 80–94). In the end, the American auto industry bailout did not follow the "too big to fail" principle; in some cases, troubled companies were given support using a special version of bankruptcy proceedings (Chrysler, General Motors). The state acquired ownership, manufacturer warranties were supported by the state, demand support measures were enacted, the financing issues of distribution networks were treated and new company managers were appointed (*Tracking...* [2011]).

Car makers were given support outside of the United States as well. Although previous British experience, after the failure to rescue British Leyland several times, was not very promising and none of the companies came close to bankruptcy, car makers in France, Italy and Spain were given significant amounts of support aimed at propping up demand, supporting research and development and maintaining their distribution network. The European Commission threatened to take action against the elements of the French bailout measures that aimed to protect French jobs and suppliers only. The competition commissioner at the time, Neelie Kroes stressed that state aid measures must comply with both competition policy and free movement of capital rules.

Although crises require immediate intervention, and experience from previous crises can provide some guidance in choosing intervention methods, crisis man-

[6] On the competition-distorting effects of the measures taken in the Hungarian banking system during the crisis, see *Várhegyi* [2012].

[7] For detailed analysis, see *Mérő* [2013].

agement measures that can be removed from the regulatory palette in a short time should be applied once the crisis has stopped spreading (*OECD* [2009*a*]). One common reason why crises drag on is that extraordinary measures are kept in force in the hope that their cost will eventually be recouped. This is borne out by the above-mentioned experiences of the 1930s crises. At the same time, economic analyses did not question the importance of the role of competition in the economy. The banking sector's "too big to fail" principle was eventually replaced by the consideration of systemic risk, and strong objections were voiced against using the principle in the real economy. In fact, the American Congress declared, at least in principle, that the "too big to fail" principle would not be applied any more.

Relatively few analyses of the results of the measures have been published. Without these, recovery from the crisis can prove to be a success for all instruments, creating a lower level of acceptability for state intervention. Corporate behaviour is also affected by state intervention seen during a crisis: it may pay to exaggerate the dangers. The 2008 crisis and the following sovereign debt crisis siphoned available funds away from industry support (*Delgado* [2011] p. 8). When the 2008 financial crisis was over, further active state participation in various industrial support programmes was announced. In the United States, Barack Obama announced the creation of 15 manufacturing industry innovation centres. In the United Kingdom, Prime Minister David Cameron, citing the market's inability to generate the industrial capacities needed by the country, announced in November 2012 an industrial strategy designed to meet this objective. In Japan, Prime Minister Abe Shinzo set up a new government body aimed at promoting economic growth, which included a new industrial competitiveness council that draws up an economic growth strategy (*Stiglitz et al.* [2013] pp. 2–3).

The crisis generated renewed interest in the manufacturing industry. 70 percent of world trade is made up of products of the manufacturing industry, and 85 percent of research and development subsidies goes to manufacturing. The European Union's goals include increasing the share of the manufacturing industry. Industry 4.0, the digital structural reform that is also called the new industrial revolution – the emergence of new types of consumption and trade – has posed a new challenge to competition and sectoral regulation. On the public policy palette, the crisis of 2008 and its afterlife pointed to a new balance of industrial and competition policy instruments.

SEESAW: THE COEXISTENCE OF COMPETITION AND INDUSTRIAL POLICY

The imperfect operation of markets motivates governments to intervene. They appear to have two types of intervention options, but some authors consider competition policy to be a type of industrial policy. According to *Armentano* [2007], most American antitrust regulation is essentially a type of government planning. Merger guidelines determine which companies may merge and how, and they can even require certain parts of a company to be sold. The history of antitrust regulation is full of decisions involving market restructuring, such as the case of *Standard Oil* and *AT&T*, when it was decided to break up entire industries (p. 25).

The court issued its decision on the telecommunications monopoly of AT&T in 1984, and until the new telecommunications law was adopted in 1996, the judge essentially became responsible for implementing telecommunications policy. In the case of Microsoft's antitrust lawsuit, breaking up the company was again one of the options; in the end, an agreement was reached setting out behavioural remedies, which had to be constantly monitored. We quoted the opinion of *Greenspan* [1967] on the Sherman Act, which, in Greenspan's opinion, kicked off a series of erroneous decisions. *Armentano* [2007] believes that antitrust regulation cannot be reformed, and the Act and the authorities should be abolished. There was a time when Ronald Coase, seeing the long-standing problems with the operation of the communication regulatory authority, the *Federal Communications Commission*, also felt that perhaps it would be best to abolish it (*Coase–Johnson* [1979]).

Court decisions can be based on a mix of industrial and competition policy considerations; quite often, decisions made in antitrust cases appear to be based on industrial policy considerations. If consumer welfare is not what is considered, then attention is often focused on competitors and not competition, resulting in decisions with industrial policy implications. When competition policy is used to achieve multiple goals, industrial policy considerations may come to the fore. Court decisions lag behind public policy changes, and they are influenced by prior decisions, which can create a "path dependency" in courts. American jurisprudence is a good example of this. Daniel Sokol describes the 1950s and 1960s as follows: big was still considered bad, merger efficiencies were ignored, vertical restraints were per se illegal, intellectual property was subject to the nine no-nos. From the 1970s, decisions based on these principles were increasingly seen as aid provided to inefficient competitors (*Sokol* [2015] pp. 1251–1252).

However, the scope of competition law has always been rather limited. In regulated industries (banking, railways, telecommunication, energy industry etc.) in the period before deregulation, competition authorities did not have much control over the industry. After market liberalisations, the sectoral regulators had more limited powers, but their approval is still required for mergers, for instance. Nevertheless, there are numerous other economic sectors that are legally – fully or partially – exempt from competition regulation. Agriculture, fisheries and insurance enjoy exemptions in most places; the United States has more than 30 such exemptions (*White* [2008] pp. 7–10).

The provisions of other laws often conflict with antitrust. These include regulations on tariffs and quotas, agricultural subsidies, state procurements that prioritise the purchasing of domestic products, taxes or subsidies that selectively affect specific sectors, or even prioritising domestic companies when it comes to commissioning military research or production. In the United States, state rules could also result in reducing competition. In regulated industries, the number of bank branches, road transport companies or long-distance telephone service providers within a state could be capped. In 1943, the Supreme Court held that such limitations are only valid if they are clearly part of state policy, and the state itself oversees their enforcement (e.g. taxis).

Exemption from competition rules is often justified by citing market failures. Well-intentioned efforts to fix these problems are often mixed with various forms of lobby activities, which several models of rent-seeking behaviour have sought to explore (*Dal Bó* [2006]). The history of the FTC, described above, illustrates how quickly an authority set up with the best intentions can be captured by diverse interest groups. Occasionally there are efforts to reduce the interplay between politics and the economy; the United States Congress passed several laws on campaign financing, such as the Tillman Act of 1907 or the Federal Corrupt Practices Act of 1925. However, a 2010 Supreme Court decision dismantled the restrictions on political contributions, giving rise to even stronger suspicions among those who protest against intertwining (*Lamoreaux* [2019] p. 113).

Up to the early 90s, certain types of public procurements were seen as especially important in Europe. In most countries, certain services (water, natural gas, electricity, telecommunications, mail, transport) were provided by state-owned companies. The ratio of state purchases was quite high in developed market economies (up to 10–20 percent of GDP), and in some sectors, there was essentially no trade between the countries of the Common Market. In these markets, a state buyer in a monopoly position was facing a monopolistic or oligopolistic private supplier, manufacturer, which made the buyer-seller relationship interdependent.

Buyers, who were operating large technological systems, infrastructures, primarily needed technologically reliable suppliers who could meet special needs and were able to ship quickly in all circumstances. In return for meeting these requirements, domestic suppliers demanded relatively continuous orders, partial payment of the development costs – which are extremely high for these products – and the most powerful restriction of import competition. In markets like this, prices were of course largely secondary to other conditions (technical parameters, reliability, delivery deadlines). The European Commission analysed a situation of this type – the special relationship between a supplier and its state- or municipally-owned customer – in connection with the merger of the rolling stock manufacturing units of *Asea Brown Boveri* and *Daimler Benz* (*Motta* [2004] pp. 286–292). The 2019 *Siemens–Alstom* case was part of the wave of rolling stock manufacturing mergers that followed suit.

The justifications brought up for the exclusivity of domestic orders, apart from the mutual dependence, have included strategic interests and employment policy considerations. Mutual dependence was conserved by differing country standards (e.g. in railways, in telecommunications and in electricity production), direct subsidies and research and development contributions. In the late 1980s, a study done for the Commission showed that all countries had manufacturing capacity for most product types purchased by the state, but they did not sell to each other. Eliminating restrictions could generate significant savings (*Cost of Non-Europe…* [1988] pp. 3–15, 44). This is a special type of restriction of competition, in which a state buyer with exclusive rights prevents foreign competitors from entering the market through its purchasing policy.[8] By the late 1990s, when exclusive arrangements ended and most suppliers were privatised, the tight constraints on suppliers were loosened, and a powerful shift started among manufacturing industry suppliers.[9]

There were examples of competition-distorting state aid of dubious value in every era. Part of the problem is that subsidies were already targeted at declining sectors. There was rarely any attention paid to the issue of how much these subsidised companies – the survival of which was desirable for the employment they provided or for other reasons (winning votes, for instance) – reduced the otherwise efficiency-increasing effects of competition. The German economic miracle happened with significant state aid.[10] While state aid only amounted to half a percent of net domestic product in the 1930s, they rose to 2 percent during the post-war boom. However, the bulk of the money was spent in declining industries, such as coal mining, steel manufacturing, the textile industry and shipbuilding.

German reunification once again consumed massive amounts of state aid, and the distribution of funds among federal, state and local levels of government meant that the lower the level of decision-making, the more likely the funds were to end up in declining sectors. In some member states of the European Union, the share of state aid in the manufacturing industry became extremely high by the 1980s: close to 10 percent in Italy and 13 percent in Greece, compared to 3-4 percent in Germany and the UK (*Foreman-Peck* [2006] pp. 47–48).

Regarding political influences, we should note that analysis by the European Community on state aid and politics in ten countries in the 1980s showed that a more fragmented party structure generally correlated with higher state aid ratios.

[8] Ericsson is often brought up as an exception: it did not get domestic orders, so it had to find export markets and became a successful company through that.

[9] In the United States, high tech sectors were prioritised when it came to state purchases. In the 1970s, 80 percent of the output of the aeronautical industry, 50 percent of telecommunications equipment manufacturing and 40 percent of electronic device component manufacturing was for state buyers, directly or indirectly. The largest buyer was the military (*Wescott* [1983] p. 145). State subsidies was also handed out in emerging projects on an ad hoc basis, often unsuccessfully. The Anglo-French Concorde airplane project was carried out with significant state support, as was the development of British AGR nuclear reactors.

[10] An increasing number of authors question whether state policies really had as much of a role in Japan's similarly successful post-war growth as was previously thought. There are especially strong doubts around the role of Japan's Ministry for International Trade and Industry (MITI). Truly successful, growth-generating, efficiency-increasing industries grew to a large size without state support (Sony, Honda, Panasonic); what is more, state aid, due to its powerful political aspects, did more to slow growth than to spur it (*Hatta* [2017]).

When companies were in a stronger lobbying position and a right-wing government was in power, state aid was higher. However, the time to the next elections was not shown to have any influence on state aid (*Neven* [1994]).

The spectrum of industrial policy interventions includes creating national champions as well as keeping foreign companies out of the national market. Naturally, national champions can now be international (European) like *Airbus*, or as supporters of the *Siemens–Alstom* merger thought. The "creation" of national champions became popular in the 1960s (although companies may have been given support with the same justification at other times too), when it was felt in France that the right answer to the "American challenge" was to create internationally competitive companies through mergers and state aid.

Similar processes took place in Britain too: the job of the Industrial Reorganisation Corporation (IRC), established in 1966 and operating for four years, was to merge other companies into what was considered to be the best company of the sector. This was the case, among others in the automotive industry, the electrical engineering industry. This is also how the steel giant British Steel was created out of 14 companies, despite the fact that the British competition authority of the time (the Monopolies and Mergers Commission) opposed the mergers (*Bollino* [1983] p. 52, *OECD* [2009*a*] p. 27). In the early 2000s, the German competition authority also opposed the merger of E.ON and Ruhrgas; however, the competent ministry supported it, and eventually a deal was reached, allowing E.ON to buy out Ruhrgas' shareholders.

During the period of privatisations, there was an especially strong drive to stop companies and service providers from ending up in the ownership of foreign stockholders, or at least delay that process. This was made possible by the introduction of "golden shares". This special share type was introduced in part to appease the opponents of privatisation, and in part to keep out foreign capital, which was felt to be justified in some cases. There was also an intention to protect newly privatised companies from unexpected mergers and acquisitions, and to control market concentration processes. Out of the 18 stock market privatisations in Great Britain, special shares were used in 15 cases. In the European Union, a review of this special share type started in 1997, and it was found to be contrary to the operation of the European Union. By 2004, member states largely ended their use. Mergers of domestic companies also provided opportunities for keeping foreigners out. One example is the merger of GdF and Suez in France in 2008, when the Italian ENEL's bid to obtain Suez was blocked. The Government backed the GdF-Suez merger, and the European Commission didn't block it, only requiring company divestiture remedies.

While large corporations were being created in Europe – which doesn't necessary mean a general increase in industrial concentration – attention was paid repeatedly to concerns about size in the United States. In the late 1930s, President Franklin Roosevelt created a special committee (Temporary National Economic Committee), which spent three years examining the issue of the concentration of economic power. First, the committee examined the patent issues of some specific sectors (glass, automotive), then it made proposals for the reform of the patent system. The study commissioned by the committee described how large companies used patents as barriers to entry, and how licensing agreements in reality functioned as market sharing arrangements. The committee recommended making licence handovers compulsory, so that anyone could purchase licenses for a fee. Although Congress did not adopt the proposal, the committee chairman, who was also the head of the DoJ's antitrust department, applied it in his day-to-day work. 136 such licence agreements were signed until 1975 (*Lamoreaux* [2019] pp. 107–108).

In the 1950s and 1960s, company size was the main consideration in American competition regulation; market structure was seen to be the main source of problems. Inquiries were based not around companies, but industries or sectors, the structure of which fundamentally determines the decisions and behaviour of companies, which is reflected in their performance. The structure–conduct–performance (SCP) paradigm is essentially this method of analysis as applied to competition regulation. By the 1970s, the validity of this paradigm was questioned as the number of available economic analysis tools grew: such as game theory models allowed for more refined analyses of corporate behaviour than before.[11] However, better analysis failed to bring about an immediate paradigm shift in the practice of American antitrust law. Courts were slow to accept new economic arguments, and the authorities – although they reached their conclusions using the new toolbox – often based the arguments they made in court on market share and market structures (*Shapiro* [2019] pp. 74–75).

The change is well illustrated by the work of two successive committees of two consecutive presidents. While preparing for the 1968 election, Lyndon Johnson asked Phil C. Neal, law professor and Dean of the University of Chicago to set up a committee to prepare a report on competition in the American economy, and make proposals for the reform of antitrust. The report was completed four months before the election (see *Hovenkamp* [2009]), but Johnson did not use it in his campaign, as he withdrew from the candidacy.

The report proposed fundamental reforms, including a new law on concentrated industries, based on which inquiries could have been launched against oligopolies. The proposal was not to allow a company to have more than 12 percent market share in the sector if oligopolies are broken up. Furthermore, a ban on mergers was proposed if the combined market share of the four largest companies exceeded 50 percent, or if the market share of the company wishing to merge exceeded 10 percent. The report suggested indiscriminate licensing agreements once again, i.e. if a single licence sale was made, all other licence agreements should be required to have the same terms. The report was not adopted unanimously, and none of its

[11] On the changes of the use of economic analysis in competition policy and a detailed analysis of this process, see *Valentiny* [2019].

recommendations were implemented. The election was won by Richard Nixon, who set up a committee of his own, led by professor of economics George Stigler, also from the University of Chicago. The committee rejected any assumed correlation between market concentration, profit size and constraints of competition, and made numerous technical proposals to amend the competition rules. The recommendations of this committee were not implemented, either (*Hovenkamp* [2009] pp. 1–3).

In the structure–conduct–performance framework, they focused on the sector, and sought to interpret the relationship between market structure and performance through cross-sectoral comparisons. Through this process, the problem of endogeneity became clear; thus, causality was not determined with any degree of confidence. Therefore, the focus shifted to the behaviour of companies: new inquiries – stressing the differences between sectors and the importance of details – were launched taking into account the institutional specificities of each sector. A more thorough consideration of efficiency, the theory of contestable markets and empirical studies based on these ideas started to chip away at the validity of the structure–conduct–performance model, and eventually the use of game theory models brought about its complete rejection. It was proven that size and profit are of course correlated, as the most efficient companies are the most likely both to grow big and to be profitable. In the 1980s and 1990s, instead of size, the focus was on the effects of corporate behaviour on competition and on the harm done to consumers.

Hosts of empirical studies confirmed that competition contributes to achieving industrial policy objectives. Productivity growth, which is a prerequisite for economic growth, is ensured by selection between companies and the elimination of inefficient companies. The most effective tool against inflation and excessively high prices is competition and effective competition enforcement. Competition can spur innovation, encourage new companies to enter the market and promote the rise of emerging industries (*OECD* [2009*b*] pp. 41–44).[12]

The process of deregulation, privatisation and market liberalisation, which started in the United States in the late 1970s and spread to Europe in the 1980s and especially in the 1990s, strengthened competition, even though it was based on "classical" industrial policy considerations: top-down transformation of certain sectors, often for budgetary reasons. These moves can also be seen as the result of a series of government failures, as the previous regulation of these sectors had proven insufficient in the United States. In Europe, it became clear that the state had been unable to provide management and investment financing to state-owned companies and service providers for decades. The end result – and partly, the intention – was the strengthening and stimulating of competition in numerous areas of the economy that had been free of competition in the last decades. The new sit-

[12] On the links between innovation and competition, and on innovation and research and development support as central issues of industrial policy, see *Aghion et al.* [2005], *Halpern–Muraközy* [2012], and *Lőrincz* [2014].

uation also brought changes to the relationship of sectoral authorities and competition authorities: sectoral regulation gradually started to use the analytical criteria of competition regulation when selecting markets that needed intervention, and, what is more, inter-institution connections grew stronger as well: the two operated as if they were one body (Germany) or were actually merged (Netherlands).

However, the analysis of the issues of American antitrust and its hundred-year history mask the fact that competition authorities are themselves quite new institutions, even if various other institutions and the courts had worked to promote the principles of competition before they were set up. In many cases, the creation of sectoral regulation predated the adoption of a competition law, for instance. More than 120 countries around the world have a competition law, but about 90 of them only adopted one after 1990 (*Hyman–Kovacic* [2012] p. 1). This applies to the countries that joined the EU in 2004, but it is also true of some older member states (e.g. Italy, Ireland, Netherlands). The growing acceptance of competition policy over the last two decades (though not necessarily its growing application) is reflected by the fact that when the organisation of competition authorities, the International Competition Network (ICN) was set up in 2001, it only had 14 members, but membership grew to 127 by 2013.

However, the crisis of 2008 also brought about a change in the perception of competition. Many hold failures of regulation – and especially the regulation of the financial sector – responsible for the crisis. The failure of a few large corporations (Enron, Worldcom) raised the issue of company size already before the crisis, even though they were more related to competition problems in another sector: excessive concentration in auditing. Companies founded before the crisis that grew to a large size, such as Amazon (1995), Google (1998) and Facebook (2004) kicked off another wave of concerns about company size. Only some of the issues are related to competition (these include the advertising ranking policy of Google, acquisitions, mergers), most of them are to do with other areas of public policy, such as data protection. There are continuous calls for breaking up these companies, which matches the goals of the "new Brandeisian" movement that is concerned with market concentration and company size in general.[13] This despite the fact that the above-mentioned company bankruptcies proved that poorly operating large companies can fail, and the market quickly fills their place. Keeping up with changes in social norms, reform proposals aimed at eliminating social inequalities have raised the possibility of changing the goals of a competition policy, which currently focuses on consumer welfare exclusively (*Fox* [2018]).

Many feel that industrial policy and competition policy complement one another. If an intervention of an industrial policy nature is carried out, then it has to be compatible with the principles of competition policy. Others hold the principle that industrial policy has to be limited to competition policy. According to the first

[13] For a detailed analysis of these issues, see *Gönczöl* [2019].

approach, industrial policy can only be successful if it affects sectors that already have competition, and does not limit competition. I.e. it must not lift companies out of this circle, but rather support all companies equally. Industrial policy needs to be horizontal (*Stiglitz et al.* [2013], *Sokol* [2015]). *Aghion et al.* [2015] carried out an analysis of Chinese companies, which indicated that a "competition-friendly" industrial policy is possible in principle. Companies' performance improved more in sectors where there was originally competition and where subsidies were spread as much as possible across the sector. Examined by support type, the findings were true of tax relief, but not of loans and import duties. How non-competition-distorting industrial policy interventions may be designed without influence from various interest groups is an open question of course. The main message of the analysis of *Agion et al.* is that the debate on industrial policy cannot simply be about taking a stand for or against industrial policy.

CONCLUSION

Competition policy and industrial policy are both (along with other public policy instruments, such as monetary policy and budgetary policy) part of a public policy package that governments use to try and achieve economic growth and greater welfare. Although their arguments and justifications are often opposed, they work in parallel in practice, with constant contact points between the two. This often makes it difficult to separate them, especially when considering the motivating force of interventions: the activities of interest groups. Competition regulation and sectoral regulation are carried out with the ambition of serving the public interest, but – as we have seen – the creation of the institutions overseeing them was marked by a compromise that emerged from the competition and conflict of a series of special interests. For instance, the implementation of the Sherman act was heavily influenced by such competing interests.[14]

Through the history of American regulation, the powerful lobbying influence of the regulatees generally played a significant role in the creation of federal regulatory agencies. The basis of federal telecommunications regulation was the 1913 Kingsbury Commitment, in which AT&T, under pressure from an increasingly ominous antitrust inquiry into its anticompetitive practices, proposed the introduction of federal regulation in the sector. In return for a legally protected monopoly, AT&T, in addition to state regulation, accepted federal regulation by the Interstate Commerce Commission (ICC), a body set up in 1887 that had only been involved in railway oversight up to that point (*Kiss* [2008] pp. 23–24).

[14] Regarding the interest group theory of regulation, *Antal-Pomázi* [2017] provides an analysis, proposes a model and tests that model.

The electricity industry has taken a similar approach to state regulation. The president of the most important electricity industry association, Samuel Insull stated as early as 1898 that service providers were interested in standardisation and the separation of peak and off-peak consumption, i.e. influencing demand patterns. The most suitable framework for this would be state or federal regulation instead of fragmented local administration and regulation – which had been the norm due to concessions. If the regulation were to include price regulation as well, then the industry, demanding in return the declaration of exclusive rights, would have to accept that as well (*Hausman–Neufeld* [2002] p. 1057). Insull's holding company eventually went bankrupt in 1931, for similar reasons in many ways to Enron in the 2000s (accounting manipulations, among other things). This bankruptcy played an important role in the 1934 creation of the stock market regulator and the 1935 creation of the federal electricity regulator (*Cudahy–Henderson* [2005]). Hearing the voices demanding regulation, Facebook recently proposed some regulatory conditions regarding itself, which the European Commission rejected.[15]

There are some areas in which there is less resistance to industrial policy interventions. One of these areas is the fight against the effects of negative externalities (e.g. environmental protection). Market competition is also seen to be limited in the knowledge industry (research and development), and interventions are accepted. Important public policy matters like the protection of democracy are also brought up as arguments in debates on competition or industrial policy. The actions against Standard Oil (1911), the distribution of radio frequencies in America (1920–1940) and the behaviour of today's high-tech companies all reflect the worry that companies with excessive economic power may take control of politics.

These all lead to the conclusion that market and competition don't exist in themselves: they both require as prerequisites a set of rules that determine their operation. The influencing of these rules in multiple directions is what the duality of competition and industrial policy is all about. The rules provide a framework, and market players may either adhere to or do not. Therefore, competition is not the default state of the market; the default state is a combination of competition and restriction of competition.

[15] Sectoral lobbies can make their voices heard not only for regulation, but also when it comes to deregulation. This type of rent-seeking intensifies when the incumbent's position is no longer sustainable, and the possibility of entering new markets arises (*Crew–Rowley* [1986]).

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