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How can the Digital Markets Act impact the current EU Digital Market and what does that imply for European and foreign actors?

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Abstract

This paper aims at understanding the stakes and impacts of the Digital Markets Act. Thanks to the analysis, two complementary views are studied: the reaction of third-markets actors with a focus on China and the United States as well as the ability of European firms to deal with new opportunities brought by the DMA's implementation.

To conduct this study, an historical overview of the EU digital strategy is first developed, and the DMA's legislative proposal is then theoretically defined by analyzing the rationale behind this act, the firms targeted by the authorities as well as the obligations imposed on identified gatekeepers. Following this, an investigation of the stakeholders' positions regarding this act is provided. Then, quantitative data is used to analyze three aspects of the draft regulation: the lobbying activities around the DMA, the trends emerging all over the world regarding Big Tech's regulation and the capacity of EU firms to compete with third-market leaders.

The conclusion that is drawn is that the DMA is one of the most lobbied regulation of the European Union. Third-market stakeholders, and especially GAFAM, have spent enormous amounts of money in lobbying costs to influence the content of the act. While the DMA seems to be a major concern for third-market firms making business on the European market, the same trend is currently emerging on other continents. Both the USA and China recently decided to strengthen their own legislations in order to slow down the monopolistic positions of their national big tech companies. One of the stated goals of the DMA is to ensure fair business environment aiming at allowing EU firms to grow up and developing European leaders. Nevertheless, this objective seems to be hard to achieve. Even though the sanctions applied by the DMA would be significantly increased compared to what firms have experienced in the past, the efforts made by the EU in terms of R&D investments and market capitalization are not sufficient to close the technological gap that exists with the USA and China.

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Introduction

Over the last two decades, the new technologies have evolved and developed at an incredibly fast pace. One of the industries targeted by stakeholders is the Information and Communication Technologies (ICT). Within a few years, these developments have led our economy to be mainly driven by digital tools and online platforms. Some firms managed to enjoy the benefits of those new markets and quickly expand their market share up to controlling their business segments. This is the case, for example, of the GAFAM that are dominating the European market. To deal with this market concentration and monopolistic positions, the European Union (EU) has recently disclosed a new regulation in the name of the Digital Markets Act. This report tackles the following research question and subquestions:

How can the Digital Markets Act impact the current EU Digital Market and what does that imply for European and foreign actors?

- 1) What is the rationale behind the Digital Markets Act?
- 2) How strong have the lobbying activities been around the Digital Markets Act and who are the most interested stakeholders?
- 3) What are the trends in third-market countries regarding Big Tech regulation?
- 4) Can EU firms have the capacity to compete with third-market tech companies?

To answer these questions, the starting point has been to read academic papers and books in order to better understand the context and the higher-level framework of regulation regarding digitalization in the EU. Then, secondary data collected on the websites of European institutions, national governments, corporations and reliable press companies has been used to have a superior understanding of the stakes of the new legislative proposal as well as a better perception of the global trends in other countries.

This paper is divided into four main chapters. The first one aims at presenting an historical overview of the EU digital strategy by describing the modifications brought since 2014 by the Juncker Commission. The second part provides a detailed presentation of the Digital Markets Act by answering four questions: Why such a regulation? Who is targeted? What does it entail? When will it be applicable? The next chapter outlines the positions of a large list of stakeholders potentially affected by this new legislation. The last part provides a deep analysis divided into

three subsections: the lobbying activities around the DMA, third-market countries' trends regarding Big Tech regulation and EU firms' ability to grow up and compete with international leaders. A conclusion finally closes this paper, recalling its main outcomes and opening the way for further research.

Part I. Historical overview of the EU digital strategy

Europe lost the first round of the digital revolution to China and the United States (USA) and must now react. Twenty years ago, the USA developed a first-mover advantage in Information and Communications Technologies (ICT) (Nouveau, 2020). At the time, the EU considered this advantage as a sectoral competitiveness of the USA, but it would quickly become unrecoverable. Since then, China has been the only economy capable of competing with the Americans. Over the years, digital industries have started to extend their scope to an increased number of purposes, from B2C to B2B and now progressively heading towards the digitalization of everything (id.). The dependence of Europe on foreign economies has raised at the same time and the digital gap that has been formed became difficult to close. Nowadays, we depend on the USA in many industries: Facebook and Google for advertisers, US mega clouds for technologies, US investors for startups (Husson, 2020) ...

As Margrethe Vestager stressed, “the timing to solve this problem is absolutely now, because we are now entering the next phase of digitalization” (Forbes, 2021). With only two European out of the 100 largest global tech firms, namely SAP and ASML, the EU needed to establish new regulation with the objective of developing and maintaining large tech firms on the European soil (id.).

This need for new legislation led the European Commission to enhance its focus on the digital market. Between 2014 and 2019, the Juncker Commission had outlined ten political priorities, with one of those being the Digital Single Market (DSM). The objective of the DSM is to provide the best possible access to the online world both for businesses and individuals while ensuring the free movement of persons, services and capital (European Commission, 2020). During his mandate, Juncker implemented 28 legislative proposals in line with the EU long-term strategy for digital transformation. These achievements cover the following areas: digital culture, digital future, digital life, digital trust, digital shopping and digital connectivity (id.). These modifications have allowed the creation of 35 new digital rights and freedoms aiming at boosting connectivity, the data economy, digital public services as well as improving digital skills of citizens (Council of the EU, 2019).

Among all the modifications brought to the DSM by the Juncker Commission, one of the most important achievement is the EU copyright rule. This directive entered into force in June 2019 and aims at protecting creativity in the digital age as well as enabling creators and consumers to make the most of the new digital world (European Commission, 2021). Another significant piece of legislation is the implementation of the General Data Protection Regulation (GDPR) in 2016. This regulation was an essential step to protect natural persons having regards to the processing of personal data and the free movement of those data (European Commission, n.d.). This new European framework had a non-neglectable impact on the major digital players. In addition, the EU regulation on platform-to-business relations (P2B Regulation) has applied since July 2020 (European Commission, n.d.). It is the first set of rules with the objective of preventing market distortion, promoting healthy competition and prohibiting unfair trading practices by creating a fair, transparent and predictable business environment for smaller businesses and traders on online platforms (id.).

The Digital Market Act is in line with the legislative developments undertaken since the Juncker Commission. After the Juncker Commission, the European Commission collectively developed the EU's overall political goals by defining six priorities for 2019-2024. Among others, one of the six pillars is: "A Europe fit for the digital age" (European Commission, n.d.). Through this pillar, the Commission is determined to strengthen the EU digital sovereignty by setting new standards rather than following those of others. In an interview, French President Macron said: *"The United States has the GAFA, China has the BATX. And Europe? We have the GDPR. It's time to have our own technological sovereignty and not depend only on American or Chinese solutions"* (Husson, 2020). To set those new standards, a clear focus on data, technology and infrastructures has been defined. In March 2021, the Commission presented a vision for Europe's digital transformation by 2030, evolving around four cardinal points: skills, infrastructures, business and government. Each of those areas will be translated in the digital ambitions in concrete terms with key milestones. For example, 75% of EU companies should be using Cloud/AI/Big Data and 90% of SMEs should have a basic level of digital intensity (European Commission, 2021).

The Digital Services Act package has been presented in December 2020 as one of those bold moves into Europe's digital renaissance. Indeed, the legal framework for digital services has remained unchanged since the adoption of the directive on electronic commerce, in 2000. This legislation was the corner stone of the regulation of the digital space and its players (Maquet,

2020). Obviously, a lot has changed in 20 years and this directive was not adapted to the fast innovations that took place in the recent years. When the e-commerce directive was adopted, Amazon was a bookseller and Facebook did not even exist while these platforms have now a huge economic power as well as political and societal impact (Husson, 2020). An update of this regulation was therefore crucial, to align the EU digital strategy to the current need of the digital market. One of the instruments used to reach the objective of setting its own new standards is the Digital Services Act package containing two legislative proposals: The Digital Services Act and the Digital Markets Act (DR2 Consultants, 2021).

Part II. Digital Markets Act

On the 15th of December 2020, Thierry Breton and Margrethe Vestager presented two new legislative proposals dealing with the European digital economy, forming the Digital Services Act package: The Digital Services Act (DSA) and the Digital Markets Act (DMA). The DSA aims at regulating online platforms and strengthening their responsibility while the DMA aims at ensuring a fair competition between these platforms (Maquet C, 2020). Those acts are two pillars of the new European digital strategy (European Commission, n.d.). In the context of this paper, the focus will be on the Digital Markets Act and we will analyze it by answering four questions: Why has the DMA been proposed? Who are the actors concerned? What does it contain and entail? When will it be enforced?

2.1. Why has the Digital Markets Act been proposed?

The Digital Markets Act proposed by the European Commission intends to guarantee online consumer protection and enhance the development of innovative digital companies in the European Union (Maquet C., 2020). Indeed, as explained earlier (cf. Part I.), our economy is currently mainly driven by digital tools and online platforms. While the EU is hosting more than 10 000 online platforms, 90% of those are SMEs that do not manage to substantially grow and most of the market is shared by a limited number of large online platforms (Digitalsme, n.d.). Those ones have a strong market power and are able to set the standards for innovation, competition and for consumers' choice in the EU.

As it can be observed below (cf. Table 1), the EU digital market seems to be highly concentrated, with a few multinational companies dominating and controlling a market segment. Having a look at the market share of the EU detained by GAFAM companies (Google, Apple, Facebook, Amazon and Microsoft), they all are significant actors in their market segments, leading to an oligopolistic market characterized by a limited amount of firms meeting market demand. While this phenomenon of market concentration has already been observed back in the days, the dynamic has recently changed. Indeed, some examples have shown in the past that innovation can sometimes restructure market powers and allow the entry of new potential competitors on the market (Anderson J. & Mariniello M., 2021). As an example, Facebook overcame MySpace in 2008 and Google replaced AltaVista in 2000 (Press G., 2018). Whereas the dominant position of MySpace and AltaVista respectively lasted for three and one

years, today's digital leaders have maintained their position for more than a decade (Digital Competition Expert Panel, 2019).

Table 1: Market Share Europe (Statcounter, 2021)		
Market Segment	Dominant Company	Market Share of the EU
Search Engine	Google	93%
Mobile Operating System	Google Android	68%
	Apple IOS	31%
Desktop Operating System	Microsoft	76%
Social Media	Facebook	78%
Web Brower	Google Chrome	61%
	Apple Safari	19%
E-commerce	Amazon	25%

These long-lasting leading positions and the high concentration on digital markets are raising some concerns. Indeed, these gigantic platforms act as gatekeepers between businesses and citizens, meaning that they have the ability to act as the main bottleneck to a large number of market participants not reachable elsewhere. Alexandre de Streel (2020) acknowledges five characteristics describing the digital market: (1) economies of scale on the supply-side, (2) direct and indirect network effects on the demand-side, (3) creation of an ecosystem, (4) high innovation rate and (5) uncertainty in the evolution. The combination of these market forces could lead to “winner-takes-all” scenarios (Anderson J. & Mariniello M., 2021). The European Commission already expressed the worry that Big Tech companies could unlawfully take advantage of their leadership and their incredible bargaining power to lock in their dominant position, increase their influence and distort the competition (id.). The economic power of those gatekeepers goes beyond that, as those Big Tech firms also have the ability to gather a large amount of data, easily access technical capabilities or enter new markets without any difficulty (European Commission, 2020).

To avoid this, the DMA aims at constraining these behaviors by forcing those giant firms to open up to more competition. The implementation of the DMA would ensure a more transparent and fair market, by addressing two major problems: high barriers to entry and anticompetitive practices of leading multinational firms (Anderson J. & Mariniello M., 2021). The European

Commission therefore seeks to foster innovation by facilitating the entrance of new businesses into the market, promoting their activities and development over competitors.

2.2. Who is concerned by the Digital Markets Act?

The Digital Markets Act has a limited scope and does not apply to all the sectors. The draft legislation defines a list of eight types of digital services targeted by the DMA, identified in the legislative proposal as core platform services: online search engines (ex: Google Search), online intermediation services (ex: Google Play, App Store), social networks (ex: Facebook), video sharing platforms (ex: YouTube), communication platforms (ex: Gmail, WhatsApp), operating systems (ex: Google Android, Microsoft), Cloud services (ex: iCloud) and advertising services (ex: Google AdSense) (European Commission, 2020). Note that the companies mentioned within the brackets are only examples since no firm has been officially recognized as a gatekeeper.

The obligations and sanctions of the DMA will not apply to all the companies of those sectors, but only to the firms recognized as being gatekeepers. This classification would be based both on quantitative and qualitative criteria. On the one hand, indicators such as market shares, number of users affected by platform operations, time users spend on a platform's site and the annual economic revenue have been identified as relevant quantitative benchmarks (European Parliament, 2020). Article 3 of the draft legislation pinpoints three cumulative criteria that are presumed to be satisfied with specific thresholds (cf. Appendix 1) (European Commission, 2020):

- A significant impact on the EU internal market: An annual EEA turnover equal or above €6.5 billion in the last three financial years or an average market capitalization of at least €65 billion in the last financial year, and a presence in at least three of the 27 Member States.
- Control of an important gateway for business users to reach end-users: More than 45 million monthly active end users and more than 10 000 yearly active business users in the EU in the last financial year.
- The control in question must be entrenched and durable: Thresholds of the second criteria must be met in each of the last three financial years.

On the other hand, several qualitative criteria that are harder to assess can also be taken into account, such as the ability of the platform to control access to a large number of users and its ability to leverage its gatekeeper position (European Parliament, 2020).

While some large platforms such as search engines or marketplaces could be identified as digital gatekeepers, some precision is still needed. Indeed, some debates exist regarding platforms such as travel booking or mobility activities (European Parliament, 2020). To tackle this problem and given the importance of the DMA, some stakeholders have tried to provide keys to identify gatekeepers. As an example, the UK Competition Market Authority recommends setting up ex-ante obligations for firms diagnosed to have ‘strategic market statuses’ based on three criteria: their size and scale, their ability to leverage market power into other markets, and their position of access point for consumers and businesses. The Centre on Regulation in Europe came with a suggestion of four cumulative benchmarks: a large size, occupy a position on which other businesses depend, a gatekeeper position that lasts, and a control over an ecosystem (European Parliament, 2020).

The companies that are targeted by the DMA are therefore not publicly known yet and the criteria needs to be refined. Nevertheless, it seems to make no doubt that the GAFAM are expected to be subject to the DMA given their size and influence on the EU Internal Market. China, the second dominant economy in the world might also be targeted, as they have a national equivalent to the GAFAM: the BATX (Baidu, Alibaba, Tencent and Xiaomi). Those four Chinese firms together represent more than \$950 billion in market capitalization (Dulieu, 2019). According to calculations made by Caffarra and Morton (2021), other firms would appear to meet the thresholds such as Oracle, SAP, AWS or Microsoft Azure. On the contrary, companies like Twitter, AirBnB, Netflix LinkedIn and Zoom do not seem to meet the criteria for now. Some organizations such as Booking.com, Spotify, Uber and TikTok meet some of the thresholds but not all of them. The Commission might identify those groups as gatekeepers according to article 3(6) via market investigation. In this case, the emerging gatekeepers would be subject to a part of the obligations described hereafter (cf. Section 2.3).

2.3. What does the Digital Markets Act entail?

In order to promote the innovation and open up competition on the digital market, the DMA aims at complementing the existing competition rules with ex-ante regulation of digital

gatekeepers. Shifting from ex-post to ex-ante regulation is a significant move as some behaviors are now prohibited from the start (Clark, 2020). This legislative proposal is based on basic principles: “What is forbidden offline should also be forbidden online” (Husson, 2020). The draft legislation contains both mandatory practices that firms identified as gatekeepers should adopt as well as prohibited unfair behaviors (Doctorow C. & Schmon C, 2020).

Article 5 and article 6 of the legislative proposal define two different types of obligations that digital gatekeepers will have to deal with. On the one hand, article 5 provides a list of seven prohibited practices (cf. Appendix 2). Those have been developed because of the ineffectiveness of the existing antitrust regulation. These major prohibitions are related to interoperability, data processing and platforms’ transparency (Maquet, 2020). More specifically, the article aims at banning self-preferencing, the bundling of different digital services and the conducts limiting user’s mobility across platforms. The prohibited practices are very detailed and provide the digital platforms with clear rules in order to limit the power of Big Tech companies (De Streel, 2021).

On the other hand, article 6 of the draft legislation enshrines eleven prohibitions and obligations that are “susceptible of being further specified” (cf. Appendix 3) (European Commission, 2020). Those provisions aim to guarantee market contestability and ensure market fairness. Among others, the article contains a prohibition of self-preferencing as well as obligations of data sharing and a non-discriminatory access to app stores. Those prohibitions and obligations are sometimes broadly defined and will need to be specified by the European Commission on an individual platform basis, through a dialogue with the regulated gatekeeper (De Streel, 2021).

Additional transparency obligations should also be respected by firms identified as gatekeepers. First, according to article 12, they have to notify the European Commission of their planned mergers and acquisitions involving a provider of another core platform service regardless the need to do it under the EU Merger Regulation or any national merger rule (De Streel, 2021). Furthermore, within six months after being defined as digital gatekeepers, they have the obligation to provide to the European Commission an independently audited description of the consumers profiling techniques that are used and an annual update of the potential changes as explained in article 13 (De Meese, 2021). The last obligation has regards to the identification of gatekeepers. Indeed, in article 3, it is mentioned that it is the role of firms to alert the

Commission when they meet the thresholds to be considered as gatekeepers (European Commission, 2020).

Apart from obligations for firms that have been identified as gatekeepers, the DMA also grants the Commission with investigative and enforcement powers. Articles 15, 16, and 17 give the right to the Commission to conduct market investigations in three specific cases: for designating gatekeepers, in case of systematic non-compliance, and into new services or practices (European Commission, 2020). Chapter V of the draft legislative proposal provides more details regarding the rights to operate those investigations (id.).

Core platform service providers will have to comply with all these prohibitions and obligations within six months after being officially designated as gatekeepers. We should note that some exceptions may be granted based on very restrictive conditions (De Meese, 2021). In case of non-compliance with the obligations listed in the draft legislation, sanctions have been imposed. Companies that fail meeting the DMA's expectations risk a fine of up to 10% of the total worldwide annual turnover (European Commission, n.d.). In case of recidivism, additional remedies may be imposed. Such remedies will need to be proportionate and could, as last resort options, involve structural takeover and the dismantling of (parts of) the business (Maquet, 2020).

2.4. When will the Digital Markets Act be enforced?

The Digital Services Act package, containing the DMA, has been presented on the 15th of December 2020 by the European Commission but is not enforced yet. Indeed, as every draft legislation, the DMA is subject to the Ordinary Legislative Procedure and needs to be validated by the Council of the EU, representing the 27 Member States, and the European Parliament (Maquet, 2020). Those two institutions can have up to three different lectures with amendments in between before voting the legislation (Maquet, 2020).

Within the European Parliament, there has been some debates with regards to which committee should take the leadership on the DMA. After long-lasting discussions, it has been decided that four committees would work together, under rule 57 of the European Parliament (European Parliament, 2019). Regular meetings will therefore be organized between IMCO (Internal Market and Consumer Protection), ITRE (Industry, Research and Energy), LIBE (Civil

Liberties, Justice and Home Affairs) and JURI (Legal Affairs), and the rapporteur of each committee will participate in the drafting of reports, trilogue sittings and amendments negotiations (DR2 Consultants, 2021). Within the Council of the EU, the DMA is discussed in the Internal Market Working Party, falling within the Competition Council formation (id.).

This long negotiation process between the Council of the EU and the European Parliament is expected to last at least one and a half year before a compromise is reached. Once adopted, the Act should enter into force six months after its publication and will directly be applicable across the EU (De Meese, 2021). The Digital Services Act package is therefore expected to be adopted by the European legislature by mid-2022 and should apply to around ten firms, including the GAFAM (De Streel, 2021). Nevertheless, it seems useful to remember that other recent and significant files took way longer to be adopted, such as the GDPR that took five years (DR2 Consultants, 2021).

Part III. Stakeholders' position

The objective of this section is to provide a description of the conflicting interests by identifying the main actors which are or could be affected by the Digital Markets Act. Four categories of stakeholders, sorted by nature are included in this paper: 1) EU Member States, 2) EU companies, 3) Third-market countries and 4) Third-market firms.

3.1. EU Member States

As we already analyzed the scope of the DMA, it can be easily understood that all the member states of the EU will be impacted by this new legislation. Nevertheless, the position and opinion of the 27 member states diverges. While most of the countries agree with the need to improve access to markets for small players, it can be noticed that Eastern countries seem to have adopted a reactive position while Western member states have been more proactive regarding the drafting of the DMA.

In Eastern Europe, the DMA proposal has been welcomed and they recognize the necessity to ensure a level playing field for smaller EU firms, most of those being SMEs struggling to thrive. More specifically, Romania, Slovakia and Latvia have shared their views and specific concerns with Euractiv (2020). Romania acknowledges that the DMA will contribute to the development of a safer digital space and that it is needed to regulate data gathering (Stolton, 2020). According to Slovakia, the DMA will support innovation and competition even if some monitoring obligations should complement the existing draft (id.). On its side, Latvia insists on the importance of compatibility with the existing EU competition law as well as Platforms-to-Business regulation (id).

In Western Europe, countries seem to have more stakes and are therefore more proactive by making propositions of improvement and missing elements of the draft regulation. It is the case, especially, of France, Germany, and the Netherlands. These countries are also some of the most innovative countries of the EU, which might explain their involvement and concerns. France has worked for more than two years, jointly with the European Commission, on this topic, with the objective of promoting a powerful European regulation model (Ministère de l'économie des finances et de la relance, 2020). These new regulations should be agile and flexible to ensure constant adaptation to new business models (Gouvernement Français, 2020). Nevertheless, the

French government wants to go further than what is currently planned, asking for the ability of member states to individually take action against giant tech firms in case of fault (Piquard, 2021; Rochefort, 2021). Together with Germany and the Netherlands, France has formulated propositions to strengthen the DMA, insisting on the flexibility and the reaction speed to tackle the evolving practices as well as special attention to mergers and acquisitions of big digital companies (Terrasson, 2021). In the publication, ministries of those three countries also call for cooperation between the national authorities of each and every member state to ensure a better efficiency (Vitard, 2021). The Netherlands, France and Belgium also published a joint declaration in October 2020. In this declaration, they express their willingness for a strict enforcement of the competition rules, aiming at avoiding abuse of dominance and anti-competitive practices (Government of the Netherlands, 2020).

Within the 27 EU Member States, two exceptions should be noted: Estonia and Ireland. Estonia has shared its concerns regarding the DMA. According to them it is “crucial to refrain from over-regulating online service providers and carefully weigh every measure’s impact on consumer welfare, innovation and business users’ legitimate interests” (Stolton, 2020). These concerns can be explained by the technologically advanced status that has been acquired by the country these last years. Estonia has been named ‘the most advanced digital society in the world’ by Wired magazine and is hosting several notable firms such as Eleks, Axon and Bamboo Agile (e-Estonia, n.d.; Visual Objects, 2021). On the 8th of September 2020, during the public consultations organized by the European Commission, the government of Ireland also published its position regarding the DMA. In this paper, Irish authorities explain that holding a dominant position is not illegal and does not prevent new entrants on the digital market (Government of Ireland, 2020). Dublin, being the European home of several of the world’s largest tech giants, is opposed to the ex-ante regulations and requires more evidence for the justification of such legislation (Stolton, 2020).

3.2. EU companies

Another category of actors that will be affected by the DMA comprises the European companies. Indeed, those are the primary targets as the legislation aims to increase their market power and allow them to compete with bigger firms. As far as our research is concerned, we did not find any public individual position of European companies. Rather, several associations gathering multiple firms have publicly shared their views on the DMA. Those corporations

represent companies from multiple industries such as computer (DOT Europe), lighting (LightingEurope), communication (CCIA), brands (AIM), tech (EUTA), media (News Media Europe) and SMEs (SMEunited). All these associations recognize the enormous potential of the DMA to set the bar in terms of digital policy and the opportunity for the EU to take the lead in addressing the challenges of digital economy (Banks, 2020). In their publications, several corporations insisted on the need of the European Commission to work jointly with industry representatives, as they already did last year with the public consultations, to reach the stated goals (EUTA, 2021; Greenfield, 2020). While they acknowledge that the proposal is on the right track to ensure a level-playing field, some associations have shared potential improvements (SMEunited, 2020). The EUTA and News Media Europe have both published a list of amendments that could be made to strengthen the effectiveness of the proposal vis-à-vis the conduct of gatekeepers (News Media Europe, 2021). The recommendations relate to the scope, shortening deadlines and the proposed fines that they judge ineffective (EUTA, 2021).

3.3. Third-market countries

The EU being a powerful actor in the global economy and the DMA having an influence on multinational firms, third-market countries have reacted to this regulation proposal. Our research focuses on China and the United States as these are the two dominant economic powers in 2021 according to the annual ranking of CEOWORLD magazine, based on 60 indicators across seven categories (political stability, economic influence, defense budget, country's weapons, global alliances, soft power and military strength) (Papadopoulos, 2021). Moreover, those two countries are hosting some of the biggest firms in terms of market capitalization with the GAFAM and the BATX. While neither China nor the USA have publicly shared their position regarding the DMA, we have found some interesting information on the USA's interests vis-à-vis this draft legislation.

Even though this is not explicitly mentioned in the proposal released by the European Commission, it is more than likely that the GAFAM, the American Big Tech, will be the main targets of the DMA. The official position of the American government is not known yet but is highly expected as it is still an open question whether the Biden administration will defend the GAFAM in the European digital market. The DMA comes in a context where the EU and the US aspire to build a better relationship, that has been previously harmed during Trump's presidency (Landler, 2020). The European Commission stressed the need for cooperation

between the US and the EU with the goal to tackle big global topics such as the dominant position of online platforms. In January 2021, the President of the European Commission, Ursula von der Leyen, expressed her confidence that Joe Biden will be an ally in strengthening rules on how big tech firms operate, since the current president of the United States shares the same position as the EU (Amaro, 2021). In a speech given at the Munich Security Conference in February 2021, Ursula von der Leyen called the US to join the European initiatives in order to create together a set of rules for the digital economy that are valid worldwide (European Commission, 2021). Even if the official position of the American government about the DMA is not publicly known yet, the same debates have recently arisen in the US too as explained further in the paper (cf. Section 4.2).

While the position of Biden administration is still expected, other organizations have raised their voice regarding the DMA. In March 2021, the Congressional Research Service, a research institute informing the members of the US congress, published a document in which they stressed the potential effect of the DMA on the US firms doing business in Europe. They also outline the fact that EU ongoing digital regulations, including the DMA, are an opportunity for US-EU cooperation (Fefer, 2021). AmCham EU, representing American companies in Europe, also published a position paper on the 7th of May 2021. In this paper, they stressed six areas (e.g., scope, definition of gatekeepers...) where further clarity is needed to improve the design of the DMA and ensure a global understanding of this regulation (AmCham EU, 2021).

3.4. Third-market firms

As explained above (cf. Section 2.2), the European Commission has not disclosed any name of gatekeepers. Nevertheless, it seems obvious that the primary targets of the DMA are the American Big Tech, better known as GAFAM even if it has not been officially confirmed. Indeed, those firms all meet the criteria set up to identify gatekeepers, namely an annual turnover of at least €6.5 billion or at least 45 million users across Europe. After the disclosure of the DMA, some firms have reacted and shared their opinion on the Act, as it could radically change their business operations in the EU. In addition to these publications, most of the American Big Tech have spent enormous amount of money in lobbying and took part in a lot of meetings aiming to influence the legislation (cf. Section 4.1) (Corporate Europe Observatory, 2020). In this paper, we decided to analyze the position of GAFAM firms, even if we do not have any public confirmation of their gatekeeper position. Other multinational firms might as

well be recognized as gatekeepers by the EU. As part of our research, we also had a look at the position of BATX firms but did not find any relevant information.

3.4.1. Google

As one of the focus of the DMA is to tackle search engines, social networks, cloud computing services and operating systems, Google officially presented its position. Matt Brittin, Google's President of Business and Operations for the EMEA region, shared his opinion in an interview. According to him, "it's so important to get the rules right for European consumers to have more choice, to support the kind of jobs we'll need in the future and to support European businesses." Google also denies the dependance that businesses rely on to reach their users and warns against the negative impact that over restrictive rules could have on the European economy (Kayali, 2020). Nevertheless, Matt Brittin recognizes the importance of the EU market for Google and highlights the qualities of adaptation which will be used by the firm to meet EU standards (id.)

3.4.2. Apple

One of the potential changes brought by the DMA is putting an end to self-preferencing. This would force Apple to modify its business model with regards to its practices and preinstalled applications on the App Store (Potuck, 2020). While Apple already tried to change their anti-competitive behavior by reducing its commission on sales from 30 to 15% for app developers with less than \$1 million in annual net sales in November 2020, this did not impede the European Commission to disclose the DMA (Stolton, 2020). Earlier in the year, in January 2020, Apple shared its opinion in a public consultation organized by the Irish government, Ireland being the European home of Apple. While they declare welcoming and supporting some of the DMA's provisions, Apple is more concerned by the one-size-fits-all approach to deal with very diverse firms and sets of products (Department of Enterprise, Trade and Employment, 2021).

3.4.3. Facebook

Facebook has been one of the first firms to give its opinion about the DMA. According to the company, the legislation is "on the right track to help preserve what is good about the internet" (Kelion, 2020). Facebook also called attention to Apple, hoping for boundaries being set for this other US tech giant (Reuters, 2020). This shows that tensions have been observed not only between Big Tech companies and the European Commission, but also between GAFAM. This

little war between Facebook and Apple is not new and goes back to the moment when Apple announced a privacy feature allowing users not to be tracked by advertisers across different application. Earning revenue from advertisement, Facebook showed its discontent while Apple accused them from invasive tracking. Regarding the DMA, a Facebook spokesman added that “Apple controls an entire ecosystem from device to app store and apps, and uses this power to harm developers and consumers, as well as large platforms like Facebook” (Reuters, 2020).

3.4.4. Amazon

Compared to the other American Big Tech, Amazon has been more discrete and does not seem as concerned by the DMA as other multinationals. This could be explained by the limited impact that the legislation has on Amazon. Indeed, the DMA under its current form could only affect a few aspects of Amazon such as the prohibition on ranking its product before the ones of competitors or the interdiction on using non-public data from competitors hosted on the platform (European Commission, 2020).

3.4.5. Microsoft

Compared to the other firms, Microsoft has not used media or newspapers to share its opinion. It is also one of the only GAFAM companies that reacted to the consultation organized by the European Commission early 2020. Microsoft supports the development of an appropriate regulatory framework to ensure fair markets. They reveal themselves to have suffered from some competitors’ practices to compete and innovate (Alaily, 2021). In order for the DMA to be effective, Microsoft advises the European Commission to define clear criteria that will allow an online platform to be identified as a gatekeeper. Moreover, the Big Tech company insists on the adaptability of the DMA to keep pace with the innovation taking place in digital markets (Microsoft Corporation, 2020).

3.5. Conclusion

The disclose of the DMA on the 15th of December 2020 generated reactions from a lot of different actors. While the EU stakeholders seemed to welcome this legislative proposal with the notable exceptions of Ireland and Estonia, the rest of the world did not share the same opinion. The USA are the most worried by this regulation, as GAFAM would be the most impacted firms. Therefore, those firms have a lot of concerns that they publicly disclosed, using media or the official public consultations of the European Commission. American firms see the

DMA as a huge stake that could have enormous repercussions on their businesses. One of their worry is related to the Chinese companies. American organizations indeed consider that the DMA would give an advantage to Chinese firms that they consider less impacted by the new EU rules.

Part IV. Analysis

After having deeply understood what the DMA entails, what is at stake with this draft legislation and having identified the main stakeholders, this section will provide an analysis of this act. This section will be divided into three main subsections. The first one aims at spotting the lobbying activities that have been put in place by the stakeholders and the consequences of such actions on the draft legislation. Then, a comparative analysis between the DMA and the similar moves that are currently being observed around the world will be provided. Finally, the efficiency of the DMA will be tackled by investigating the abilities of European firms to step up thanks to this new regulation.

4.1. Lobbying activities around the DMA

As the DMA is currently making its way through the Ordinary Legislative Procedure and is still waiting for approval, many stakeholders which have already been identified in the previous sections have engaged themselves in lobbying activities. According to various sources, no recent legislative proposal has been subjected to such an intense lobbying since the liberalization of telecoms at the end of the 90s (de Laubier, 2021). The Digital Services Act package is one of the largest regulatory frameworks that the EU will adopt, leading to debates between Big Tech and the EU. This is clear from the number of meetings that have been disclosed including discussions on the DMA and the DSA. According to Corporate Europe (2020), 158 meetings involving 103 organizations have been organized with commissioners, their cabinets and directors-general since the start of the Von der Leyen Commission.

Among the stakeholders making huge efforts to shape the draft regulation, Big Tech are particularly engaged in this long lobby battle. Given the potential implications for GAFAM firms, it seemed obvious that massive lobbying would follow the presentation of the DMA early 2020. As it can be observed in Table 2, according to the Transparency Register, the amount of money spent annually by the GAFAM firms in lobbying activities varies between 2 750 000€ for Amazon and 6 000 000€ for Alphabet (Google) (Europa.eu, n.d.). Furthermore, all the GAFAM firms have managed to obtain meetings with the European Commission to discuss about the DSA and the DMA. The number of reunions goes from three for Apple and Amazon, four for Facebook and Microsoft, to nine for Google (Europa.eu, n.d.). We should keep in mind that this only takes into account meetings held with the European Commission. To this number,

we could also add the 19 meetings that GAFAM held with the European Parliament (Clarke & Swindells, 2021).

Table 2: Lobbying of largest tech companies (based on Transparency Register)		
Company	Number of meetings with the Commission on the DMA	Lobbying costs in 2020 [€]
Alphabet (Google)	9	5 750 000 – 5 999 999
Apple	3	3 500 000 – 3 749 999
Facebook	4	5 500 000 – 5 749 999
Amazon	3	2 750 000 – 2 999 999
Microsoft	4	5 250 000 – 5 499 999

Google is therefore leading the pack and stands out with the most meetings and money spent on lobbying activities. Talking of Google, a leaked copy of their lobbying strategy has been revealed at the end of October 2020 by the French newspaper Le Point (Corporate Europe, 2020). The document describes the strategy that the multinational is setting up to fight regulations that could impact its profit margin. Entitled “DSA 60-Day Plan Update”, this paper discloses the main components of the lobbying strategy, which are, among others, to lobby at several levels (Parliament, Commission and Member State), mobilize third parties to reverberate the Google’s message, call up for the US government support, and to create conflicts between the Commission’ departments (Berretta & Grallet, 2020). Despite a meeting between Thierry Breton and Sundar Pichai, Google’s CEO and apologies from the latter, the strategy evoked in the document has nevertheless been put in place (Treilles, 2020). Those revelations have reinforced tensions between Google and the EU and are likely to generate further debates within the Brussels bubble (Espinoza, 2020).

In parallel of those lobbying activities that GAFAM have individually set up, Big Tech firms also have close ties with think-tanks which are aiming to influence new regulations by

publishing position papers and studies. Nevertheless, these ties are not clear at all as they are not always revealed. It happens frequently that think-tanks decide not to disclose their association with a Big Tech or tech companies prefer to keep their ties secret (Corporate Europe, 2020). Table 3 shows the ties that GAFAM firms have with think-tanks and which affiliation have been kept secret, showing a lack of transparency. This chart clearly shows a lack of transparency regarding the affiliation that large multinational companies have with think-tanks. As an example, Facebook in particular has worked with several think-tanks without revealing it while Microsoft seems to be the only firm to disclose all its affiliations. It should be noted that, according to the Transparency Register, none of these think-tanks has participated to any meeting with the Commission having regards to the DMA, but these data are questionable. In addition to those ties with think-tanks, Big Tech firms are also members of trade associations, having the objective of representing the interests of those digital companies. According to Corporate Europe (2020), the four trade associations having the biggest EU lobby budget are: CCIA, DigitalEurope, DOT Europe and EuroISPA. All of these have at least four of the Big Five among their members. As it can be seen in Table 4, all four associations together have a total lobby budget of €2.4 million, whose DigitalEurope represents more than 50% and have all took part to at least one meeting with the Commission on the DMA topic.

Table 3: Membership of GAFAM in think tanks (Corporate Europe, 2020)					
Think tank	Google	Amazon	Facebook	Apple	Microsoft
Centre on Regulation in Europe	Officially disclosed	Not disclosed, but affiliated	Not disclosed, but affiliated	Not disclosed, but affiliated	Officially disclosed
Bruegel	Officially disclosed	Officially disclosed	Not disclosed, but affiliated	Officially disclosed	Officially disclosed

European Policy Centre (EPC)	Officially disclosed	Officially disclosed	Not disclosed, but affiliated	Not disclosed, but affiliated	Not affiliated
Transatlantic Policy Network (TPN)	Not disclosed, but affiliated	Not affiliated	Not disclosed, but affiliated	Officially disclosed	Officially disclosed

Table 4: Lobbying of largest trade association in terms of EU lobby budget (based on Transparency Register)

Trade Association	Number of meetings with the Commission on the DMA	Annual lobbying costs [€]
CCIA	1	400 000 – 499 999 (2018)
DigitalEurope	5	1 250 000 – 1 499 999 (2019)
DOT Europe	3	500 000 – 599 999 (2020)
EuroISPA	1	25 000 – 49 999 (2020)

All these figures highlight the intensity of lobbying activities in which Big Tech firms have been engaged those last months. This is obviously explained by the significant implications that such an act could have on their revenue. This exceptional level of lobbying also leads to a real danger that the discussions could be shaped by Big Tech firms and deviate from its initial objective. But, what about the lobbying efforts of other stakeholders?

As we already mentioned above, China has been quite silent since the release of the DSA package, and no official position has been published. Can we draw the same conclusion regarding their lobbying efforts?

According to the ranking of Kleiner Perkins (2018), China is hosting nine of the world's top 20 tech giants. Out of those nine firms, we decided to analyze the top five in order to have a better view of their lobbying activities in Brussels. Those five firms are the BATX to which Ant Group has been added. As it can be observed in Table 5, only two firms have been found on the Transparency Register, namely Alibaba and Xiaomi. Even if those two companies appear in the register, none of those have had any meeting with the Commission concerning the DMA. The lobbying costs that have been spent these last years are also very different from one firm to another as only 10 000€ are declared by Xiaomi while Alibaba mentions 600 000€.

Table 5: Lobbying of largest tech companies (based on Transparency Register)		
Company	Number of meetings with the Commission on the DMA	Annual lobbying costs [€]
Baidu	/	/
Alibaba	0	600 000 – 699 999 (2018)
Tencent	/	/
Xiaomi	0	10 000 – 24 999 (2019)
Ant Group	/	/
TikTok	4	800 000 – 899 999 (2020)

How can we explain this lack of interest from Chinese firms towards the DMA? The first and obvious reason relates to the size of the market share that the EU market means for Chinese firms. Whereas the EU constitutes a considerable market for all the GAFAM firms, Chinese organizations operate at a way smaller scale on the European market (The Economist, 2020). As an example, Alibaba commerce in China represents 90.7% (473 683 million yuan) of its annual revenue whereas only 9.3% (48 851 million yuan) comes from international commerce (Statista, 2021). Another explanation might be found in the current context of the diplomatic relations between the EU and China. These are not at their best for the moment and there is still a lot of sensitive points that persist, notably regarding human rights, despite the EU-China

investment treaty which has been signed late 2020 (Brunsden, Peel & Fleming, 2020). Moreover, the EU made clear its intention to prioritize its relations with the US to form an alliance capable of tackle the “strategic challenge” posed by China (Fleming, Brunsden & Peel, 2020). These elements can partially explain the low interest that has been shown by China towards the DMA.

Nevertheless, an exception to this trend can be spotted with TikTok. The video sharing application is the highest-earning app for the year and is one of the fastest-growing platforms worldwide (Ahlstrand, 2021). According to the Transparency Register, TikTok seem to distinguish from other Chinese firms with bigger annual lobbying costs and a participation in meetings with the Commission, four on the DMA topic (cf. Table 5). This considerable interest of TikTok can be explained by the market share that the EU represent for the Chinese firm. Indeed, the application is monthly actively used by 100 million Europeans (Bloomberg, 2020). The significant market that Europe is for TikTok is enough to describe the growing interest for lobbying at Brussels.

The lobbying expenses are therefore very heterogeneous between the various third-market countries potentially impacted by the DMA. GAFAM firms have spent enormous amounts of money while China has, with a few exceptions, been almost absent since the DMA’s release. The last major actors that we will have a look at is the European Union. Being the primary focus of the draft proposal, we will now have a look at how the EU firms have been involved in the discussion.

To do so, we based our analysis on the ranking made by Statista (2019) of the top 10 largest tech companies by market capitalization. As Table 6 shows, only three firms had the opportunity to take part in meetings with the Commission concerning the DMA: SAP, Amadeus and Spotify. The firm which has been the most involved is Spotify with six meetings organized. Furthermore, having a look at the annual lobbying costs, those are variable: from 9 999 for Capgemini to 1 000 000 for SAP. These numbers show that EU firms have been less invested in the shaping of the forthcoming legislation.

Table 6: Lobbying of largest tech companies by market capitalization in Europe in 2019 (based on Transparency Register)

Company	Number of meetings with the Commission on the DMA	Annual lobbying costs [€]
SAP	2	1 000 000 – 1 249 999 (2020)
ASML	0	25 000 – 49 999 (2019)
Dassault	0	200 000 – 299 999 (2020)
Amadeus	2	600 000 – 699 999 (2019)
Ericsson	0	700 000 – 799 999 (2020)
Nokia	0	900 000 – 999 999 (2019)
Infineon	0	300 000 – 399 999 (2020)
Spotify	6	600 000 – 699 999 (2019)
Ayden	/	/
Capgemini	0	< 9 999 (2018)

After having analyzed the lobbying efforts made by three of the main actors - GAFAM firms, Chinese companies and European organizations, let us compare them. According to the figures from the tables above, we can draw the following conclusion: American firms have been the ones who spent the most in lobbying costs and took part in the largest number of meetings with the Commission to discuss about the DMA. On the one hand, it makes sense as GAFAM firms are the ones which are the most likely to be identified as gatekeepers by the EU authorities and will therefore be the most impacted. Their lobbying efforts demonstrate the stakes represented by the DMA: more transparency, responsibility, fairness and rules for firms controlling a part of the digital market. On the other hand, this can raise questions knowing that one of the goals of the DMA is to ensure fair digital markets to boost growth of EU firms. Hence, it would have been appreciable to organize more meetings with EU companies in order to better meet their expectations and needs. The enormous amount of money devoted by Big Tech to lobbying can

partially explain this ubiquity of American representation in Brussels. With several millions of dollars spent annually, GAFAM firms can afford a very large staff which is attending basically every single meeting organized in Brussels. The question is now to know if Big Tech's efforts to dilute the DMA will work? In the past, we have seen some consequences of GAFAM lobbying. At the time of the GDPR's negotiations, tech giants did not manage to destroy the legislation, but the act ended up hitting SMEs harder than Big Tech (Clarke & Swindells, 2021). This time, this seems to be different as there are signs that the EU legislators will not be easily overawed. Indeed, these last years, the EU has fined several GAFAM firms: Google had to pay \$10 billion for antitrust violation (Whalen, 2020), two antitrust probes have been launched into Apple (Shead, 2020) and Amazon has been sued for antitrust cases (Clarke & Swindells, 2021). As the draft regulation is currently in the Ordinary Legislative Procedure, lobbying is now taking place with the European Parliament and the Council of the EU who can still propose amendments to the legislative proposal.

4.2. Comparative analysis with third-market countries

The regulation of Big Tech is a trend that is observable in several countries around the world and not only in the EU. Moreover, the first charges against Big Tech firms by national authorities took place a few years ago. This section aims at analyzing the behaviors that the USA and China have adopted to react to the rise in power of their national tech giants.

For a few years, the number of indictments against GAFAM has risen exponentially for violation of antitrust laws. Currently, the EU and the US both have three ongoing antitrust cases against GAFA (Carroll, 2021). On the 29th of July 2020, the American Congress organized an audience of the four GAFA's CEO: Sundar Pinchai, Tim Cook, Mark Zuckerberg and Jeff Bezos. The most notable absentee of this audience is Microsoft, which was not even invited. 22 years ago, Bill Gates already had to explain that Microsoft's dominance was not dangerous for the nascent Internet economy and had agreed to stop the practices for which the firm was accused (Blanchot, 2020). The July 29 procedure finalizes months of investigation into the practices of the GAFA. The objective of the audience was to determine the extent to which GAFAs prevent their competitors from developing, and thus creating an anti-competitive market (Fournier, 2020). Following this procedure, Facebook was charged early December for abuse of a dominant position. The court will look at the data management, business practices of Facebook as well as the acquisition of WhatsApp and Instagram (Blanchot, 2020). 48 out of

60 American states have expressed their willingness to get involved in the matter. At the end of June 2021, a federal district court ruled in favor of Facebook in two lawsuits brought by the Federal Trade Commission and state attorneys general (McLaughlin, 2021). Facebook is not the only firm that has to face American justice. Google is also accused of abuse of dominant position and anti-competitive practices. After the lawsuits that were dropped by the Federal Trade Commission (FTC) in 2013, 11 American States and the Department of Justice are opposed to Google with the search engine of the firm at the center of discussions (Rochefort, 2020). Google risks big as the sanction could go as far as dismantling its activities or selling its Internet browser, Chrome (id.). Given the importance of the charges and the sizes of the two accused companies, these trials could last for years before being closed.

In the matter of new technologies, Big Tech regulation has been one of the first files Joe Biden had to deal with as the President of the USA (Renouard, 2021). Last October, after 15 months of hard work with the audience of July as the high point, the American Congress delivered a 449 pages report on the anti-competitive practices carried out by GAFAs. This paper first analyzes the behavior of GAFAs and comes then with potential new regulation such as platforms' dismantling or limiting the sector of activity (Alric, 2020). Another aspect that needs to be framed is the acquisitions made by GAFAs which allow them to stop the emergence of new rivals. According to the House of Democrats, new rules have to be set up to prevent companies from giving their own products any competitive advantage on their platforms. For them, it is unacceptable that Amazon promotes its own products on its marketplace just like Google should not be able to highlight its ancillary services in the search results (Chartier, 2020). Big Tech quickly responded to accusations and expressed their disagreement. In line with the report, a document was sent to the leaders of the House of Representatives and the Senate requiring more regulation for the activities of large technology companies. This letter has been signed by 50 groups, both businesses and non-profit organizations, asking for a rapid intervention (Alric, 2020). It was therefore important for Joe Biden to urgently tackle this problem with very high stakes regarding GAFA's businesses.

As a result, an American parliamentary committee approved, on the 23rd of June 2021, a legislative proposal aimed directly at Google, Apple, Facebook and Amazon (Goulard, 2021). After more than 30 hours of debate, parliamentarians recommended several law projects which will transform the foundations of America's biggest companies. The reform contains the following:

- The potential dismantling of firms in case of “irreconcilable conflict of interest” (e.g., Amazon could not sell products on the marketplace where it sets the rules),
- A measure that imposes portability and interoperability of services (e.g., users wishing to leave Facebook should be able to take their contacts, photos and messages),
- The prohibition to acquire competitors to preserve market power,
- Increased costs for companies in the event of a merger, in order to improve funds of agencies responsible for applying competition law,
- The interdiction for platforms to favor their own products (e.g., Google could not display its own services at the top of Internet search results)
- More funding to government agencies that keep a check on corporations, the Federal Trade Commission (AFP, 2021).

These bills would specifically apply to platforms having a market capitalization above \$600 billion and more than 50 million monthly active US users (Feiner, 2021). In case of breaching of those rules, fines of up to 30% of their annual turnover could be imposed to GAFAs (Vignaud, 2021). The next step for these legislative proposals to be put in place is to be adopted by the House of Representatives and the Senate, where the fate seem to be more uncertain (Capital, 2021). The reaction of Big Tech to this proposal is that, according to them, lawmakers risk to create more problems than they might solve. Nevertheless, GAFAs do not seem to form a united front. For example, Facebook seems open to the proposal regarding interoperability while Google says this would expose people to scammers (Ovide, 2021). While the initial process was to go from introduction to markup in less than two weeks, several lawmakers felt rushed and expected changes before the proposal reaches the House floor. After the markup adjourned, bipartisan members of the California delegation on the committee even released a joint statement asking for revision of the bills as, according to them, “committee members did not have enough time to properly consider the bills prior to the markup” (Feiner, 2021). The bills therefore faced a significant pushback. More recently, the Columbia Law Professor Lina Khan has been sworn in as chair of the Federal Trade Commission by President Biden. The Big Tech response to this decision was quick. Amazon is now pressing for her recusal from the firm’s ongoing probes, arguing that Khan lacks impartiality in investigations into Amazon (Palmer, 2021). The Big Tech bases his accusations on an article published in 2017 in which Khan, PhD student at that time, explains that US antitrust laws were not adapted anymore to punish abuse of dominant position of Amazon (Bezatz, 2021). The next few months will therefore be decisive vis-à-vis the future of Big Tech regulation in the USA.

As the willingness to increase regulation for large tech firms seem to have arrived on the other side of the Atlantic, let us have a look at what is happening on the Asian continent. In November 2020, China expressed its desire to limit the monopoly situation in the country. A document published by the Chinese government shares the concerns of policymakers regarding the growing influence, risk and power that digital platforms and their business practices represent for the Chinese economy (Cimino, 2020). In this antitrust report, the State Administration for Market Regulation, China's bureau for regulating monopolies, issued draft regulation that are aimed at safeguarding consumers' interests and ensuring a fair competitive environment. Several practices were targeted by the authorities and could be prohibited: requiring sellers to only offer their products on a single platform or offering differentiated prices to customers based on their profile are examples of methods that are in the government's sights (Cimino, 2020). The implementation of such measures would be the first time China defines anti-competitive practices between digital companies. According to Morgan Stanley, an analyst, some of the companies that will be negatively impacted by the new rules are Alibaba, Tencent, Pinduoduo, JD.com and Meituan (Choudhury, 2020). Those companies are the ones which greatly contributed to enabling China to become the second largest economy in the world. Following the announcement of these potential new law projects, the combined losses of China's five tech giants have reached \$280 billion in terms of market capitalization in a few days (Huang, 2020).

China's reaction was not long in coming... On the 14th of December 2020, the South China Morning Post, a local newspaper, reported that three of the country's largest technology companies had already been fined for breaching anti-monopoly law (Liu, 2020). A subsidiary of Alibaba, a unit of Tencent and an affiliate of SF Holding had to pay 500 000 yuan each, the equivalent of 70 000 euros. The amount of the fine seems ridiculous compared to the annual turnover of these firms but, according to a spokesperson for the market regulatory authority, the aim of this sanction is to sound the alarm and to show other tech giants that the Chinese government is determined to enforce new regulations (Cimino, 2020). Only three months after the publication of the report, the State Administration for Market Regulation has unveiled its antitrust legislation for digital platforms, early February (Reuters, 2021). Platforms are now prohibited from forcing sellers to establish exclusivity agreements, price adjustment or even using opaque algorithms to manipulate the market in their favor. The law also enables a

broadening of the criteria to define an abuse of dominant position, by adding transaction volumes for example (Vitard, 2021). Those rules came into effect on the 7th of February 2021.

The investigation of the trends that are emerging all around the world regarding the regulation of large tech companies will now allow us to make a comparative analysis between the USA, China and the EU. Overall, we can easily conclude that there is a shared and global willingness of governments to increase the regulation of Big Tech firms. This need for new legislation is derived from the growing power and influence of giant firms, that the authorities accuse of anti-competitive behavior and monopoly position in their respective sectors. In the three economic powers that we have studied, we identified new sets of rules that have been set up by the national / international authorities. The content of those legislative projects is very similar among the three economic powers. The three legislations are about prohibiting business practices that are used on a daily basis by large technology companies. Nevertheless, the details of those rules differ and seem to be adapted to the behavior that firms adopt on the national territory. As an example, the prohibition of proposing different prices based on the client profile is something that we only find in the Chinese regulation. Other differences should be highlighted. The first one relates to the sanctions that are imposed to firms in case of non-compliance with the rules. Whereas the DMA should have fines of up to 10% of the company's annual turnover, the USA are planning to go way further than that. The expected fines can go up to 30% of the annual turnover, and they should even have a clause that would go as far as a dismantling of the organization. The charges imposed by China are not known yet. Another major difference that can be spotted is the speed of implementation. In the EU, the DMA is expected to be adopted by mid-2022 at the earliest. In the USA, the legislative proposal still needs to go through the Senate and the House of Representatives, which, according to several sources, does not seem to be an easy step. While the adoption of the regulation will take several months or years in the USA and in the EU, China has been very quick, and the rules are already enforced. It only took 3 months to the Asian country to put in place its antitrust legislation. This speed of implementation could be explained by the extent of the rules. Indeed, according to our research, China only adopted three new antitrust rules while the package that is about to be adopted in the USA and in the EU is much more complete and has a larger scope.

4.3. Efficiency of the DMA: will European firms be able to compete?

The last part of the analysis focuses on the efficiency of the DMA. The objective of this section is to investigate the capacity of European firms to close the technological gap that currently exists between the EU and the USA. As the goal of the DMA is to ensure a fair market in order to allow EU firms to compete, we will look into the potential of our companies to meet the expectations of authorities and, why not, becoming sectoral leaders.

Before deep diving into the European market and the analysis of the potential future tech leaders, we will first have a look at the efficiency of the DMA vis-à-vis sanctions that are imposed to Big Tech. Indeed, the main penalty that would be enforced to GAFAMs in case of non-compliance with the DMA is a fine of up to 10% of the annual turnover. Having a look at Table 7, we can easily have a clear idea of the amount of money that 10% represent for them. As a matter of comparison, Google was fined 4.3 billion euros in 2018 by the European competition authorities for unfair practices in the Android ecosystem aiming at strengthening its dominant position in the Internet search's sector (AFP, 2020). With the same idea, Facebook was fined 5 billion dollars in 2019 by the Federal Trade Commission (FTC) for failing to protect data of its users (AFP, 2020). Back in 2012, Microsoft lost its EU antitrust appeal but managed to obtain a reduction of the fine from €899 million to €860 million (Arthur, 2012). Compared to the expected maximum fines that could be imposed to GAFAMs as part of the DMA, we can clearly spot a dramatic increase of charges. This shows a willingness of the EU to act effectively and to successfully reduce abuses of a dominant position on the European digital market. Nevertheless, the efficiency of the DMA also highly depends on the ability of European firms to compete with international players. This is what we will investigate.

Table 7: Expected fines if not complying with the DMA (Statista, 2020)		
Company	Annual turnover (2020), in billion US dollars	10% of the turnover (2020), in billion US dollars
Google	181.69	18.169
Apple	274.52	27.452
Facebook	85.965	8.5965
Amazon	386.06	38.606
Microsoft	143.02	14.302

A first indicator that can be used to evaluate the development capacity of the EU is the R&D spending that are made each year. Based on figures from Statista (2021), we can highlight the trend that has been emerging for several years. Table 8 shows the evolution of the global R&D share by region. While the USA seem to be fluctuating and has lost 2.4% between 2017 and 2020, the opposite can be observed in China with a continuous increase, allowing them to considerably reduce the gap that was existing with the USA in 2017. According to those figures, Europe has been struggling to capture bigger share of the R&D spending with an average loss of 0.5% over 4 years.

Table 8: Share of total R&D spending worldwide by region 2017-2020 (Statista, 2021)				
Region	2017	2018	2019	2020
United States	25.6%	24.7%	25.2%	23.2%
China	21.2%	21.8%	22.5%	23.2%
Europe (34 countries)	21%	21.3%	20.8%	20.5%

Another indicator developed by the Union is the EU Industrial R&D Investment Scoreboard, published annually since 2004 by the European Commission. The 2020 edition contains the 2500 firms investing the most in R&D in the world in 2019 (PubAffairsBruxelles, 2020). These companies, based in 43 different countries (18 are Member States of the EU), represent approximately 90% of the business-founded R&D in the world, each of them investing at least €34.7 million for a total of €904.2 billion (European commission, 2020). The sample comprises 775 US firms representing 38.5% of the total R&D in the sample, 536 Chinese (13.1%) and 421 EU-based companies (20.9%), as well as 309 Japanese (12.7%) and 459 from the rest of the world (14.8%) (id.). As it can be observed in Table 9, the most significant change in terms of number of companies is the increase in China with 29 additional firms while the EU has seen a decrease of 3 firms in the ranking. We should keep in mind that 2019 has been the first year to take into account the EU with 27 Member States instead of the previous 28. If we have a look at the R&D investment, China is far behind the EU, therefore changing the ranking and leading the EU to the second place. The USA is nevertheless far ahead, both in terms of number of companies and in R&D spending. Having a look at the growth in R&D's investments, the three regions have increased their spending. In the 2019 Scoreboard, the EU registered a growth of 4.9% in 2019 and managed to raise this percentage to 5.6% in 2020 (European Commission, 2020). However, this number is rather low compared to the double-digit percentage that the US (10.8%) and China (21%) managed to record in 2020 (id.). At the Member State level, the

country that influenced the most this R&D growth is Germany, which hosts the four biggest contributing companies (SAP – 18.6%, Volkswagen – 4.9%, Daimler – 6.5%, and Bayer – 10.2%) (id.). Only considering the ICT sector, the three companies that affected the most positively the R&D growth of the EU sample are SAP, ASML Holding (25.5%) and Nokia (9.1%) (id.).

Table 9: Distribution of companies and R&D by region/country (European Commission)			
Region	Number of companies (2018)	Number of companies (2019)	R&D 2019 (€bn)
United States	769	775	347.7
China	507	536	118.8
EU	424	421	188.9

Industrial R&D is highly concentrated, and the main contributors come from 4 sectors: ICT producers, health industries, ICT services and the automotive industry (European Commission, 2020). Figure 1 depicts the annual investments that have been made by the three main economic regions in those four industries in 2019, with the annual R&D growth as a percentage. As it can be observed, the only sector in which the EU takes the lead in terms of investment is the ‘Automobiles and other transport’ one. In the three other sectors, the USA are the first and the EU is lagging behind, especially in ICT industries. Therefore, the EU’s R&D performance seem to be mainly shaped by the automotive sector while the USA is dominated by its fast-growing ICT sector. As the 2020 Scoreboard acknowledges, the ratio of R&D investment between the EU and the USA has dangerously decreased in both ICT sectors. In 2010, EU companies invested 50% of what the US was spending in ICT producers and in 2019, the share collapsed to 34% (id.). In ICT services, the same can be highlighted with a drop from 20% in 2010 to 13% in 2019. The same conclusion can be drawn regarding the comparison between the EU and China. While the EU had invested more in the four major sectors in 2010, Chinese firms’ investment in the ICT sectors have considerable overtaken those of EU companies (id.).

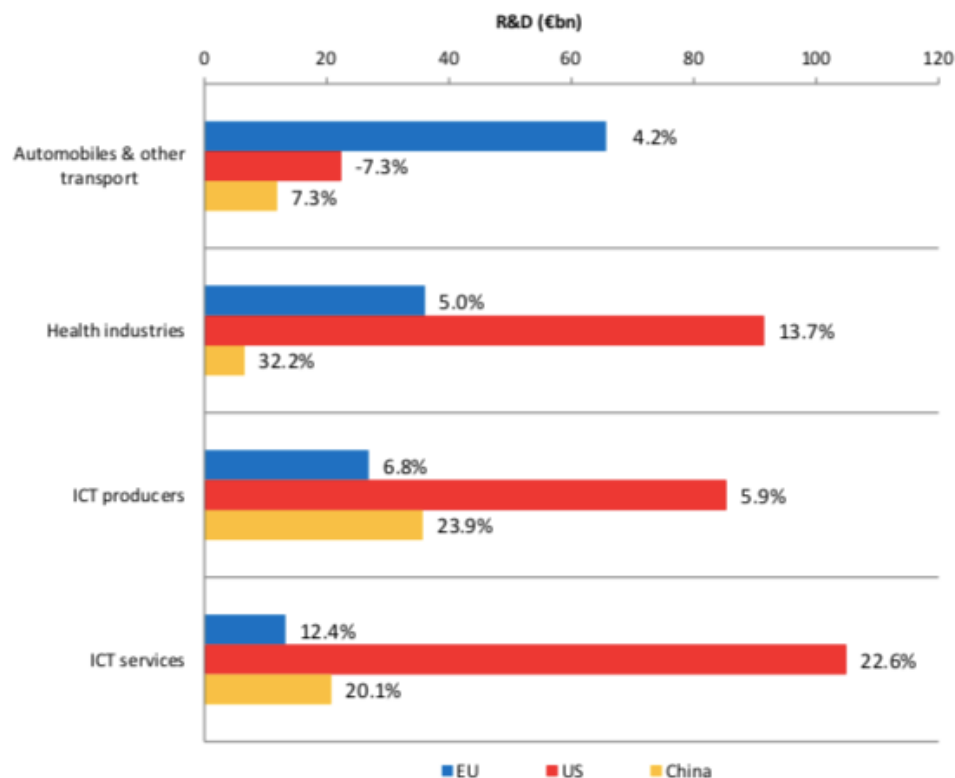


Figure 1: R&D investment in 2019 by region/country and sector (European Commission, 2020)

The last indicator that is used for the analysis is the market capitalization of EU firms. To do so, we used data from the European Commission based on the 2020 Scoreboard. Table 10 depicts the actual state of the five EU leading companies in the “Software and computer services” industry in terms of Market Cap. As it can be observed, the gap between the first and fifth firm is already very important, as SAP has a Market Cap more than ten times bigger than Yandex. This shows the low market value of EU organizations. Another interesting point is the Market Cap growth. During the last year, only two out of five companies managed to have a positive growth while the three others lost at least 7,8%. However, a notable point is the diversity of country of origin as the five firms are established in different EU Member States. Nevertheless, it can be noted that all of those countries are Western European countries, highlighting the gap that is still existing between Western and Eastern Europe. The only Eastern European firm that is ranked in the top 1000 EU and UK companies in the Software industry is Asseco Poland, which has a Market Cap of €1088.5 million and a growth of 21.9%. As a point of comparison, the three largest American internet companies in February 2021 were Amazon, Alphabet (Google) and Facebook with respectively a Market Cap of \$1557 billion, \$1368 billion and \$733.6 billion (Statista, 2021).

Table 10: R&D and Market Cap of EU firms (European Commission, 2020)					
Company	Country of Origin	R&D (2019) (€ million)	R&D growth (%)	Market Cap (€ million)	Market Cap growth (%)
SAP	Germany	4283	18,6	133440.1	5.2
Dassault Systemes	France	737.9	16,9	33793.2	-7.8
Amadeus	Spain	988.3	10,3	29734.6	-15.2
Spotify	Luxembourg	620	26,5	21725.6	-28.8
Yandex	Netherlands	329.7	14	9485.3	14.2

All that information about the current state of the European business gives us a better understanding of the stakes of the DMA. As a reminder, the implementation of the DMA aims at ensuring a fairer market so that European firms would be able to grow up and, why not at a longer term, close the technological gap that currently exist between third-market players and EU companies. It seems reasonable to conclude that, in the current state of things, the European Union does not have the means to compete with Big Tech firms. While the fines that will be imposed on GAFAM have the potential to provoke a reaction regarding their monopolist behaviors, this is not enough to reverse the trend. More effort needs to be done by the EU in terms of R&D spending. As mentioned earlier, the gap between European and American investments has increased these last years, as the EU only invested 34% of what the US invested in ICT producers in 2019. Moreover, in terms of growth, as we observed in Figure 1, the USA experience a one-year growth 10% higher than the European one in 2019. These figures clearly indicate the lack of EU investments regarding new technologies. The same can be observed having regards to Market Cap. Even if the EU made some efforts, SAP seems to currently be one of the only EU firms having the potential to progress at the international level and compete with the biggest. In order to enhance the EU capacity to create sectorial leaders, a focus needs to be quickly put on R&D, innovation and technology. Indeed, if the EU needs to recover the advance of the USA and China, those two economic powers are also increasing their investments, as a strong competition has recently arisen between those two countries. The EU therefore also has to deal with this intense competition and put all the chances on its side by developing funding programs and promoting innovation, entrepreneurship and R&D.

Having a look at the EU budget for 2021-2027, €161 billion have been dedicated to the “Single market, innovation and digital” pillar (European Commission, n.d.). This represents around 10% of the total EU budget. Among others, Horizon Europe, the new European research program with a budget of €95.5 billion, aims at helping Europe “to stay at the forefront of global research and innovation” (European Commission, n.d.). This considerable budget dedicated to innovation along with new legislations such as the DMA could therefore help the EU to strengthen its digital market and position itself as a leader. Between 2014 and 2020, the EU dedicated €125.61 billion to the pillar called “Competitiveness for growth and jobs” including support for research and innovation (Council of the EU, n.d.). This was already an increase of more than 37% compared to the previous multiannual financial framework (MFF). There is therefore a clear willingness of the EU to increase its budget dedicated to innovation and new technologies. Nevertheless, special attention must be paid to the two other major economic powers: the USA and China. As a matter of comparison, in 2015, Chinese Prime Minister presented a national strategic plan and industrial policy called “Made in China 2025” aiming at further developing the country’s manufacturing sector. This 10-year development plan targets several industries such as Information Technology, New Materials or Robotics with the stated goal to increase the Chinese-domestic production of core materials to 80% by 2025, with the semiconductor industry central to the plan (Le Gal, 2015). To achieve those objectives, the Chinese government committed in 2018 to investing around \$300 billion in the plan (Fang, 2018).

The amount of money dedicated by the EU to its R&D, new technologies and innovation is considerably growing between each MFF. However, the same trend can be spotted in other countries, which are also spending large amounts of money in order to keep innovating and maintain their competitive advantage. This recent stiff competition between China, the USA does not help and the EU will have to put the Digital Single Market at the top of its agenda if they do not want to miss the second round of the digital revolution.

Conclusion

In this paper, our goal was to identify and explain the impacts of the Digital Markets Act both for European and foreign actors. Our methodology for doing so was to analyze three different aspects: the lobbying activities around the DMA, the trends emerging in other countries regarding large tech companies' regulation and the investments made at the EU level to promote the innovation of EU firms. As mentioned in the introduction, our objective was to answer the following questions:

How can the Digital Markets Act impact the current EU Digital Market and what does that imply for European and foreign actors?

- 1) What is the rationale behind the Digital Markets Act?
- 2) How strong have the lobbying activities been around the Digital Markets Act and who are the most interested stakeholders?
- 3) What are the trends in third-market countries regarding Big Tech regulation?
- 4) Can EU firms have the capacity to compete with third-markets tech companies?

In the first part of the paper, we highlighted the evolution of the EU digital strategy. Since 2014, several regulations have been adopted in order to improve the access to the online world both for businesses and individuals. Our economy is currently driven by digital tools and a few large online platforms managed to dominate and control their market segments. In order to deal with this market concentration, the EU developed a new legislative proposal, the DMA, aiming at ensuring a fair competitive environment. This draft regulation targets only a small number of firms, meeting specific criteria, prohibits them from adopting unfair behaviors and imposes certain practices on them.

Thanks to our research and an analysis of the stakeholders' positions, we have been able to draw some interesting findings concerning the other sub-questions as well. With this analysis, we found out that the DMA is one of the most lobbied legislative proposal. Among the various stakeholders, the GAFAM have been the most involved with several billion euros spent in lobbying costs and many meetings organized with the EU authorities. The same conclusion cannot be drawn for all third-market countries. China, indeed, does not show a lot of interest in influencing the EU regulation. This can be explained by the low importance of the European market in the eyes of Chinese companies. The absence of EU firms in the discussions is also

raising some questions as the DMA has primarily been shaped to allow them to better compete on the international market. While the EU therefore seem to have taken the path of increasing Big Tech regulation, the same trend is emerging on other continents. Both China and the United States have embraced similar paths by adapting their regulation to the innovative environment in which their companies operate. These raising concerns led the two countries to introduce new sets of regulation to curb monopolistic positions of their national leaders. While Chinese legislation already entered into force in February 2021, the American proposal is still pending Congress approval. The evolution of the European legislation could have a positive impact on the EU firms' capacity to evolve and expand internationally. Even if there is a clear willingness from the EU to slow down GAFAMs' monopolies with increased fines, it does not seem to be enough to allow European companies to substantially grow. Indeed, the recent rise in R&D spending can be observed in the three economic powers: the EU, China and the USA. Even more worrying, the annual R&D growth of investments is larger in China and the USA than in Europe. This could potentially enhance the existing technological gap between the EU and the two economic powers, which are already far ahead in terms of new technologies, digitalization and innovation.

During the elaboration of this paper, we faced some limits that need to be considered. Our first limitation is our scope. Indeed, during our analysis, we mainly focused on a limited number of companies, namely GAFAM and BATX. By only focusing on specific firms, our conclusions cannot be generalized to the whole American and Chinese markets, as smaller organizations could have divergent positions. Concerning the quality of our data, we have to acknowledge a potential bias in our analysis. Indeed, a significant part of our analysis is based on data found on the EU institutions websites and, despite our mitigation efforts, we could also be influenced by our European understanding of the topic.

In order to further investigate this topic, two several paths could be interesting to take. The first one is to conduct an on-the-field research, by organizing interviews in both firms that could be identified as gatekeepers and smaller EU companies which could take advantage of the DMA. This could enable researchers to have access to more accurate and comparable data. Another possibility would be to wait for the DMA to be voted and enforced and build a comparative analysis aiming at investigating the real impact that such a regulation can have on firms' behaviors and practices.

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Appendices

Appendix 1: Article 3 (1,2) of the DMA (European Commission, 2020)

Article 3 Designation of gatekeepers

1. A provider of core platform services shall be designated as gatekeeper if:
 - (a) it has a significant impact on the internal market;
 - (b) it operates a core platform service which serves as an important gateway for business users to reach end users; and
 - (c) it enjoys an entrenched and durable position in its operations or it is foreseeable that it will enjoy such a position in the near future.
2. A provider of core platform services shall be presumed to satisfy:
 - (a) the requirement in paragraph 1 point (a) where the undertaking to which it belongs achieves an annual EEA turnover equal to or above EUR 6.5 billion in the last three financial years, or where the average market capitalisation or the equivalent fair market value of the undertaking to which it belongs amounted to at least EUR 65 billion in the last financial year, and it provides a core platform service in at least three Member States;
 - (b) the requirement in paragraph 1 point (b) where it provides a core platform service that has more than 45 million monthly active end users established or located in the Union and more than 10 000 yearly active business users established in the Union in the last financial year;
for the purpose of the first subparagraph, monthly active end users shall refer to the average number of monthly active end users throughout the largest part of the last financial year;
 - (c) the requirement in paragraph 1 point (c) where the thresholds in point (b) were met in each of the last three financial years.

Appendix 2: Article 5 of the DMA (European Commission, 2020)

Article 5 *Obligations for gatekeepers*

In respect of each of its core platform services identified pursuant to Article 3(7), a gatekeeper shall:

- (a) refrain from combining personal data sourced from these core platform services with personal data from any other services offered by the gatekeeper or with personal data from third-party services, and from signing in end users to other services of the gatekeeper in order to combine personal data, unless the end user has been presented with the specific choice and provided consent in the sense of Regulation (EU) 2016/679. ;
- (b) allow business users to offer the same products or services to end users through third party online intermediation services at prices or conditions that are different from those offered through the online intermediation services of the gatekeeper;
- (c) allow business users to promote offers to end users acquired via the core platform service, and to conclude contracts with these end users regardless of whether for that purpose they use the core platform services of the gatekeeper or not, and allow end users to access and use, through the core platform services of the gatekeeper, content, subscriptions, features or other items by using the software application of a business user, where these items have been acquired by the end users from the relevant business user without using the core platform services of the gatekeeper;
- (d) refrain from preventing or restricting business users from raising issues with any relevant public authority relating to any practice of gatekeepers;
- (e) refrain from requiring business users to use, offer or interoperate with an identification service of the gatekeeper in the context of services offered by the business users using the core platform services of that gatekeeper;
- (f) refrain from requiring business users or end users to subscribe to or register with any other core platform services identified pursuant to Article 3 or which meets the thresholds in Article 3(2)(b) as a condition to access, sign up or register to any of their core platform services identified pursuant to that Article;
- (g) provide advertisers and publishers to which it supplies advertising services, upon their request, with information concerning the price paid by the advertiser and publisher, as well as the amount or remuneration paid to the publisher, for the publishing of a given ad and for each of the relevant advertising services provided by the gatekeeper.

Appendix 3: Article 6 of the DMA (European Commission, 2020)

Article 6

Obligations for gatekeepers susceptible of being further specified

1. In respect of each of its core platform services identified pursuant to Article 3(7), a gatekeeper shall:
 - (a) refrain from using, in competition with business users, any data not publicly available, which is generated through activities by those business users, including by the end users of these business users, of its core platform services or provided by those business users of its core platform services or by the end users of these business users;
 - (b) allow end users to un-install any pre-installed software applications on its core platform service without prejudice to the possibility for a gatekeeper to restrict such un-installation in relation to software applications that are essential for the functioning of the operating system or of the device and which cannot technically be offered on a standalone basis by third-parties;
 - (c) allow the installation and effective use of third party software applications or software application stores using, or interoperating with, operating systems of that gatekeeper and allow these software applications or software application stores to be accessed by means other than the core platform services of that gatekeeper. The gatekeeper shall not be prevented from taking proportionate measures to ensure that third party software applications or software application stores do not endanger the integrity of the hardware or operating system provided by the gatekeeper;
 - (d) refrain from treating more favourably in ranking services and products offered by the gatekeeper itself or by any third party belonging to the same undertaking compared to similar services or products of third party and apply fair and non-discriminatory conditions to such ranking;
 - (e) refrain from technically restricting the ability of end users to switch between and subscribe to different software applications and services to be accessed using the operating system of the gatekeeper, including as regards the choice of Internet access provider for end users;
 - (f) allow business users and providers of ancillary services access to and interoperability with the same operating system, hardware or software features that are available or used in the provision by the gatekeeper of any ancillary services;
 - (g) provide advertisers and publishers, upon their request and free of charge, with access to the performance measuring tools of the gatekeeper and the information necessary for advertisers and publishers to carry out their own independent verification of the ad inventory;
 - (h) provide effective portability of data generated through the activity of a business user or end user and shall, in particular, provide tools for end users to facilitate the exercise of data portability, in line with Regulation EU 2016/679, including by the provision of continuous and real-time access ;
 - (i) provide business users, or third parties authorised by a business user, free of charge, with effective, high-quality, continuous and real-time access and use of aggregated or non-aggregated data, that is provided for or generated in the context of the use of the relevant core platform services by those business users and the end users engaging with the products or services provided by those business users; for personal data, provide access and use only where directly connected with the use effectuated by the end user in respect of the products or services offered by the relevant business user through the relevant core platform service, and when the end user opts in to such sharing with a consent in the sense of the Regulation (EU) 2016/679 ;
 - (j) provide to any third party providers of online search engines, upon their request, with access on fair, reasonable and non-discriminatory terms to ranking, query, click and view data in relation to free and paid search generated by end users on online search engines of the gatekeeper, subject to anonymisation for the query, click and view data that constitutes personal data;
 - (k) apply fair and non-discriminatory general conditions of access for business users to its software application store designated pursuant to Article 3 of this Regulation.
2. For the purposes of point (a) of paragraph 1 data that is not publicly available shall include any aggregated and non-aggregated data generated by business users that can be inferred from, or collected through, the commercial activities of business users or their customers on the core platform service of the gatekeeper.

Abstract :

This paper aims at understanding the stakes and impacts of the Digital Markets Act. Thanks to the analysis, two complementary views are studied: the reaction of third-market actors with a focus on China and the United States as well as the ability of European firms to deal with new opportunities brought by the DMA's implementation.

To conduct this study, an historical overview of the EU digital strategy is first developed, and the DMA's legislative proposal is then theoretically defined by analyzing the rationale behind this act, the firms targeted by the authorities as well as the obligations imposed on identified gatekeepers. Following this, an investigation of the stakeholders' positions regarding this act is provided. Then, quantitative data is used to analyze three aspects of the draft regulation: the lobbying activities around the DMA, the trends emerging all over the world regarding Big Tech's regulation and the capacity of EU firms to compete with third-market leaders.

The conclusion that is drawn is that the DMA is one of the most lobbied regulation of the European Union. Third-market stakeholders, and especially GAFAM, have spent enormous amounts of money in lobbying costs to influence the content of the act. While the DMA seems to be a major concern for third-market firms making business on the European market, the same trend is currently emerging on other continents. Both the USA and China recently decided to strengthen their own legislations in order to slow down the monopolistic positions of their national big tech companies. One of the stated goals of the DMA is to ensure fair business environment aiming at allowing EU firms to grow up and developing European leaders. Nevertheless, this objective seems to be hard to achieve. Even though the sanctions applied by the DMA would be significantly increased compared to what firms have experienced in the past, the efforts made by the EU in terms of R&D investments and market capitalization are not sufficient to close the technological gap that exists with the USA and China.

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