

# **Antitrust enforcement in the digital economy: what lessons for China?**

**Alberto Heimler**•

*Report prepared for the Cairncross Foundation study on ‘Competition policy for China’s digital economy: Some international perspectives’.* March 2022.

## ***Abstract***

The digital industry is reaching a mature stage. In recent years in the United States and in Europe a discussion had started on the proper tools to adopt in order to stop serious anticompetitive practices. Many believe that antitrust enforcement is sufficient, others argue for the introduction of specific regulatory tools. The major reason why antitrust seems less effective in digitals is that the opportunities to discriminate against competitors are very large. While price discrimination is relatively easy to identify and to sanction, non-price discrimination which is widespread in digitals is much trickier to prove because it may be the result of many different strategies. Furthermore the affected party of these anti-competitive strategies is not the final consumer but other firms, making more difficult to detect the theory of harm. As a result antitrust enforcement, especially because cases last for years due to their complexity, is often on the defensive, prohibiting practices already no longer that relevant and late with respect of current anti-competitive practices.

The benefit of a regulator is that it provides legal certainty and sets rules ex-ante and valid for all. The risk is that these rules may be too restrictive and block also pro-competitive practices. In this respect China has adopted a much more flexible approach, relying on the antitrust authority, as provided by the Chinese State Council in its Guideline for the platform economy industry. In principle an antitrust authority is much more effective, provided that cases are decided based on accurate evidence, rigorously and quickly. In an innovative industry the process of decision making by the antitrust authority cannot last for years. And a well-staffed and professional authority is a necessity because cases very often require the agency to collect a vast amount of information that a single complainant is unable to provide (this is why private litigation based on the antitrust provisions is not a solution in digitals). Furthermore only a well-staffed agency can devise and monitor the required remedies. This why SAMR needs to multiply its staff and reach the size of antitrust agencies in comparable jurisdictions in order to increase its effectiveness.

Relying on antitrust enforcement requires defining a precise economic objective since existing legal provisions are drafted in a very general way. A clear objective provides the legal certainty that legal provisions now lack. The maximization of consumer welfare has been the standard that has served us well for decades. The digital economy has put into question the consumer welfare standard because the possible anticompetitive effects of platforms strategies are often not directed to final consumers, but to other firms that provide complementary services to the dominant platform. A recently developed standard based on transaction cost economics is discussed in the paper and applied to a number of recent antitrust cases to show its effectiveness.

## ***1. Introduction***

The digital economy poses new challenges to antitrust enforcement worldwide. The main reason is that the development of the digital economy follows patterns that were never seen before in the economic history of the world. All of us were taught that the reason for the success of a company is its profitability and that, as a result, expected profits determine entry. The pattern of development of

---

• Professor of Economics, Scuola Nazionale dell’Amministrazione, Rome (Italy) and Chairman, Working Party on “Competition and Regulation”, Competition Committee, OECD, Paris (France). I would like to thank Cyril Lin for very helpful comments that substantially improved the paper and Ginevra Bruzzone for pointing out to me the importance of discussing the contestability assumption in the EU Digital Markets Act.

the digital industry follows, or at least has followed, a different more complicated pattern: Companies get their name/brand established not by earning profits, but by being successful in offering free services to users. When users multiply, investors arrive in bulk and the companies' stock prices increase, probably under the belief that profits will somehow follow. Sometimes this prediction is correct sometimes it is not, but in any case, it often takes years before any turnover shows up at all.

All this implies that entry decisions are not driven by (immediate) profits like in traditional sectors (which means that entry barriers are much lower than usually thought. All you need is a product/service that users appreciate). More importantly, profits start to pile up once the company is already quite successful (big and maybe already dominant), since in the digital economy turnover and profits are very much associated to size.

This is why the digital industry poses many challenges to antitrust enforcement. In merger control the major issue is that very often big digital companies acquire smaller, sometimes only potential rivals. Static market power is unaffected because the smaller rival offers its services for free and did not yet develop any turnover, very often the service it supplies is new and different. Nonetheless many claim that these mergers should be blocked because the smaller rival may have the potential to challenge in the future the market power of the big established digital firms. This potential is of course very hard to prove and the possibility of making mistakes is huge. This is the reason why antitrust authorities are very cautious. The challenge is indeed even greater because the digital economy is subject to very rapid technical progress and the 2-4 years' time frame which is normal in traditional industries as a safe (i.e. uncertainties are minimized) horizon to consider in merger control, leads to strong and often uncontrollable uncertainties. As for abuse of dominance type cases, they require very thorough investigations that only a very well-staffed and endowed agency is able to undertake since they require extensive analysis of data and of consumption patterns. As is well known, what matters in antitrust are not damages to a single competitor but widespread market wide effects that only a well-staffed antitrust agency has the possibility to discover and to evaluate. A related problem associated with this complexity, is that in many jurisdictions, and in particular in the US and in the EU, antitrust cases last a very long time and the issues addressed may rapidly become irrelevant or at least not as relevant as originally believed. Finally, while most anticompetitive practices by big digital companies follow somehow traditional patterns, more often than not they do not lead to a reduction of consumer welfare in markets where users already pay nothing for quite sophisticated services that they receive. As a result, in order to challenge them, a new foundation for antitrust (one that would allow enforcers to consider reductions of total surplus on all sides of the market) would have to be developed, in order to make sure that what is prohibited is indeed (total) welfare reducing.

This paper will first discuss the main objectives of antitrust enforcement and how they fit with the challenges posed by the digital economy. A new approach, recently developed by Darryl Biggar and myself, the transaction-cost approach to antitrust, is potentially better up to the task of identifying a standard for a competitive harm. I will then discuss some recent EU cases against the digital giants in order to show how effective antitrust can be and the challenges, in terms of information to be gathered and to be processed, faced by well-staffed antitrust agencies. In European type administrative authorities the procedural steps through which remedies are identified are in my view unsatisfactory and I propose some reforms so as to make the process more objective and secure.

Even though the European Union has been quite active and brought a number of cases against the dominant digital platforms, it clearly believes that antitrust alone is not sufficient to discipline the market power of the so-called gatekeepers, platforms that are essential for entry in specific markets, even short of dominance. In fact, the European Union has recently proposed the Digital Market Act, still under review by the EU decision making institutions, where a number of *ex-ante* obligations are imposed on these gatekeepers. I will briefly describe the Act and provide some critical

comments to a regulatory structure that I find possibly too rigid for accompanying the development of a fast-changing and innovative industry like that one associated to the digital economy. All this will be compared to Chinese institutions, discussing whether they are well structured and endowed to undertake the path recently suggested by the State Council Guidelines on the platform economy. Some recent proposed amendments to the Chinese AML go in the right direction but strengthening the human capital of the Chinese authority remains a priority. A discussion on recent developments in the financial industry and the role that competition can play there concludes the paper.

## **2. The objectives of antitrust enforcement**

The US Sherman Act was adopted in 1890 to reduce the power of the big industrial trusts and introduce a "comprehensive charter of economic liberty aimed at preserving free and unfettered competition as the rule of trade". According to Senator Sherman, "if we will not endure a king as a political power, we should not endure a king over the production, transportation, and sale of any of the necessities of life. If we would not submit to an emperor, we should not submit to an autocrat of trade, with power to prevent competition and to fix the price of any commodity". Probably Senator Sherman was right at the time and for a number of reasons: the Sherman Act was meant to achieve these broad objectives and it was written in very general terms, prohibiting restraints of trade and the attempt to monopolize markets. These very general formulations, however made it very difficult to respect them (because firms did not know for certainty what was prohibited and what was allowed) and then, of course, they made it also difficult to enforce them.

The subsequent case law tried to make these very general legal provisions workable, leading to much more specific prohibitions and many practices were prohibited irrespective of the actual impact they had on market competition. Horizontal price fixing, tying, exclusive territories, group boycotts, resale price maintenance were all prohibited per se, so that it was not necessary to prove that they actually restrained trade in the specific circumstances of each case. These per se prohibitions originating in the judgements of the US Supreme Court, while quite effective in providing legal certainty, led to highly inefficient outcomes. As Joshua Wright and Douglas Ginsburg wrote<sup>1</sup>: "The (Supreme) Court interpreted the Sherman Act ... to reflect a hodgepodge of social and political goals, many with an explicitly anticompetitive bent, such as protecting small traders from more efficient rivals".

As a result, in the 1970s and 1980s a mounting academic criticism, mainly originating in the University of Chicago, started to emerge on the way the antitrust statutes were interpreted and enforced, with economics providing the lenses by which to interpret and give a rigorous meaning to the rules. In 1977 this new Chicago approach was accepted by the US Supreme Court in the *Continental T.V., Inc. v. GTE Sylvania Inc.*, judgment<sup>2</sup>. The Court recognized that only "unreasonable" restraints of trade had to be prohibited, overruling the per se prohibition of exclusive sales territories. A few years later, in 1979, the Court made it explicit that "Congress designed the Sherman Act as a consumer welfare prescription"<sup>3</sup> and in 1984 that a "restraint that has the effect of reducing the importance of consumer preference in setting price and output is not consistent with this fundamental goal of antitrust law."<sup>4</sup>

By the 1990s almost all the existing per-se prohibitions were overruled in the United States and today only cartels continue to be prohibited per se. All this means that, while the law has become much more coherent and rigorous, prohibiting something through antitrust enforcement becomes

---

<sup>1</sup> Wright, J.D. and Ginsburg, D.H., (2013), "The goals of antitrust: Welfare trumps choice", *Fordham Law Review*

<sup>2</sup> The case originated from the denial of GTE to allow Continental to sell television sets in a territory already assigned to Sylvania. The Supreme Court affirmed in that case that there were good reasons for GTE to assign exclusive territories, i.e. allow for pre-sale services of high quality (433 U.S. 36, 1977)

<sup>3</sup> *Reiter v. Sonotone Corp.*, 442 U.S. 330, 343 (1979)

<sup>4</sup> *NCAA v. Bd. of Regents of the Univ. of Okla.*, 468 U.S. 85, 107 (1984).

much more difficult since the negative net effects on competition deriving from a given practice need to be shown in order to prohibit it. And the proof requires both factual evidence and a consistent theory of harm.

What this story tells us is that the very general Sherman Act provisions were first made more specific by per se prohibitions and made general again by a widespread acceptance of the rule of reason (guided by a vast and articulated case law).

By adopting the consumer welfare standard the US Supreme Court moved the evaluation of an antitrust offence from a simple formal exercise (i.e. is the clause leading to an exclusive territory?) to a much more complicated and complex effect-based one, where the effects were being assessed under a consumer welfare standard. The shift in approach was substantial and it can be appreciated by comparing the 1968 US merger guidelines where the “primary role” of merger control is “to preserve and promote market structures conducive to competition” (i.e. all that matters is to maintain a competitive market structure) with the 1982 merger guidelines where “mergers should not be permitted to create or enhance ‘market power’” and market power is not defined according to some structural market characteristics but by “the ability of one or more firms profitably to maintain prices above competitive levels” (i.e. the emphasis is no longer on market structure but on market outcomes).

This new effect-based approach to antitrust originated in the United States, but has influenced the whole world, imposing on enforcers the duty to show the negative anticompetitive effects of a prohibited practice against some standards, not always clearly defined.

In the United States and a few other jurisdictions the consumer welfare standard was explicitly adopted as a strict legal standard. In most other jurisdictions including the EU, consumer welfare was generically cited as the objective of antitrust enforcement, mainly in official speeches, not in judgements of the reviewing courts and, as result, antitrust authorities continued to pursue other vaguely defined objectives, in the EU the protection of the process of competition, coherent with existing legal provisions.

### *The consumer welfare standard*

The exact meaning of the term “consumer welfare” in antitrust law, first popularized by Robert Bork in 1978<sup>5</sup>, has been controversial at least among economists. Gregory Werden makes a credible argument that Bork intended something like a general equilibrium concept of welfare, closer in spirit to the standard (partial equilibrium) economic concept of total surplus<sup>6</sup>, but, in practice, Werden observation arrived too late (over 40 years after the book was published) and the US Courts consistently interpret Bork’s concept of “consumer welfare” as calling for focus on the welfare of the buyer side of the market.

As a result, the most common criticism of the consumer welfare standard is that, if competition law is primarily interested in promoting the welfare of buyers (or final consumers), enforcement should lead to the approval of mergers or cartels between competing buyers which increase the market power of the buyers in an upstream market, allowing them to reduce the price at which they buy an input good, as long as there is no adverse effect on the price paid by end-consumers downstream.

While in early years the criticism of the consumer welfare standard was limited to the academic world (and by the way only economists raised their concerns) and had mainly to do with the treatment of monopsony power and with price discrimination, in recent years with the development of the digital giants (Google, Amazon, Facebook, Apple and Microsoft), this conflict between the prescriptions of a narrow consumer welfare standard and the actions and objectives of competition

---

<sup>5</sup> Bork, Robert H. (1978). *The Antitrust Paradox*. New York: Free Press.

<sup>6</sup> Gregory J. Werden, ‘Consumer Welfare and Competition Policy’ in *Competition Policy and the Economic Approach* (Edward Elgar Publishing, 2011).

enforcers has evolved, especially in the United States, into a widespread political discomfort against current antitrust practices. According to this criticism, the courts and enforcement agencies were wrong, as Kovacic and Jones summarize it, in replacing “the original legislative commitment to protect smaller firms from oppression and preserve a democratic political order with a single-minded focus on consumer welfare and efficiency”<sup>7</sup>.

One of the early advocates for a switch away from the consumer welfare standard in the face of the developments in the digital world was Lina Khan<sup>8</sup>. Khan argued that a company that obtains a dominant position as a gatekeeper or bottleneck may be able to affect upstream competition in ways that do not affect prices to downstream consumers in the short run. For example, Amazon may use “its bargaining power to extract better terms from producers and suppliers, who, in turn, slash investments to meet its demands”<sup>9</sup>. For Kahn, this is an example of how companies may “exploit their market power in a host of competition-distorting ways that do not directly lead to short-term price effects” and would not be caught by a consumer welfare standard.

Kahn criticism did not remain in the academic journals but received a strong political backing by two leading candidates of the Democratic Party to the 2020 Presidential nomination, Bernie Sanders and Elizabeth Warren. As Kovacic and Jones (2020) describe it, these two candidates believed that “antitrust must return to its origins embedded in a broader citizen-welfare standard that addresses employment security, wage levels, economic freedom of consumers, the well-being of SMEs, the preservation of democracy, the diffusion of concentrated private and political power and a wariness of monopoly power in all of its form”.

However it is not so easy. Indeed, the proponents of this approach do not explain how inevitable trade-offs could be solved when enforcing the antitrust provisions. For example, should we allow an increase in market power associated with greater employment security or should we opt for a reduced employment security, but characterized by more competitive market outcomes? Should we accept greater market power, but reduced emissions or should we accept the higher emissions associated with greater competition? In any case, adopting the citizen standard, would require a revision of the existing case law of the last 40 years and a rebuilding of a new and different approach. There is not a common view and a common understanding for anything like it to happen. What could be easier to achieve is a rethinking in the objectives pursued by antitrust enforcement, maintaining most of the case and the existing legal provisions intact. Furthermore, while both Warren and Sanders do not have any political role any longer in the current Administration, President Biden has appointed Lina Khan as head of the Federal Trade Commission, a sign of sympathy to this new approach to antitrust. How and whether the case law in the United States will move in new directions is all to be seen.

The situation in the EU is different. Rather than a reform of antitrust enforcement, the Commission has proposed in December 2020 (more on this in section 7 of the paper) a new regulatory approach that would effectively carve out the digital platforms from antitrust enforcement, the same way as price and access regulation has made antitrust enforcement quite marginal as the disciplining instrument against the anticompetitive exercise of market power in the public utility sector.

### *A new objective for antitrust*

---

<sup>7</sup> See Kovacic, W. E. and Jones, A. (2020), Antitrust implementation blind side: challenges to major expansion of US competition policy”, *The Antitrust Bulletin*

<sup>8</sup> “... the current framework in antitrust – specifically its equating competition with ‘consumer welfare,’ typically measured through short-term effects on price and output – fails to capture the architecture of market power in the twenty-first century marketplace. In other words, the potential harms to competition posed by Amazon’s dominance are not cognizable if we assess competition primarily through price and output. Focusing on these metrics instead blinds us to the potential hazards.” Lina Khan, ‘Amazon’s Antitrust Paradox’, (2017) 126 Yale L. J. 710-805, 716-717.

<sup>9</sup> Khan, *supra* note 28, at 791.

In the past 40 years economics has helped develop a standard of harm in antitrust enforcement, serving as an instrument for interpreting legal provisions written in a very general way. Without the guidance that economics has provided, the law would have led to very discretionary enforcement practices. The economic approach has brought with it many advantages: the necessity to identify a theory of harm, the need to collect evidence that the theory is actually relevant for the case in question, an evaluation of the adequacy of possible remedies. We cannot renounce to all of this.

Existing concepts and theories continue to be relevant. Antitrust enforcement is a public policy like any other and as such its objective should be the maximization of total welfare, the sum of producers' surplus and consumers' surplus. The total welfare standard is the best candidate for serving as the objective of antitrust enforcement, as generations of economists have suggested. Farrell and Katz (2006) summarize the argument in this way: "... total surplus is an appropriate ultimate goal for antitrust enforcement .... We believe that total surplus is an appropriate ultimate objective because, as others have argued, there is a natural division of labor between efficiency-oriented policies and policies aimed at improving the distribution of income, and antitrust policy fits much better into the first category. Thus, we conclude that a sensible final goal of antitrust policy is to maximize total surplus without regard to distributional considerations"<sup>10</sup>.

However the simple version of the total welfare standard is not fully coherent with existing legal provisions. For example, the textbook approach to total welfare, characterized by fixed supply and demand curves, would not only allow a perfectly discriminating monopolist to exist, but would also promote its creation. Instead, most antitrust laws prohibit price discrimination. Furthermore, under a total welfare standard a merger leading to monopoly would be evaluated under the condition that total output is not reduced, by the way a much simpler test than that performed under a consumer welfare standard (where what matters are that prices paid by consumers are not increased), but a result that all competition authorities would find unacceptable<sup>11</sup> when the merger would lead to much higher prices even though output is not affected (which happens when the demand curve is vertical).

The recent criticism on antitrust by the new Brandeisian school<sup>12</sup> is based on a different perspective and simply rejects any measure of welfare. According to Lina Khan<sup>13</sup>, one of the early proponents as already mentioned, "antitrust law assesses competition largely with an eye to the short-term interests of consumers, not producers or the health of the market as a whole; antitrust doctrine views low consumer prices, alone, to be evidence of sound competition. By this measure, Amazon has excelled. It has evaded government scrutiny in part through fervently devoting its business strategy and rhetoric to reducing prices for consumers." And she adds, "in principle consumer interests should include not only cost but also product quality, variety, and innovation."

While she concludes that "an analysis of the competitive process and market structure will offer better insight into the state of competition than do measures of welfare", I believe that it is not necessary to return to the fairness concepts of the early days of antitrust and that economics provides the tools to address the challenges that she describes.

However a big effort on the part of antitrust authorities and the courts is required in order to go beyond the comfort zone of the consumer welfare standard. For example, Lina Khan argues that "because online platforms serve as critical intermediaries, integrating across business lines positions

---

<sup>10</sup> Joseph Farrell and Michael Katz, *The Economics of Welfare Standards in Antitrust*, (2006) 2 *Comp. Policy Int'l* 3.

<sup>11</sup> On the other hand, if we allow for efficiency defenses in merger control, then it would be a burden on the parties to prove that a lower output (and higher prices) increase total welfare when the merger specific efficiencies are higher than the deadweight loss.

<sup>12</sup> See Konstantin Medvedovsky, *Hipster Antitrust – A Brief Fling or Something More?*, *CPI Antitrust Chronicle* (April, 2018), available at <https://www.competitionpolicyinternational.com/wpcontent/uploads/2018/04/CPI-Medvedovsky.pdf>.

<sup>13</sup> Lina Khan, 'Amazon's Antitrust Paradox', (2017) 126 *Yale L. J.* 710-805.

these platforms control the essential infrastructure on which their rivals depend. This dual role ... enables a platform to exploit information collected on companies using its services to undermine them as competitors". She suggests a return to fairness as a standard to adopt.

Recently, in a number of papers, Biggar and Heimler<sup>14</sup> suggest that an antitrust standard has to be based on a clear and measurable characteristics and lead to a conventional welfare analysis, otherwise trade-offs could not be coherently addressed<sup>15</sup>. They suggest, as an alternative to existing standards, that protecting irreversible and relationship-specific sunk-investment is an intermediate objective that antitrust authorities could pursue and by doing so maximize total surplus, giving specific indication to market players on what is prohibited and to authorities on how to enforce the law.

Sunk relationship-specific investments are very common. For example, in coal-exporting countries such as Australia, coal miners may make a substantial sunk-investment in mines, which have little value without access at reasonable conditions to a coal export port. An airline may invest in developing flights from and to a given airport while relying on reasonable tariffs for take-offs and landing. Similarly an electricity generator investment relies upon access to an electricity grid at fair and reasonable prices. A seller of goods on Amazon's marketplace might be required to make a material sunk-investment in product research and development before offering the product for sale through Amazon's channels. Almost all significant, on-going transactions require some form of sunk-investment by one or more of the parties to a transaction.

The main problem with sunk-relationship-specific investments is that they are subject to the threat of "hold-up" – the risk that, once the investment is sunk, the counterparty in the transaction will change the terms and conditions of trade to expropriate the value of that sunk investment from the legitimate owner. In a competitive market, those investments are not specific to any one trading partner and cannot be expropriated because, if an attempt is made, an alternative buyer or an alternative seller could easily be found. However, if there are no alternatives, sunk investments may be expropriated by strategically changing the terms and conditions of trade by one party of the transaction.

Faced with the threat of hold-up, entrepreneurs will be reluctant to make essential sunk-investments or will make less valuable investments that are less prone to hold-up. Economic value will be foregone. This potential for economic harm gives rise to a solid economic justification for antitrust or regulatory interventions, providing also an indication of the remedies to be imposed (the antitrust standard above which a violation may be identified being the transaction price that would make the sunk-investment just profitable).

Lina Khan asserts that Amazon has attained a dominant position as provider of e-commerce infrastructure on which numerous online suppliers are forced to rely. She provides several examples that illustrate how Amazon has exploited that position by using its unique access to sales data to identify successful products, producing them itself and selling them at a much lower price,

---

<sup>14</sup> See Biggar, D. and Heimler, A. (2020), "Is Protecting Sunk Investments a Primary Economic Rationale for Antitrust Law?", *Journal of antitrust enforcement*, Biggar, D., Fels, A. and Heimler, A. (2019), "The Goals of Competition Law Debate and Competition Policy for Labour Market", *CPI Chronicle* and Biggar, D. and Heimler, A. (2021), "Digital platforms and the transactions cost approach to competition law", *Industrial and Corporate Change*

<sup>15</sup> For example, as Biggar and Heimler (2020) suggest, the fairness or the competitive process standard are silent on how to resolve trade-offs like for example: Does protecting the process of competition imply that a competition authority should prohibit, or promote, price discrimination? Does protecting the process of competition imply that we should force the owner of a bottleneck facility to sell to rivals at cost? Or is it better for the process of competition to allow a firm to decide with whom and on what terms to deal? Is it better for the process of competition to allow a merger to monopoly with substantial cost efficiencies, or is it better to prevent a monopoly irrespective of such cost efficiencies? Is it better for the process of competition to allow a dominant buyer of agricultural products to cut the prices it offers to farmers, if it passes some of those price cuts on downstream, or is it better to prevent it from doing so?

expropriating the sunk investment of its third-party sellers – in this case, investment in product design and development.

“It is third-party sellers who bear the initial costs and uncertainties when introducing new products; by merely spotting them, Amazon gets to sell products only once their success has been tested. The anticompetitive implications here seem clear: Amazon is exploiting the fact that some of its customers are also its rivals.”<sup>16</sup>

The competition concerns that have been raised against dominant digital platforms can be seen as part of a longstanding concern within competition law about certain actions by dominant firms which expropriate the value of investments by trading partners. The sunk-investment approach to antitrust provides an economic foundation for addressing such concerns within the existing legal framework and it also provides a standard for assessing a violation of the law, the standard being the trade conditions that would make the sunk investment barely profitable.

The sunk-investment approach to antitrust is particularly relevant for the digital world. Jacobides et al. (2018)<sup>17</sup> suggests that the relationship between different activities and firms directly and indirectly associated to a given platform is characterized by strict complementarities, implying strong dependency between them. If the relationship between firms is symmetric the opportunities of exploiting the negotiation power of one side of a transaction to extract from the other the full value of its sunk investment are limited, if not existent. However if the dependency is one sided, then the possibility of engaging in hold-up becomes much more likely.

In any case competition concerns are not just limited to attempts by a firm with a bottleneck or gatekeeper position to directly engage in hold-up. In some cases, for example, where price discrimination is infeasible, the bottleneck firm may prefer to use its position to change the market structure upstream or downstream, to place itself in a position to engage in hold-up further up or down the vertical supply chain. This behavior is sometimes referred to as vertical foreclosure. Such practices, also common in ecosystems, could well be addressed by adopting the transactions cost approach to competition law.

Biggar and Heimler (2020)<sup>18</sup> discuss in some detail the competition concerns that may originate in aftermarkets. These are markets where the purchase of a good (e.g., a car, a photocopier, or an elevator) commits the buyer to an on-going stream of purchases of maintenance services and spare parts. In a digital world aftermarkets can be defined as all complementary services/products associated to a hub. A firm that is able to monopolize this market for after-sales or for the supply of complementary services may be able to exploit the sunk investments of the existing installed base of customers by changing, after the purchase is made, the terms and conditions of trade. What matters here is not the high price of after sales services or of complementary services, but the fact that these terms change after a substantial base of customers have made the sunk-investment so as to abusively expropriate the sunk investment made.

Shapiro called this the surprise theory of antitrust liability<sup>19</sup>. Where customers are aware of existing terms and conditions of trade before buying, these can hardly be considered abusive. On the other hand, serious concerns exist where a firm exploits its market power after any upstream or downstream firms have made material sunk investments – particularly where there is a long history of dealing. In this case, the sunk-investment approach to antitrust suggests an intervention by the antitrust authority to protect those investments from exploitation due to changes in the terms and conditions of trade.

---

<sup>16</sup> Khan, *supra* note 22, at 782-783.

<sup>17</sup> Jacobides, M.G., Cennamo, C. and Gawer, A. (2018), “Towards a theory of ecosystems”, *Strategic Management*.

<sup>18</sup> See footnote 14.

<sup>19</sup> See Shapiro, C. (1995), “Aftermarkets and Consumer Welfare: Making Sense of Kodak”, *Antitrust Law Journal*, 63: 483-511

The sunk investment approach to antitrust has not yet made it into specific enforcement actions by any agency. I am confident of its effectiveness: It would not lead to expand or extend antitrust enforcement beyond what antitrust agencies already do; it provides a better rationale for enforcement initiatives and it shows that shortcomings of the consumer welfare standard, both in the digital and in traditional markets, could rigorously be addressed and tackled.

### ***3. Is antitrust able to discipline market power in the digital economy?***

One of the biggest shortcomings of antitrust interventions in the fast-changing digital economy is the long duration of proceedings, both in the EU and in the US. The two recent cases against Google decided by the European Commission<sup>20</sup> lasted years, with an in-depth investigation over 7 years long in the case of Google Shopping and 3 years long for Google Android. The US Department of Justice started a case against Google on October 20 2020. The judge who will hear the case established a calendar where the trial will start at the end of 2023 and conclusions are not expected before 2026 and then we have to consider possible appeals (should the case not be settled)

Cases in order to be relevant for the smooth development of an industry cannot exceed two years. It is true that collecting the evidence for an abuse of a dominant position requires much more data and evaluations than those provided by the complainant. However, there is a limit at how long an antitrust proceeding should last, considering also that on top we have to add judicial review (quite common in administrative systems), which could last other 3-5 years. The EU, the US and all antitrust agencies in the world should make every possible effort to speed up the process. The best solution, in the case of administrative systems with which I am more familiar, would be to declare, when formal proceedings start (in the EU at the time dawn raids are performed), the expected end of the procedure (constrained by law to be not more than a year, to be extended by an appealable decision), a practice followed by most other national authorities of the EU Member States. In this way internal teams would have a greater incentive to finish on schedule and furthermore the Authority would dedicate to the case the necessary manpower to achieve a speedy decision. In such circumstances case deadlines would be extended only when strictly required (since every extension would have to be formally justified and subject to appeal).

As for the substance of these Google cases, they follow quite traditional theories of harm, the exclusion from the market of equally efficient competitors by a dominant company. However, the facts of the two cases are quite different. I will refer to the EU cases, since the US case against Google is yet to be established and developed. I will also discuss the German Facebook case where the theory of harm, the violation of privacy rules, is instead quite controversial.

In the Shopping case Google, after having introduced its own comparison-shopping service in 2004, started to systematically give more prominence in users search results to its own service than to that of competitors. Google shopping services would be the only one to appear with great prominence on the first page of the screen. Evidence collected by the Commission in the course of the investigation “shows that even the most highly ranked rival service appears on average only on page four of Google's search results, and others appear even further down”. Additional evidence shows that “the ten highest-ranking generic search results on page 1 together generally receive approximately 95% of all clicks on generic search results (with the top result receiving about 35% of all the clicks). The first result on page 2 of Google's generic search results receives only about 1% of all clicks. This cannot just be explained by the fact that the first result is more relevant, because evidence also shows that moving the first result to the third rank leads to a reduction in the

---

<sup>20</sup> COMMISSION DECISION of 27.6.2017 (AT.39740 - Google Search (Shopping)) and COMMISSION DECISION of 18.7.2018 (AT.40099 – Google Android)

number of clicks by about 50%. The effects on mobile devices are even more pronounced given the much smaller screen size.”<sup>21</sup>

The case ended with a cease-and-desist order and Google had to devise a way to comply with the Commission decision. In particular Google created a separate company, Google Shopping Europe (GSE) in order to make sure that there is no cross subsidization from other Google activities and that every comparison service is treated equally. The complexity of the remedy shows the importance of a well-staffed and competent agency to be able to evaluate whether remedies are up to the task and the impossibility of a judge in a private litigation case to identify anything similar and more importantly to monitor its execution.

In the EU Android case, the theory of harm is less clear-cut. Until 2010 Nokia and BlackBerry were the major suppliers of smart phones operating systems. Nokia had developed Symbian that was by far the most successful of the time, disregarding Apple that was (and is) vertically integrated. At that time, in order for a smart phone to have a pre-installed Google search engine, Google had to pay phone manufacturers. Microsoft was also in the market, but with a different business model. Microsoft was selling to smart phone producers its own operating system but together they had to preinstall Microsoft search engine, Bing. Google followed the example of Microsoft by developing a competing operating system, Android, but it chose a different pricing structure than the one adopted by Microsoft. The pricing structure Google choose was very innovative: Android was open source and given away for free, but if smart-phone producers wanted some Google products pre-installed they had to pre-install them all. In particular, since smart-phone users had a clear preference for Google Play, Google would supply to phone manufacturers a version of Android that had preinstalled all Google products, Google Search, Google Play and Google Chrome. Android was very successful and by 2011 Google covered over 90% of the market. Phone producers could still use the generic version of Android and leave users free to install whatever they would desire. In any case, everything was for free.

According to the Commission this practice of tying Google Search to Google Play is abusive and strengthens Google dominance in the search engine market.

The problem with this decision is first that in 2010, when Google entered the market with Android, there were other operating systems in the market and also one, Microsoft, integrated with a search engine, Bing. Had Microsoft been successful with Bing, Google strategy would have failed. Things have changed in the following ten years and Google achieved a stable dominant position. Furthermore as people like to say, Google competitors are only one click away and users, unsatisfied with Google, could easily download from the Web whatever they desired.

The Commission is keen in proving the importance of pre-installation and that Google strategy restricts competition in the search engine market. Evidence was indeed collected that Microsoft phone users, where Google is not preinstalled (but could be downloaded from the web), are much less likely to use Google Search than Android user (the share of customers with Google Search is much lower than with Android phones). But if pre-installation is so important, why competing search engine providers, Yahoo for example, don't pay upfront smart phone producers to pre-install their search engine? This is the common practice Google follows with Apple (Google pays Apple for pre installation). The Commission does not provide an answer to this question. Since such a market solution is not discussed in the Commission decision, the outcome of the case is that the pricing strategy of Google should have been different and be changed in unknown and not discussed directions, not necessarily to the benefit of consumers, especially low-income consumers (that receive a well-functioning search engine for free and, should Google charge for the installation of Google may not receive the service anymore).

---

<sup>21</sup> See the Commission press release at <https://ec.europa.eu/commission/presscorner/detail/en/IP171784>

The Google Android case shows the complexity of antitrust cases and the need to understand how markets function before concluding that an abuse has taken place. The exclusivities Google requests from phone manufacturers are in practice a payment for applications that they receive for free. In order to show that such an implicit price is abusive, the Commission would have had to show that as a result of the tie the total surplus of phone users was reduced, taking into consideration that any alternative (and more effective) search engine was simply one click away. The evidence provided by the Commission in this respect is at best very weak: not having preinstalled Google search on Microsoft phones does not mean that Google Search is not used: users could simply enter Google.com on the web page of the phone, or some Microsoft phone users may not use a search engine at all, simply because they don't use the Web functions of their phone.

This weakness in the motivation of the Google-Android abuse is even more important in the German case against Facebook where the abuse simply originated from the violation by Facebook of the General Data Protection Regulation (GDPR)<sup>22</sup>. Market developments and constraints, as noticed by the Appeal's Court annulling the Bundeskartellamt (the Germany's national competition regulator) decision, were largely ignored. However, the judgment of the Appeal's Court was itself appealed by the Bundeskartellamt and the Federal Court, the German Supreme Court, reversed the judgment of the Appeal's Court, but identifying a new form of abuse, not simply the fact that the provisions of the GDPR were violated, but the fact that Facebook misrepresented to consumers what their rights were.

The case originated from the 2019 decision by the Bundeskartellamt that Facebook abused its dominant position in the social networking market by imposing on its users to share additional data than those developed on the Facebook platform itself. These additional data were generated on Instagram, WhatsApp, Masquearde and Oculus and the sharing simply violated the EU GDPR. According to the Bundeskartellamt the use by Facebook of additional data without explicit consent from the Facebook user is an abuse of dominance because it violates a rule protecting the weaker party in a contractual relation. The Dusseldorf Appeal's Court disagreed because such regulation, and there are many similar laws protecting workers, buyers or data suppliers, was not introduced to avoid the exercise of market power by a dominant company, but in order to ensure data protection.

According to the Appeal's Court the Bundeskartellamt, in order to prove that Facebook abused its dominant position by sharing these additional data, would have had to show that such sharing had an effect on the market just because Facebook was dominant and that these effects would have to be substantial. In essence the Court fundamentally disagreed with the Bundeskartellamt very general claim "that consumers' loss of control over their data and the weakening of their right to informational self-determination due to excessive data processing of Facebook is sufficient to show the existence of consumer harm even at a conceptual level without need for further concretization".

The Bundeskartellamt appealed the Appeal's Court decision and in June 2020 the German Federal Court of Justice with a provisional interim measure confirmed that Facebook abused its dominant position. However the judgment of the Court is not yet available in full, but it seems that the theory of harm that the Federal Court has adopted is slightly different from the one identified by the Bundeskartellamt and questioned by the Dusseldorf Court of Appeal: the Federal Court justifies the abuse simply and directly with the missing possibility of choice for users (users were not directly asked whether they agreed to the practice of sharing these additional data with Facebook), not because Facebook violated the data protection law (GDPR). According to Professor Daniela Seeliger "this is a requirement which has not existed in this form in abuse of dominance cases up to now. In this respect, the significance of the decision extends far beyond the specific case of

---

<sup>22</sup> General Data Protection Regulation EU 2016/679

Facebook”<sup>23</sup>. As a result of all these novelties, it may well be that the case will be referred to the European Court of Justice for a final clarification.

I summarized these three cases to show that not all European antitrust interventions against digital platforms are based on a solid theory of harm.

However, while the Google Shopping case, being an abuse against Google customers/competitors, could be possibly rationalized also by the transaction cost approach to antitrust, with Google not providing a fair ranking to competing price comparison providers and thus threatening to expropriate the sunk investment they had made in developing their service, the Google Android case would be very difficult to reconcile with a total surplus standard. Indeed, the Google Android case is more a protection of competitors case (why would competing search engines not pay phone manufacturers for pre-installation? A question that is not even mentioned in the Commission’s decision). As for the Facebook case, as clarified by the German Federal Court, it could be an abuse under the sunk investment approach to antitrust, but the Bundeskartellamt would have had to prove that, had consumer known when using Facebook that additional data would have been used beyond those allowed by the GDPR, they would not have joined Facebook in the first place. Unfortunately the German Federal Court seems to have made this misrepresentation to consumers per-se illegal. As I already mentions, the case is not final yet and we will see in the coming years how the case will actually develop.

The possible infringements of antitrust law by the digital platforms are much more numerous than what can be deduced by these few examples and the transaction cost approach to antitrust provides a solid standard of appreciation for when a real harm could be identified.

#### ***4. The sunk-investment approach to antitrust and the digital platforms<sup>24</sup>***

Indeed the possibility for the digital platforms to behave anticompetitively is widespread and the Chinese “Antitrust Guidelines of the Anti-monopoly Commission of the State Council for the Platform Economy Industry” identify a number of them:

- 1) Discrimination between competing complementary firms through self-preferencing, for example by impeding competing applications from becoming the default application if a user so desires or by keeping suppliers of complementary services out of the market in order to keep it under the control of the platform itself;
- 2) Use of information gained in its role as platform to affect competition, for example Amazon double role as service provider and competitor;
- 3) Raising the price or lowering the quality of services offered to complementary firms. For example, Amazon may introduce new charges for services that were provided as part of a bundle, Apple may raise the commission it charges on transactions through the application store, platforms may raise the price of advertisement to be placed on the web page of platform users;
- 4) Raising the price or lowering the quality of services provided to end-users through practices like steering customers towards products that yield a higher margin for the platform, reducing the size of discounts on related purchases or subscriptions, increasing the volume

---

<sup>23</sup> See Seeliger, Daniela, “The Facebook decision: is everything clear now?” available at: <https://www.d-kart.de/en/blog/2020/06/27/die-facebook-entscheidung-ist-jetzt-alles-klar/>

<sup>24</sup> For a thorough discussion on the sunk-investment approach to antitrust and the digital platforms see Biggar, D and Heimler, A. “Antitrust Policy Towards Digital Platforms and the Economic Foundation of Competition Law”, 2021, *Industrial and Corporate Change*, Forthcoming

of undesired or unsolicited content, such as advertising, reducing the service quality on other dimensions desired by users and consumers, such as the degree of privacy.

While the Chinese Guidelines correctly identify possible anticompetitive practices by digital platforms, they fail to discuss the theories of harm that SARM should adopt in order to assess whether and when they should be prohibited. The implicit assumption of the Guidelines is that the legal provisions themselves provide such a standard. As the previous discussion has shown this is not the case. In my view, the transaction cost approach to antitrust can provide a framework that could be used as a standard of assessment. Most of the trading relations involving platforms are indeed associated with substantial sunk-investments by trading partners (see Table 1).

When a trading relationship is associated with a sunk-investment and competition is absent, that sunk-investment may risk of being expropriated for example when a dominant market player is able to identify successful products or services developed by users of the platforms and threatening to produce a rival product, undercutting the original firm; when a dominant platform withdraws access to specific Application Programming Interfaces which are essential for a rival firm to provide services, or when it steers a customer to applications which are more profitable for the platform, rather than a better match for the customer. Furthermore, a dominant platform may exploit its customers by overcharging firms to maintain a prominent position in search results or by overcharging advertisers for placing adds.

These unfair prices, as they are called in the Chinese antitrust guidelines for the platform economy, are identified in Article 12 of the Guidelines as “obviously higher or lower” than “comparable” prices, a standard clearly very discretionary to implement or to respect. What is “obviously” a high price to me may not be so “obvious” to you! The transaction cost approach to antitrust provides instead a rigorous standard, i.e. the price that would make the sunk-investment of the trading party of the dominant platform unprofitable. What is an “obviously” high or low price could be identified according to this approach.

**Table 1 Digital platforms and the sunk investment hypothesis**

Digital platform	Sunk investment by complementary firms	Sunk investment by downstream consumers
Google (Android) and Apple (mobile devices)	Investment in the development of apps, including marketing to attract subscribers	Investment in learning to use apps and devices; investment in collecting personal information; some lock-in through investment in associated devices such as smartwatches or home automation.
Facebook		Investment in providing personal content and personal information and in building a network of friends
Amazon	Investment in the development and marketing of products to be sold through Amazon	Limited (some lock-in through the sharing of personal information on shopping habits, and purchasing of Amazon ecosystem devices such as Alexa)
Streaming services such as YouTube, Netflix, Spotify, Amazon Prime, Apple Music	Investment in the creation of content	Limited (arguably some lock-in through associated devices)

Besides providing a workable standard for the identification of an anticompetitive practice, the transaction cost approach to antitrust can also resolve the trade-off between protecting the sunk investments of the complementors and protecting the sunk investment of the digital platform itself:

dominant platforms would be allowed to earn high (or even 'supranormal') returns on their investments, but would be prevented from expropriating the investments of trading partners (by, say, prohibiting discrimination between complementors).

All this means that competition in the digital economy, as by the way the Chinese Guidelines seem to imply, may well be served by antitrust enforcement. Of course, as it has been the case all throughout the history of antitrust enforcement, some rethinking of the objectives pursued and some adaptation to the development of the digital economy may be necessary. In a fast-changing environment speed in decision making is necessary in order for antitrust to be relevant in shaping the industry's future. A big effort should be undertaken in that direction, not only in the EU and in the US, but also in China. Furthermore, as the Facebook case showed, there may be other issues, for example privacy or fake news, that deserve some extra protection. Those issues are best treated by a regulator and in most jurisdictions a privacy regulator is already in place. However antitrust enforcement should not step in into areas that are clearly outside its realm. Antitrust could certainly address privacy issues, but, in my view, their declination has to have a competition-oriented angle.

One risk associated with the way the Chinese Antitrust Guidelines for the Platform Economy Industry are written, is that the indications they contain be considered prohibited irrespective of their effects on the market. This would be quite unfortunate because it may lead to widespread prohibitions, even of practices that would be pro-competitive. The practice of SAMR and the judgements of the reviewing judges (should the decision be appealed) would identify the appropriate standard and define the amount of evidence needed for a prohibition decision.

### ***5. Merger control in the digital era: the WhatsApp-Facebook merger***

As I mentioned in the introduction, the characteristic of the digital economy is that the incentive for entry is not expected profits, but success with consumers. Even the theory of two-sided markets is not a good representation of digital developments because the side that should bear the costs often does not exist at the time of entry. Only the side that receives a product, a service for free is there. And it may be like this for quite some time after entry. Just an example: when WhatsApp was purchased by Facebook in 2014 it had over 600 million users worldwide but had a turnover of only 10 million dollars. This feature of the industry (very popular applications, but very little turnover) makes merger control in the digital economy both challenging and very prone to mistakes.

First of all, since these digital companies operate at a loss for many years, one of the biggest incentives for entry is the capital their founders gain when the company is acquired by some big company. Success with customers brings stock market values, not necessarily turnover and profits. Differently from many traditional sectors, it is quite clear that the biggest incentive for innovation and new entry in the digital economy is the possibility of being acquired by an established firm. Of course, the motives of the established firms to acquire these new entrants may be anticompetitive and the acquirers may actively pursue the elimination from the market of any potential threat to their dominance. The competitive threat however is only potential and moreover affecting variables other than prices. All this makes the process of evaluation of a merger by a competition authority very difficult and full of uncertainties, much more than in traditional markets.

Furthermore, since many of these new companies have very little turnover, they don't reach the threshold for notification. So, if there is a need for competition authorities to get more involved in mergers in the digital economy, notification thresholds would have to be modified in many jurisdictions and no longer be based on turnover only, but also on the value of the capital acquisition. For example, in the United States (besides other criteria based on turnover) a merger has to be notified to the Antitrust Authority if the value of the acquisition is above 94 million dollars. In other countries, for example in Norway, the Authority has a three months period to challenge a consummated not notified and not notifiable merger. Similarly, in China Article 19 of

the “Antitrust Guidelines of the Anti-monopoly Commission of the State Council for the Platform Economy Industry” suggests that even if a merger does not reach the notification thresholds “but the facts and evidences collected in accordance with the provided procedures show that the concentration of undertakings may exclude or restrict competition, the antitrust authorities of the State Council shall conduct investigation in accordance with law”. Like in Norway all anticompetitive mergers may thus fall under the SAMR control in China, at least in principle. This is certainly a good solution since it closes any possible loophole. However, when the notification threshold is not reached the decision about whether to investigate or not is quite discretionary and cannot be fully anticipated by the merging parties. This is why introducing a proper threshold similar to the one existing in the US is a better option (also in the fight against corruption).

Having the obligation to notify a merger is just the beginning of the story. Indeed, the major problem is what type of evidence is necessary in order to block a merger between an established platform and a startup. In the case of mergers in traditional markets, the test is simply related to the increase in price (or reduction in quality) that the merger would create. For the digital economy, where the acquired firm has very little turnover and often negative profits, the evaluation becomes much more speculative. I will briefly discuss the Facebook-WhatsApp merger and I will draw some conclusions from it. The reason why the Facebook-WhatsApp merger is relevant to this discussion is that it is one of the mergers that has been allowed by the EU and US authorities, but in the following years academics and politicians have been very critical.

As is well known, Facebook offers a range of social services, including consumer communications and photo/video sharing to consumers and advertisers. It offers the social networking platform “Facebook”, the consumer communication app “Facebook messenger”, and Instagram (photo/video sharing platform, acquired in 2012 for 1 billion dollar). Facebook revenues mainly originate from the sale of online advertising space. For this purpose, it collects data regarding the habits of users of its social network platforms and analyses them in order to provide them with the most appropriate advertisements with a turnover in 2014 of 12.4 billion dollars. In 2014, when the merger with WhatsApp was evaluated, Facebook social networking platform had 1.3 billion users worldwide and 300 millions of these used also Facebook Messenger.

WhatsApp is a provider of a messaging and phone service. Unlike Facebook it is not available on PCs and Tablets, it does not store messages on its server and it does not (yet) sell advertising space. It is available on a variety of mobile operating systems. In 2014 WhatsApp had 600 million users worldwide and a turnover of less than 10 million euros.

Facebook acquired WhatsApp for 19 billion dollars (4 billion in cash, 12 billion worth of Facebook shares; 3 billion worth of restricted stock). Furthermore Jan Koum, its founder, joined the board of directors of Facebook.

According to newspaper articles of the time the merger was clearly contributing to Facebook's strategy of focusing its business on mobile developments. WhatsApp was the fastest-growing company in history (in terms of users) and its potential growth seemed very strong. It was clear to experts of the time that the acquisition prevented WhatsApp from becoming the Facebook of the future.

The merger was notified to the European Commission that cleared the merger without an in-depth evaluation. The Commission followed its standard approach. First it defined the markets in which the two companies compete, then it determined the position of the two companies on these markets, and finally it discussed what would happen in these markets after the merger.

In conclusion the Commission cleared the merger because, as regards the communication applications market, Facebook messenger and WhatsApp are not close competitors. Furthermore customers can easily switch between different applications and there are no significant barriers for a new consumer communications application to enter the market. As regards the market for social

networking services, given the considerable differences between their functionalities and focus, the Commission concluded that WhatsApp and Facebook are not close competitors. Furthermore, even in the event of integration between WhatsApp and Facebook, the net-gain in terms of new members of social network would be limited, since the user base of WhatsApp already overlaps to a significant extent with that of Facebook. In other words, Facebook and Whatsapp are complementary services. The only problem is the market for online advertising service where only Facebook is a significant player. Should the merged entity introduce advertising on WhatsApp, according to the Commission there will continue to be a sufficient number of other actual and potential competitors who are equally well placed as Facebook to offer targeted advertising.

Of course, with ex-post insight the Commission may be criticized for its decision. However, given the information available at the time led the Commission to conclude that the markets in which the two companies operate are highly volatile, innovative and with pretty low barriers to entry. Honestly it would have been difficult to arrive to a different conclusion, also considering the risk of an annulment by the European Courts. Indeed, in a judgment taken a year before the Facebook-WhatsApp decision, “Cisco v Commission” (T-79/12, judgment of 11 December 2013)), the General Court had ruled that: “the consumer communications sector is a recent and fast-growing sector which is characterized by short innovation cycles in which large market shares may turn out to be ephemeral. In such a dynamic context, high market shares are not necessarily indicative of market power and, therefore, of lasting damage to competition”.

#### ***6. Remedies in antitrust cases, the benefit of market studies and the challenges of a regulatory approach.***

The characteristic of antitrust decisions in the EU and in many EU-like jurisdictions is that, besides a possible fine, they end with a cease-and-desist order to stop a practice considered anticompetitive. What to do in order not be found liable again is left to the company to whom the decision is addressed. In the case of a cartel, for example, an order to cease and desist is simple to understand and to implement, firms should no longer communicate between each other and stop coordinating on prices and other conditions of sale. In abuse of dominance cases the order to cease and desist requires a “voluntary” action on the part of the dominant firm which, by the way, may even go as far as to change the structure of an industry, subject to a very pervasive control on the part of the deciding antitrust Authority, but a light control in the sense that it is not subject to judicial review, unless of course the firm can prove some form of coercion.

Just as an example, in Google Shopping the European Union ordered Google to stop self-preferencing. As a result, in order not to be fined again, Google changed the way it organizes its activities in Europe and created a separate company, Google Shopping Europe (GSE). This business unit holds separate accounts to ensure that there is no cross subsidization from other Google activities and ensures that every comparison service is treated equally. The European Union found the creation of GSE capable of ensuring that self-preferencing would no longer be possible. But is some monitoring necessary? We don't know exactly. Furthermore, do other measures exist that may be more effective? Again, we don't know. How was the process? What role did the EU play in devising the remedy? We don't know either.

As this example shows remedies can be very pervasive and furthermore require continuous monitoring. This is why remedies, while easy to identify in traditional industries become a problem in digitals where, as the economic literature on ecosystem shows, there are very complex dynamics at stake. First of all, remedies may not achieve the objective they were meant to achieve. What happens then? A new case needs to be opened up or simply there is the possibility of identifying new remedies? The rules and the practice are not very clear on this. The second possibility, that the remedies identified by the parties are too constraining, are, at least at first sight, easier to handle. Since remedies were designed by the parties themselves, the parties may require the Authority to

reconsider them, according to new evidence. However, whether the Authority would agree with a new proposal is questionable, since there is no motivation in the first place, nor full judicial review.

The current situation with the way remedies are identified in the EU is thus not satisfactory. My preferred solution is that antitrust authorities impose remedies directly, maybe by opening a different proceeding and more importantly provide a motivation for why the specific remedies they identified need to be implemented. This would be very transparent because it would subject all remedies to judicial review. As the procedure now stands, the fact that remedies are voluntarily presented by the parties is true only on paper. In reality the Authority negotiate the remedies with the parties and it is not transparent the role the Authority plays. In other words it looks that parties offer “freely” the remedies that the authorities desire! Plus, it is not a negotiation among equals. The Authority can impose sanctions if there are unjustified delays in complying and as a result parties may feel forced to adopt whatever the Authority seems to suggest.

I am skeptical on the possibility of solving the problem by creating a new regulatory structure. It is true that a regulator would make the process much more transparent because it would have to justify and motivate all *ex-ante* adopted regulations. Furthermore, these *ex-ante* regulations would be subject to judicial review. However, platforms differ one from the other not only for the need that each of them satisfies, but also for the way they are able to monetize their success. As a result, regulatory interventions would have to be tailored to the specific characteristics of each, losing its generality. A speedy antitrust enforcement would in this respect be much more effective.

One of the justifications for introducing a regulator is that in digitals many anticompetitive practices go undetected. One reason for this is that anticompetitive outcomes may also originate from the unilateral action of firms not yet dominant and as such would not be subject to the abuse of dominance prohibitions. Furthermore, digital markets are often characterized by widespread anticompetitive features that are not caused by an agreement nor by an abuse. As a result, without some new instrument of intervention they would go unchallenged.

One very promising possibility is to adopt the UK model of market studies. These are thorough market investigations conducted by the Competition and Markets Authority (CMA), the UK antitrust agency, aimed at identifying features in a market that create an adverse effect on competition. These features, which can be practices, regulatory interventions or structural characteristics, are not necessarily prohibited under antitrust laws or any other law. A market study would first of all identify them. But what distinguishes these market studies from a simple market report is that the CMA may impose remedies following a market investigation and these remedies are subject to judicial review. Many features of the digital industry could be evaluated through market studies and many of the shortcomings of current antitrust enforcement could be overcome, mainly the fact that in an antitrust case a remedy may only affect the parties of the investigation, not all market players.

The European Commission and the UK Government seem to go much further than simply allowing market investigations to be undertaken and both jurisdictions are in the process of introducing a new regulatory tool specifically designed for the digital economy. These developments are particularly surprising for the UK where the use of market studies by the Competition and Market Authority is well established and, under many accounts, quite successful. While the scheme to be introduced in the UK is still not fully defined, except for the idea that the regulation to be introduced should be very light and in a great part associated with the respect by the digital companies of a code of conduct, the EU approach is already quite detailed and it is therefore important to briefly summarize it.

## ***7. Recent developments in the European Union: The EU Digital Market Act***

On 15 December 2020, the European Commission adopted its proposal for the Digital Markets Act

(DMA) the goal of which is to increase the contestability and the fairness of the digital economy in the European Union<sup>25</sup>. The same day, the Commission also adopted the Digital Services Act (DSA) with the aim of ensuring that Europe is a safe, predictable and trusted online environment where fundamental rights are protected and online anonymity wherever technically possible is ensured<sup>26</sup>. Those two proposed instruments are now being negotiated by the European Parliament and the Council of Ministers and could be finalised by 2022 with an application in 2023.

Contrary to the Chinese Guidelines, the objective of the proposed Digital Markets Act is to introduce a harmonized regulatory ex-ante approach in the EU, in the same way as it was done in the 1990s for public utilities, not to set up a framework for the enforcement of antitrust law against the digital platforms (which is the aim of the Chinese Guidelines). The Commission aims to achieve three objectives by enacting the DMA: ensure 1) contestability of digital markets, 2) fairness of the business-to-business relationship between the platforms and their customers and suppliers and 3) the strengthening of the internal market by providing harmonised rules across the EU. According to the Commission “The proposal complements existing EU (and national) competition rules. It addresses unfair practices by gatekeepers that either fall outside the existing EU competition rules, or that cannot be as effectively addressed by these rules, considering that antitrust enforcement concerns the situation of specific markets, inevitably intervenes after the restrictive or abusive conduct has occurred and involves investigative procedures to establish the infringement that take time. The current proposal minimises the detrimental structural effects of unfair practices ex ante, without limiting the ability to intervene ex post under EU and national competition rules”.

The proposed regulation applies to so called core platform services identified in the Act as: online intermediation services; online search engines; online social networking services; video-sharing platform services; number-independent interpersonal communication services; operating systems; cloud computing services; advertising services. Platforms active in providing these services will be defined as gatekeepers if they: “(i) have a significant impact on the internal market, (ii) operate one or more important gateways to customers and (iii) enjoy or are expected to enjoy an entrenched and durable position in their operations to their size, the number of business users dependent on the platforms to reach end users, entry barriers derived from network effects and data driven advantages, scale and scope economies, the number of business user or end user locked-in and other structural market characteristics”. As it can be immediately noticed, the definition of gatekeeper adopted by the DMA is not associated to the exercise of any market power or to any abuse of a dominant position. What seems to matter is the potential of the gatekeeper to exercise its market power.

The Act aims at identifying super dominant platforms of course, but also platforms that may become super dominant in the future, a very difficult objective to achieve with an ex-ante appreciation like the one proposed in the Act, operating all these companies in a highly innovative and uncertain environment<sup>27</sup>.

As a result of the combined interaction between the services identified and the characteristics that a firm should have in order to be defined a gatekeeper, it is very easy to associate a specific company

---

<sup>25</sup> See European Union (2020), “Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on contestable and fair markets in the digital sector (Digital Markets Act)”, Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020PC0842&from=EN>

<sup>26</sup> See European Union (2020), “Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on a Single Market for Digital Services (Digital Services Act) and amending Directive 2000/31/EC”, Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020PC0825&from=en>

<sup>27</sup> According to the Act to be defined as a gatekeeper, the turnover of a digital service provider has to be above certain thresholds (article 3.2) or if the turnover thresholds are not reached, the Commission has to investigate whether it would qualify as a gatekeeper nonetheless (article 3.6).

to all of these core services (not all of them being super-dominant): Apple, Google, Facebook, YouTube, WhatsApp, Skype, Gmail, Amazon, Microsoft, and probably many others as well. Furthermore, while contestability is the objective of the regulation and more importantly the standard to be assessed when analysing gatekeepers practices it is quite surprising that contestability is not defined in the proposed Act. But more on this later.

Once a platform is designed as a gatekeeper it has a very extensive number of obligations. The regulation identifies practices that are always prohibited and that originate from the EU antitrust case law, such as among others: combining personal data originating from core platform services with personal data from other services of the gatekeeper or third-parties, unless the platform achieved the consent of the end-user; not allowing business users to offer the same services to end-users through third-party intermediation services at different conditions than those offered through the gatekeeper intermediation; not allowing business users to promote offers to end-users acquired via the core platform services and to conclude contracts with these end-users regardless of whether for that purpose they use the gatekeepers' services; not allowing end-users to access through the gatekeeper's core platform services, content, subscriptions, features or other items by using the applications of a business user in situations where these items are also offered by the gatekeeper core platform services; not providing advertisers and publishers with information concerning the price paid by advertisers and publishers and the remuneration paid to the publisher

Another set of obligations, the so called grey list, comprises obligations which need to be further specified whether they apply or not in a regulatory dialogue between the gatekeeper and the Commission: Refrain from using, in competition with business users, any data not publicly available, which is generated through activities processed via its core platform services; Allow end-users to uninstall pre-installed applications; Allow the use of third-party applications to be accessed by means other than the core platform services of the gatekeeper (side loading); Refrain from treating more favourably in ranking services offered by the gatekeeper compared to similar services of third parties and apply FRAND conditions to such ranking; Refrain from technically restricting the ability of end-users to switch between different apps and services to be accessed with the OS of the gatekeeper; Allow business users and providers of ancillary services access to and interoperability with the same OS, hardware or software features that are used in the provision by the gatekeeper of any ancillary services; Provide advertisers and publishers, free of charge, access to the performance measuring tools of the gatekeeper and the information necessary to carry out their own independent verification of the ad inventory; Provide effective, continuous and real-time portability of data generated through the activity of a business user or its end-user, in particular with tools for end-users to facilitate the exercise of data portability; Provide business users (or third parties authorised by them) free of charge, with effective, high-quality, continuous and real-time access to data, that is provided for or generated in the context of the use of the core platform services by those business users and their end-users; Provide to any third-party providers of online search engines with access on FRAND terms to ranking, query, click and view data in relation to search generated by end-users on online search engines of the gatekeeper; Apply FRAND conditions (which can be assessed with different benchmarking methods) for the access by business users to app stores.

As suggested by the Centre for regulation in Europe (CERRE)<sup>28</sup>, the obligations imposed by the Act on gatekeepers can be categorized into four problematic issues: lack of transparency which is key for digital markets to work properly; exclusionary conduct through bundling or self-preferencing and lack of access to gatekeepers' platforms and data; lack of mobility (multi-homing and switching) of business users and end-users (i.e., on both sides of the markets); lack of balance

---

<sup>28</sup> See Center for Regulation in Europe (CERRE) (2021), "The European Proposal for a Digital Markets Act. A First Assessment", available at: <https://cerre.eu/publications/the-european-proposal-for-a-digital-markets-act-a-first-assessment/>

between the rights and obligations of the gatekeepers and their business users.

As a general comment to this EU proposal, I would like to add that all these obligations are familiar antitrust offences. And indeed, they are listed in the EU proposal because they have been addressed in one or more antitrust cases against the digital platforms. The difference here is that, at least those on the black list, they are imposed on all gatekeepers without a detailed investigation on whether they are indeed anticompetitive and without the possibility of a gatekeeper objecting for efficiency considerations. More importantly, a gatekeeper is not necessarily dominant under an antitrust standard. In this respect, the regulation goes beyond the prohibitions of article 102 on the abuse of a dominant position. Finally, some of the antitrust offences on which the proposed regulation originates are still under review by the European Courts and, as I discussed in previous sections of this paper, are not based on a rigorous theory of harm. The automatic extension to all gatekeepers of the principles originating in those decisions is thus not necessarily warranted.

As an additional remark, while the attractiveness of antitrust is its flexibility and its capacity to adapt to the specific circumstances of the different cases, a system based on such an extensive black list is by itself much more rigid. Furthermore, also the grey list is not to be assessed on a case-by-case basis, but is to be linked ex-ante to each gatekeeper. This adaptation is of course welcome, but it is much short of a thorough effect-based analysis as the one undertaken within an antitrust procedure. On this I would like to add that it is true that antitrust intervenes ex-post, but, like the speed limits in our cities, it influences the behaviour of market participants ex-ante and the more so if the Commission would issue guidelines, the same way as the Chinese State Council has done. In this respect the Chinese guidelines are an example to follow, provided that they are not interpreted as per se prohibitions, but simply indications of practices to be assessed and be evaluated case by case.

Where I am particularly critical of the proposed regulation is the fact that its objective is to achieve the contestability of the core platform services. I understand that the term is used colloquially in the proposed Regulation, but contestability has a precise definition in economics: it implies the elimination of entry and exit barriers so that, as a result, all monopoly profits are eliminated<sup>29</sup>. As to make this argument clearer, it would be as if the objective of the antitrust law was achieving perfect competition and that the standard for assessing a violation of the antitrust laws was the perfectly competitive equilibrium. Everyone knows that this is not the case.

While contestability may be a hypothetical long-term objective, it cannot be the standard by which to assess day-to-day platform practices. Monopoly profits are necessary to provide the incentives for innovation and represent a signal for new entry. Eliminating them, if contestability is achieved by the DMA, would represent a return to rigidity and weaken innovation and market entry.

Indeed, the objective of article 102 and that of merger control is not contestability, but ensuring that market power is not artificially increased or maintained. This is why the objective of the Digital Markets Act should be reformulated. Of course, the transaction-cost approach to antitrust, as underlined in the previous sections, represent a viable standard (maintaining the incentives for sunk investment for the gatekeeper itself, its suppliers and its customers), but even without adhering to it, some standard of assessment would need to be identified, so as to guarantee that decision making is not leading to discretionary, uncertain and unexpected results.

Where I am particularly concerned, is that there could arise circumstances where, for one reason or another, the gatekeeper platform has to monopolise a particular market (and keep it as a monopoly) if it is to earn a normal return on its total investment (including investment in those assets that are

---

<sup>29</sup> See Baumol, W. J., Panzar, J. C., and Willig, R. D. (1982). *Contestable Markets and the Theory of Industry Structure*. New York: Harcourt Brace Jovanovich, Inc.

used to supply services for free). The desire to promote a level playing field should not eliminate the ability of the digital platform to earn a normal return on its total investment. I think this is an important counter-balance to the idea that we should always push for access to essential services at FRAND terms and this is why the term contestability and the term FRAND would need a precise definition in the Regulation. .

### ***8. The Chinese Antimonopoly law, antitrust enforcement and the size of the Authority***

The Antimonopoly Law of China followed the EU with respect of the wording of the legal provisions, with some minimal variations. The law was adopted by the National People's Congress on 30th August 2007 and implemented on August 1 2008. Differently from the EU model where objectives are left implicit, the Chinese law in Article 1 sets out its general objectives: "This Law is enacted for the purpose of preventing and restraining monopolistic conducts, protecting fair competition in the market, enhancing economic efficiency, safeguarding the interests of consumers and the public interest and promoting the healthy development of the socialist market economy". In an economic terminology, all this can be summarized as impeding artificial increases of market power. The objectives pursued by the AML are therefore in line with most antitrust laws of the world. The law as it is written for example could easily incorporate the protection of sunk-investments objective, without the necessity of any change in the law itself.

With respect to its substantive provisions, the AML follows the EU. Chapter 2 prohibits anticompetitive agreements providing for the possibility of exemptions. Chapter 3 prohibits abuse of dominant market positions with a list of factors that may give rise to dominance and a rebuttable presumption based on single, two- and three-firm market share ratios (in the EU these rebuttable presumptions are introduced only in secondary legislation and the shares are much higher). Chapter 4 controls mergers and concentrations, with a mandatory system of pre-notification based on turnover thresholds set by the State Council and a substantive test, the substantive lessening of competition, which is in line with best practices.

These substantive provisions are to be enforced by the Courts in private litigations (except of course for merger control) while public enforcement is entrusted to the Anti-Monopoly Commission (AMC) and has been initially delegated by the State Council to three separate institutions – NDRC, SAIC, and MOFCOM. NDRC was responsible for anticompetitive agreements and abuse of dominance, all relating to price; SAIC was responsible for anticompetitive agreements and abuse of dominance, all non-relating to price and MOFCOM was responsible for merger control. Besides MOFCOM who carried out all its tasks centrally, both NDRC and SAIC had an extensive network of provincial offices (with very few staff each) that were also actively involved in antitrust enforcement.

From the start, the international antitrust community criticized this three pillars structure. First, the boundaries of jurisdiction between NDRC and SIAC were not exact and there were many violations of competition law that lead to both price and non-price effects. As a result, maintaining the separation increased the risk of administrative inefficiency associated with a single case being split between the two agencies. Furthermore, the separation could lead to a fragmented case law where agencies would develop their own principles of interpretation not necessarily convergent. Finally, sectorial expertise, often associated with having instructed a case in the past, would not be shared across agencies leading to mounting inconsistencies and inefficiencies in enforcement.

The 2018 administrative reform led to the creation of a single competition Authority within the State Administration for Market Regulation (SAMR). All of the shortcomings associated with the former fragmentation of enforcement were potentially eliminated. A big effort is still needed to make sure that the three former bodies (MOFCOM, NDRC and SAIC) are fully restructured within SAMR so that they effectively operate as departments of a single agency, not necessarily with the

same specializations as before. All the conditions exist that such restructuring will take place and soon.

However, the major challenge that still waits to be solved is manpower. SAMR is heavily understaffed, the more so because it suffered a severe cut in its staff as a result of the aggregation of the three former authorities. It is true that SAMR has a decentralized structure and can use in antitrust proceedings staff localized at the provincial level, but this staff is quite limited in all Chinese provincial governments and furthermore every other federal State, like the US for example, has the same opportunity, with all the 50 US States having a small antitrust enforcement department at their disposal. This even more true at the European level where the Commission can count on very well staffed and experienced national competition authorities.

As can be seen in Table 2 the number of people working in the SAMR is a fraction of what is available in other (not even comparable in size) jurisdictions. It is true that a few issues associated with dominance can be addressed by private litigation, but not as effectively. Furthermore, many others remain completely unresolved. Cartel cases, addressing issues associated with system wide effects (i.e., the existence of network of vertical agreements blocking entry into markets) or merger control all require a well-functioning and well-staffed public agency. Even many abuse of dominance issues, since they require the possible abuse to be part of a strategy affecting the process of competition (not simply damaging the single complainant) and the necessity of acquiring a set of information much larger than that available to a single firm or to a single individual, require the inspection powers of a public agency in order to collect the necessary evidence. Furthermore, remedies both in merger control and in antitrust, go much beyond a simple prohibition and require articulated and sophisticated market reforms that only a well-staffed agency can identify and monitor.

Table 2 Number of employees of competition Authorities in selected jurisdictions (in 2018) \*

Country	Total	In antitrust
Australia	1000	170
China	45	45
European Union	750	500
France	200	160
Germany	320	140
Italy	290	100
Japan	830	830
Netherlands	500	150
South Korea	650	450
United Kingdom	560	280
United States	1800	830

Source: Web research

\* The data do not take into account the staff that in some jurisdictions is dedicated to competition at the local level (except for the EU).

In recent years most of the major antitrust proceedings in the EU and in the US, in all areas of antitrust i.e., cartels, merger control and abuse of dominance, have required teams of over 20 professionals working for years on a single case, and in many authorities there are a number of such

cases running at the same time<sup>30</sup>, a clear impossibility under existing staffing conditions at SAMR. Professional and sufficient staff is a precondition for an efficient agency.

Even adopting a good law comes as a problem of second order magnitude. Laws can be interpreted and, furthermore, even enforcing a “bad” law does not always lead to wrongly decided cases. On the other hand, the absence of staff leaves many possible cases not dealt with. China must be full with false negatives, practices that should have been prohibited and are not. The number of staff of the Authority needs to be more adequate to the size of the economy, even more so now that SAMR is clearly identified in the State Council Guidelines as the Authority responsible for the enforcement of the AML in the digital economy.

China, with 1.4 billion inhabitants has a competition authority with not even 1/3 the manpower dedicated to antitrust of the AMC, the competition authority of the Netherlands, a country of only 17 million people. This is a real emergency that needs to be corrected for antitrust to represent an effective tool able to discipline firms’ strategies and practices in China<sup>31</sup>.

By the way, given their small size, it is really remarkable what the Chinese Authorities were able to achieve in the past 12 years in all areas of competition law and policy: enforcement, procedural indications, competition advocacy interventions and reform proposals.

The small size of the Chinese Authority is a great weakness with respect of the challenges of the digital industry. As I have argued, it took years to the European Commission to bring a case against Google. Some time of course might have been wasted for useless delays, but most of the time was used up by teams of 20 or more experts to collect the necessary evidence for the case to be built, an effort precluded to SAMR, given its limited manpower. The problem is that an understaffed agency would not be able to bring important cases, or to adopt the necessary rigor in proving the offense, to the detriment of the Chinese economy.

In a recent judgment on a private litigation against Tencent, the Chinese adjudicating judge rightly concluded that a possible abuse against one single firm is not an issue to be addressed by antitrust law but by contract law. Irrespective of the validity of the case, the point he made is that a single complainant can only bring evidence with respect of what he/she sees (the action against him/herself) and has no clue on how widespread and system-wide the practice is. This thorough investigation can only be conducted by a well-staffed and well-endowed agency and private litigation is a very inferior substitute. This is the more so with respect of remedies to be implemented following a prohibition and that a judge cannot devise nor monitor. This is why strengthening SAMR is a priority for addressing the challenges of the digital economy.

Of course the strengthening of SAMR would lead to investigations fully fact based and, as a result, affected parties would routinely appeal SAMR decisions, both to correct the facts or their interpretation. With evidence based decisions and a developed and not time consuming process of judicial revisions the Chinese system could finally reach a mature stage.

### ***9. The Chinese Antimonopoly Law, administrative monopolies and the promotion of competition***

Control of administrative monopolies is introduced by Article 8 and covered in more detail in Chapter 5 of the AML. Administrative agencies are generally not subject to the antitrust laws, but in most countries the anticompetitive practices that these provisions address are prohibited by other relevant legislation. As a result, their implementation is not part of the mandate of competition

---

<sup>30</sup> Just as an example, in April 2020 the Italian Competition Authority was working on 16 different antitrust cases.

<sup>31</sup> It is true that all provincial governments in China have a small department dedicated to antitrust enforcement, the former provincial branches of NDRC. However, the same is true in the EU where antitrust is enforced centrally by the EU Commission and locally by member states authorities and in the US where every State has a small antitrust department (similar to that existing in China) whose staff is not added to that of the federal agencies

authorities. For example, in the EU most of the practices referred to in Chapter 5 of the AML are prohibited by the EU Treaty, and in particular by its free movement provisions<sup>32</sup>.

Abuse of administrative power by government agencies may restrict or distort competition, as may the activities of State-owned enterprises (SOEs). In particular, such authorities at provincial or local level may distort market forces either by favoring so called “local champions”, for example by issuing special official approvals or making it mandatory for other businesses to deal with them, or by stopping competitors (including those from neighboring provinces) from gaining access to the local market. While the objective these provisions address is very important, provinces and local governments do not have any incentives to respect the AML provisions because violating these prohibitions is not associated with any sanction. And indeed, there are very few cases launched against administrative monopolies in the course of the past 12 years.

Article 22 of the “Antitrust Guidelines of the Anti-monopoly Commission of the State Council for the Platform Economy Industry” strengthens the case for enforcing the AML against administrative monopolies in the digital field. Possible practices subject to control include public restrictions on the use of competing platforms, setting discriminatory standards or policies, favouring local platforms also with respect of participating to procurement bids.

However, the provisions against administrative monopolies are not the only one limiting and disciplining State and Provincial bodies. The State Council on June 1 2016 issued the Opinion on Establishing the Fair Competition Review System in the Construction of the Market System<sup>33</sup>. The opinion is quite articulated and it contains a checklist meant to address discriminatory regulations that lead to privileges to selected companies in the processes of market entry and exit, affecting the free flow of merchandises, or influencing the cost and conduct of undertakings within China. The State Council checklist is organized around 18 general prohibitions to be uplifted in specific circumstances identified in the Opinion itself. These prohibitions are directed to the provinces and local governments and NDRC at the time, now SAMR, is asked to oversee the process. The Fair Competition Review System (FCRS) that the State Council launched is a clear reaction to the lack of effectiveness of the AML provisions against administrative monopolies and indeed was welcome, as I have argued elsewhere, even though I suggested some minor changes with respect of the exception system in place<sup>34</sup>.

The purpose of the checklist is to achieve a level playing field in the regulatory environment across China, including on digitals. The Chinese checklist start with 18 prohibitions (on discriminatory subsidies, discriminatory public procurement rules and practices, discriminatory concession granting, discriminatory pricing, investment restrictions, tax privileges, etc.) aimed at making sure that provinces, local governments and administrative departments no longer provide undue advantages to local firms. These prohibitions are very welcome. They are very similar to the EU free movement provisions. However, the self-review process envisaged in China is much weaker than the one in place in the EU.

In the European Union, the EU Treaty prohibits these discriminatory practices by law. If Governments do not comply, then private individuals and firms can seek redress in Court (bottom-up approach). This is already a big difference with the top-down Chinese system. Furthermore, the way the Treaty prohibitions have been interpreted is much wider than what is possible within FCRS. In the EU the free movement provisions have in some cases been used to eliminate unjustified

---

<sup>32</sup> The objective of the Treaty is to guarantee the free movement of goods, services, capital and people within the common EU market.

<sup>33</sup> State Council, Opinion n. 34, 2016

<sup>34</sup> Heimler, A. (2019) “The OECD competition assessment toolkit, the EU Single Market provisions and regulatory reform: a challenge for China”. In 减少竞争中的政策壁垒：国际经验与教训 综合报告. (Cyril Lin (ed.) 2019. Reducing Policy Barriers to Competition in China: Lessons of International Experience”). Beijing: CITIC Publishers.

regulatory restrictions, not simply to make sure that they are applied in a non-discriminatory way. For example the EU Digital Market Act discussed in section 6 is based upon the EU Treaty free movement provisions and, as a result, they do not need a competition standard for them to become operational. FCRS follows the same approach. Harmonization does not require by itself the identification of a market failure nor of the best way to eliminate it.

Indeed, the State Council checklist is not built as an effort to identify “optimal” regulations, but as an instrument for avoiding preferential discriminations, including privileges offered to SOEs. The EU Treaty goes farther, not only prohibiting, along the lines of the Chinese 18 State Council standards, discriminatory rules put in place by Member States, but it also tries to impede rules that substantively discriminate against non-local goods, services and firms, promoting market access. Furthermore, the Treaty creates, through Directives and Regulations, specific regulatory provisions for all Member States in areas where the negative prohibitions are insufficient. For example, the EU intervened directly to open up to competition public utility markets and private services (and now the digital platforms), a development very difficult to achieve by State Council Opinion n. 34.

The eighteen standards are prohibitions that should be rigorously enforced subject to a general interest objective exception only (defense, health, security). The fact that SAMR is in charge of enforcing these prohibitions strengthens the possibility that they are indeed applied in order to promote a more competitive environment and employment considerations, for example, are not accepted for an exception. In this respect, if SAMR is rigorous and determined, FCRS could become an effective tool to create competitive neutrality in China - i.e., an environment where unjustified advantages to SOEs are eliminated – like it happened in the EU by enforcing the internal market rules.

The recent proposed amendment to the AML, if approved, will introduce FCRS into the legislation<sup>35</sup>. This is a very welcome development. It will make China a big internal market and where provinces, local governments or administrative agencies would not comply with the State Council prohibitions, then affected parties (even private entities) would probably be able to appeal these anticompetitive regulations in Court. As a result, there is a greater chance that undue advantages granted to SOEs which may affect the smooth development of digital markets may be effectively tackled, if not directly by the governments that control them, by private entities that under FCRS could challenge in Court the administrative actions that create a competitive disadvantage for them.

If the amendment will be approved, the Chinese system would be a complete one, with the State obliged to review all existing regulations and private parties able to challenge in Court any unresolved issue. The next step should probably be a narrowing down of existing possible exceptions.

### ***10. The financial industry, innovation and antitrust***

The financial industry and its regulators have always had an ambiguous approach to competition, the main reason being that there is a clear trade-off between competition and market stability. In some sense financial regulators have “accepted” competition, but have always been reluctant to side with competition when it led to widespread innovations and to possible disruptions.

In the 1990s the main conflict was on how to assess mergers in banking and in particular on how to define markets. Regulators adhered to the cluster market approach, strongly rejected by competition authorities. A cluster market is based on a functional characterization and it contains all the

---

<sup>35</sup> The new proposed Article 9 of the AML states: “The State establishes and implements fair competition review system, standardizes government administrative behaviors, prevents the introduction of policies and measures which eliminates and restricts competition.”

different activities that banks do. On the other hand, in competition the relevant market is based on market power and is defined as the collection of products and geographic areas where a hypothetical monopolist could significantly increase its prices not temporarily. This means that under a cluster market approach all what a bank does relates to the same artificial market, while under a relevant market approach, a bank operates in different markets and is therefore subject to different constraints,

The reason why regulators preferred the cluster market approach in the evaluation of mergers was that it may overstate competition by wrongly inferring from the existence of abundant competition to supply one product in the cluster, that competition is also sufficient in other product markets. For example, suppose that the relevant geographic market for a big company looking for a loan may be very large. The resulting geographic market may be far larger than what is appropriate to analyze competition for many small business bank products, for which proximity of the bank to the place of business is key. If the geographic market is defined over the whole cluster then adverse effects on local competition may be missed and a merger that should have been blocked is not. After years of discussions between the US Department of Justice and the Federal Reserve Bank eventually the cluster market approach was abandoned.

In the first decade of the new century financial regulators and competition authorities had different views about payment services, with regulators unwilling to take any step to increase competition and antitrust authorities questioning the collective arrangements between acquiring and issuing banks, the interchange fee, that impeded any reduction in the cost of credit cards transactions. Antitrust authorities led the way in dismantling all these cozy arrangements, through both enforcement cases and competition advocacy interventions. In the EU interchange fees were strongly reduced and the cost of card transactions was more than halved. Also, in the US legislation inspired by a number of antitrust cases led to similar results.

Finally, in recent years the development of Fintech is perceived by the traditional banking as threatening its foundations. Sectorial regulators are resisting the transition to digital financing, introducing all sorts of obstacles to the entry of non-banks in the provision of payment and banking services, making entry of the new Fintech companies if not impossible very difficult. Some competition authorities however are advocating for a more open and competitive environment. In the United Kingdom the first step in the process of a full opening up of banking to competition was to add competition as a secondary objective (besides stability) that the banking regulator should pursue. This was a move aimed at improving the way the regulator thinks about competition in banking. Then, a market investigation on retail banking, jointly undertaken by the Financial Service Authority (FSA) and the Consumer and Market Authority (CMA), the UK watchdog for competition, came up with a solution to open up to competition the market for loans<sup>36</sup>.

What the market investigation found was that when a business or an individual needed a loan from the bank, the information about his/her credit worthiness was pretty much confined with the bank with which he/she carried most of its business. To make the market for loans more contestable the FSA and the CMA imposed on the banks to create an open banking implementation entity tasked with agreeing, implementing and maintaining open and common open banking standards. Consumers, Fintechs, small and medium sized companies and banks were to be represented on its steering group. This body would set up a standard for the information on bank transactions of every bank account holder that could be transmitted to other banks if he/she agreed. In this way the market for loans, especially business loans, would be opened up to competition, loosening up the

---

<sup>36</sup> See Competition and Markets Authority (2016), *Retail Banking Market Investigation. Final Report*. Available at: <https://assets.publishing.service.gov.uk/media/57ac9667e5274a0f6c00007a/retail-banking-market-investigation-full-final-report.pdf>

constraints of relationship banking. Furthermore, Fintech companies, having access to all the data of an account holder can offer advice on how to manage, not only its loans, but all of its finances.

Fintech and other banks have taken advantage of these provisions and are rapidly entering the UK market. Similar developments, but on a larger scale, are happening in China, but without the need of open banking provisions. In China the big digital platforms, like Alibaba and WeChat, are taking advantage of the information provided by users on their transactions and first set up a payment instrument independent of the banks where customers could pay their purchases by using sums deposited with the platforms themselves. Then they decided to offer customers money market investment possibilities for the unused sums. Finally, they decided to anticipate any needed sum without requiring a disinvestment, acting very much like a bank, but with much lower costs.

It is interesting to see how this was accomplished. For the 2014 Chinese New Year, Tencent, the company controlling WeChat, devised a scheme by which its users could send out digital red envelopes containing “real” money to their friends, a very traditional New Year’s Eve present in China. That money, taken from users bank accounts, lived within WeChat wallets and could be used to make purchases, send to friends or deposited to a bank account linked to WeChat. Sixteen million red envelopes were sent and 5 million bank accounts were linked to WeChat. Alibaba had already set up Alipay, its payment service, back in 2004. The move by WeChat was clearly driven by competition and led to the widespread possibility in China to pay anything and everything with the phone and, more importantly, for free<sup>37</sup>. This is very different with what happened with the Apple wallet or Google. Both platforms entered into the market for payment services but they did not disintermediate the banks and relied entirely on the card system infrastructure. The competitive threat they brought to established players was minimal.

The efficiency that these new competitors in China bring to traditional banking is clear. However regulation should not oppose them as instead it did. Regulators should have tried to accommodate these new developments and address the regulatory shortcoming, for example find ways to control the creation of money, but not stop these new services all together. As for the future, once the UK open banking model has shown some positive results, SAMR could suggest within FCRS something similar to the UK open banking system and fully open up banking markets not simply to the digital giants, but to every company that would find it worthwhile entering.

## **11. Conclusions**

The digital industry is reaching a mature stage. Both in the United States and in Europe a discussion had started on the proper tools to adopt in order to stop serious anticompetitive practices. Many believe that antitrust enforcement is sufficient, others argue for the introduction of specific regulatory tools. The major reason why antitrust seems less effective in digitals is that the opportunities to discriminate against competitors are very large. While price discrimination is relatively easy to identify and to sanction, non-price discrimination which is widespread in digitals is much trickier to prove because it may be the result of many different strategies. Furthermore the affected party of these anti-competitive strategies is not the final consumer but other firms, making more difficult to detect the theory of harm. As a result antitrust enforcement, especially because cases last for years due to their complexity, is often on the defensive, prohibiting practices already no longer that relevant and being late with respect of current anti-competitive practices.

The benefit of a regulator is that it provides legal certainty and sets rules ex-ante and valid for all. The risk is that these rules are either too rigid or not effective. If a regulator is established, as would be the case in Europe with the Digital Markets Act, legal provisions should be precise enough as to identify a precise standard, for example the fact that sunk-relationship investment risks of being

---

<sup>37</sup> See Kai-Fu Lee (2018), *AI Super-Powers. China, Silicon Valley and the New World Order*, Boston, Houghton Mifflin Harcourt

expropriated, that would trigger an intervention. An alternative to regulation, is relying on the antitrust authority, as suggested by the Chinese State Council in its Guideline for the platform economy industry. In principle an antitrust authority is much more flexible and effective, assuming that cases are decided based on accurate evidence, rigorously and quickly. In an innovative industry the process of decision making by the antitrust authority cannot last for years. And a well-staffed and professional authority is a necessity because cases very often require the agency to collect a vast amount of information that a single complainant is unable to provide (this is why private litigation based on the antitrust provisions is not a solution in digitals). Furthermore only a well-staffed agency can devise and monitor the required remedies.

Remedies to be effective need to be structural and, as a result, they tend to modify the way an industry operates. It is a big responsibility for an antitrust authority to design such remedies and as a result identified remedies should be subject to a system of full judicial review, i.e. remedies should be appealable and the judge be able to fully review the motivations for their introduction. This is impossible in the EU right now since remedies are “offered” by the parties voluntarily and *through a non-transparent negotiation*.

For all these reasons SAMR needs to be strengthened. Just as a simple comparison, SAMR has less than 1/3 of the manpower of the ACM, the competition authority of the Netherlands, a country with a population only slightly higher than 1.2% that of China.

What should China do to remedy this situation?

A program of expansion should be initiated and 40-50 people could be hired every year for the next 10-15 years. In this way SAMR could really attract the best professionals of the country (of course if salaries are competitive enough) since they could have enough time (and a deadline) to prepare in order to have a higher chance of passing the tests for qualifying. A one shot increase in the staff of SAMR is too risky and the professional quality of huge numbers of new entrants could not be as high as required<sup>38</sup>.

Increasing the size of SAMR is only a necessary step, but it is not sufficient to increase the effectiveness of antitrust enforcement in China. Strengthening antitrust enforcement requires defining a precise economic objective to be pursued, since antitrust existing legal provisions are drafted in a very general way. A clear objective provides the legal certainty that legal provisions now lack. The maximization of consumer welfare has been the standard that has served us well for decades. The digital economy has put into question the consumer welfare standard because the possible anticompetitive effects of platforms strategies are often not directed to final consumers, but to other firms that provide complementary services to the dominant platform. A recently developed standard based on transaction cost economics is discussed in the paper and applied to a number of recent antitrust cases to show its effectiveness: the protection of sunk relationship specific investment. According to this approach the rules are meant to avoid situations of hold-up, when one party of the transaction exploits its market power to expropriate the other party of the returns of its relationship specific investment: The law intervenes when this exploitation is so severe that, had it been anticipated, the investment would not have been undertaken.

---

<sup>38</sup> See Heimler, Alberto (2020), “12 years of antitrust enforcement in China: a comparative assessment”. In Quin Lin and Chen Roger (eds). Forthcoming.