GOVERNING WHAT CANNOT BE NAMED

– EUROPE, PLATFORM ECONOMY AND THE DIGITAL MARKETS ACT

Leevi Juho Mikael Saari
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Author: Leevi Saari

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Summary:

This thesis analyses the regulation of platform economy in the European Commission. The rise of large technology corporations as the underlying infrastructure of most social activity has received fervent attention in recent years. However, there is still little consensus on the implications of this process. Does the new platform economy affect only market processes, or does it have broader societal consequences? Further, is platform economy something truly new or is it only a continuation of past forms of corporate power? These questions have acute practical importance. On the 15th of December 2020, the European Commission released a proposal for legislation that seeks to address the power of large platform corporations, called the "Digital Markets Act". What kind of corporate power does this proposal seek to regulate? And what does it suggest about the regulatory paradigm of the European Commission?

The contribution of this thesis consists of three parts. The first part is conceptual. In Chapter 2, an original analytical framework for classifying different dimensions of platform power is proposed. This framework helps to illustrate the continuities and novelties in the capabilities of platform corporations and bring together disconnected strands of research from different disciplines. The second part is empirical. In Chapter 3, the development of platform regulation in the European Commission from Spring 2015 to December 2020 is explained and the framework developed in Chapter 2 is used to analyze a recent proposal for regulation of platform economy, the Digital Markets Act. The last part of the contribution is theoretical. In Chapter 4, the Commission's proposal is mapped on the horizon of potential alternative contrast spaces, which helps to illuminate the underlying political choices and clarify possible contradictions between different authors.

The key conclusion of the work is that the European Commission has sought to address platform economy primarily as an aberration of efficient market processes. This has impacted the type of knowledge that is used in policymaking as well as the range of stakeholders consulted for the legislation. As a consequence, the European Commission ends up seeing platform corporations as actors whose capabilities are limited to manipulation of market activities. Systematic treatment of alternative framings is used to illuminate opportunities for broader analyses on the role of platform economy in the global political economy.

Contents

Acknowledgements

Philosopher Daniel Dennett has suggested that the only way to learn is to make *lots* of mistakes. Like all evolutionary processes, the path to clear thinking is marked by the continuous process of trial and error, of embarrassing mishaps and their eventual correction. However, making these mishaps is of little use if one does not recognize them when they occur. Social science is unforgiving insofar as errors are often less explicit as they are in disciplines like mathematics and physics. One's own judgment rarely suffices, for one's ideas are often too dear and, especially when writing a thesis, it is tempting to skip past the weaknesses of the argument and the faults of the favourite paradigm to give the impression of a savvy intellectual. Fortunately, I have been surrounded by a group of extraordinary mistake-spotters and pedantic error-finders. What merits this thesis may have can be traced to the constant process of trial and error in which these sharper minds have provided the critical grindstone against which my initial ideas have had a chance to find their edge.

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Siliämaa is responsible for the meticulous proof-reading. What mistakes remain are solely mine and likely a result of my stubbornness of not taking all of their points into account.

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1. Introduction: Corporations Galore!

1.1 A breath before the descent

It is a sign of the tides turning when the likes of the *Financial Times* and the World Economic Forum start to worry about the power of large corporations. In June 2018, WEF released an article covering research of the International Monetary Fund blaming large corporations for systemic economic ills such as declining business dynamism, weak economic productivity and a falling share of income paid to workers (Diez & Leigh, 2018). A year later, in November 2019, the associate business editor of FT noted in an opinion piece how the "imaginative" and "ruthless" exercise of power had subjected many corporations to criticism on a range of issues from global tax evasion and environmental damage to rising inequality (Gapper, 2019). While anecdotal, these can be seen as signs of the rekindling of debates on the role and purpose of corporations in contemporary societies.[1]

However, the scholarship making sense of the power of corporations is divided. One crucial difference concerns the context of corporate action. One strand of research approaches corporate power as a phenomenon that happens predominantly inside the confines of the marketplace (De Loecker et al., 2020; Diez et al., 2018; e.g. OECD, 2002). Scholars working from this perspective tend to see corporate power as an aberration on the operation of efficient market processes, where the dominant corporation is able to use their position to increase prices, and consequently profits, at the expense of other market participants, leading to suboptimal social outcomes.[2] Resolving these

[1] One reaction of this debate has been the recent Davos Manifesto 2020 by the World Economic Forum that proclaimed a new era of corporate governance, that seeks to re-orient the purposes of the corporations as responsible actors creating value not only in terms of bottom-line but also to their stakeholders and to society as a whole. (Schwab, 2019)

[2] The common underlying suggestion is that in the normal state of affair an efficiently operating market delivers socially optimal outcomes. This is often captured in the first theorem of welfare economics. (e.g. W. Morgan et al., 2006, pp. 433–437)

concerns has traditionally been the turf of disciplines such as competition law and mainstream economics.

Others have contested the interpretation of corporate power as an exclusively market phenomenon (Teivainen, 2002; Ylönen, forthcoming; Ylönen & Teivainen, 2018). This stance is rooted in the notions of social embeddedness and democratic legitimacy: because corporations act in societies, their actions also shape broader social and political arrangements, which requires the extension of analysis beyond market concerns. The propositions on the ways corporations end up shaping these arrangements range from straightforward regulatory capture through corruption of the policymakers to structural constraints and national decision-making through the threat of disinvestment (e.g. Ylönen & Saari, 2020). Indeed, the academic discipline of global political economy emerged partly from the need to analyse these forms of corporate power on a global level (Babic et al., 2017; Strange, 1991). After a brief hiatus in the 1990s and early 2000s[3], the recent re-invigoration of these roots has spawned new studies in multiple disciplines from economic sociology and accounting to global political economy (Garcia-Bernardo et al., 2017; May, 2020; Petry, 2020; Petry et al., 2019).

The debates on the nature of corporate power are perhaps nowhere as pressing as in the case of the platform economy. The rise of large technology corporations as the underlying infrastructure of much of social activity has motivated a plethora of research, with new and old concepts and theories from earlier periods employed in an effort to make sense of the consequences of this process. What is still lacking is a systematic assessment of the differences and similarities of platform corporations vis-à-vis companies of previous economic eras: what is new, what is old and what should we do about it?[4] Is there something novel in their capabilities to shape societies?

[3] Of the fall and rise of corporate power research agenda, see Ylönen 2021 and May 2020.
[4] One call on these lines is (Morozov 2019). More systematically of the inadequacy of recent corporate governance paradigm to grasp platform economy, see Ylönen 2021, pp. 137-140.

Answers to these questions are of acute practical importance. On the 15th of December 2020, the European Commission released a draft proposal for legislation that addresses the economic power of large platform corporations, called the "Digital Markets Act" (European Commission, 2020m).[5] This proposal has been lauded as a trailblazing move on tech power. (Kannengeiser & Fleck, 2020). But what kind of corporate power does this proposal actually seek to regulate? And what does it say about the political economy of Commission's regulatory approach? Exploring these questions helps to conceptualize ongoing policy processes and highlight the underlying choices and possible alternatives.

In this thesis, I seek to answer the following three related and interdependent research questions.

1) Is there something new about the power of platform corporations in contrast to traditional corporations?
2) How does the European Commission's proposal for the Digital Markets Act approach the power of platform corporations?
3) What does 2) suggest about the institutional and ideational regulatory paradigm of the European Commission?

The answers to these questions form the contribution of this thesis.[6] The first part of the contribution is conceptual. In Chapter 2, I propose a novel analytical framework for classifying the different dimensions of platform power. This heuristic tool helps to illustrate the continuities and novelties in the capabilities of platform corporations and bring together disconnected strands of research from different disciplines. The second part of the contribution is empirical. In Chapter 3, I explain the development of platform regulation in the European Commission from Spring 2015 to December 2020 and use the framework developed in Chapter 2 to systematically analyse the latest proposal for regulation of platform corporations. The last part of the

[5] Albeit this is only a proposal for the future Digital Markets Act, for simplicity I refer to this proposal as the Digital Markets Act in this thesis.
[6] For more thorough treatment of the different types of academic contributions used here, see Sorsa. (2019)

contribution is theoretical. In Chapter 4, I position the Commission's proposal on the horizon of potentially relevant contrast spaces, which helps to illuminate alternative framings and analytical distinctions.

1.2 Methods of discovery

This thesis follows a scientific realist orientation to social scientific research. Ontologically, scientific realists commit to the existence of an external reality independent of our observations. This does not mean that the social world consists only of things you can touch, taste or drop on your foot, but that directly unobservable things like ideas, values and emotions also exist and can produce outcomes in the world (Raatikainen, 2004, p. 83). The scientific realist also commits to an effort to try to understand how the world really works. It does not suffice that a theory works in some instrumental way – it also should aim to be approximately true. Finally, a scientific realist position commits to scientific statements about reality being intersubjective. That is, statements from different scientific paradigms can be compared and evaluated because they refer to facts of the same underlying reality. This broadly defined scientific realist stance has quite sturdy roots in the philosophy of science (Little, 2016; Raatikainen, 2004) and increasingly, in the applied sciences as well.[7]

Of the many variations of scientific realism (Kotilainen & Patomäki, 2020, p. 24; Ylikoski & Kuorikoski, 2012), I feel most at home with social realism as advocated by Daniel Little. Little defines his social realism as "realist about social mechanisms but not about social kinds (…) realist in metaphysics and empiricist in epistemology" and "sceptic or nominalist about social kinds". (Little, 2016, p. 257). In short, that means that reality is not to be limited to our observations but the best way to gather evidence of theories concerning that reality is through traditional methods of piecemeal empirical investigation; [8] causation is an objective feature of the social world; and

[7] In international relations, one relevant work advocating a form of scientific realism as an alternative to positivism and post-positivism is Patomäki & Wight (2000).
[8] Of the role of this commitment as a key distinction between social realism and some forms of critical realism, see Little (2016, pp. 251-255).

concepts depicting social phenomena should be interpreted primarily as tools to identify and classify interesting observations and not as referents to shared underlying essences.[9] These commitments help to steer away from Scylla of shallow empiricist ontology without falling into Charybdis of armchair philosophizing, towards empirically and intellectually productive engagements to generate 'practically adequate knowledge', that generates expectations about the world and of the consequences of actions in it. (Sayer, 2010, p. 47).[10]

In terms of the aims of social science, I take us being in the business of *explaining* why things happen in the social reality (Parsons, 2007, pp. 3–20; Ylikoski, 2018). This approach takes explanation to be a *skill*; a capability to approximate correct answers to counterfactual "what-if" questions (Ylikoski, 2018, pp. 46–51). This is not the only nor necessarily the superior aim of social science (cf. Flyvbjerg, 2001), but it is the one that motivates me the most. However, the strive for explanation is not taken to be an activity that would result in a set of ultimate, general laws.[11] Every explanation highlights only a part of the full complex of necessary, sufficient and accidental causes that produce a given outcome (Garfinkel, 1982, pp. 138–147; Mackie, 1965), with multiple valid explanations happily coexisting simultaneously on different levels of explanation. (Little, 2021, pp. 20–21; Parsons, 2007; Ylikoski & Kuorikoski, 2010, p. 206).[12] This makes social science an always incomplete, iterating journey investigating the contradictions and compatibilities between explanations of different levels (cf. Little, 2016, p. 10).

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[9] In other words, identifying social concepts like "riots" or "democracies" is often different from identifying natural concepts such as "protons" and "quarks". The latter are defined in terms of their causal powers: the definition of "protonhood" means that to qualify as a proton, an object must have certain necessary causal properties (i.e.attracting negatively charged particles). In contrast, social concepts like democracies contain more heterogenous observations that are treated together for some useful analytical purposes. (Little, 2016, pp. 31–34). Riot in Paris in May 1968 is only weakly similar to riot in Capitol Hill in January 2021 but treating them together might reveal something interesting about social reality. Of the possible dangers and implications of conflating natural and social concepts, see (Ylikoski & Kuorikoski, 2012, pp. 562–566).

[10] Of the particularities in combining scientific realism with social science, see (see Little 2016, pp. 221-232).

[11] This type of search for general explanatory laws was distinctive to the now-refuted Hempelian D-N model of explanation and related positivist research programs.

[12] This approach is incompatible with the idea of causation as the constant conjunction of events, often attributed to David Hume.

In this thesis, I focus on the ideational and institutional structures as the key analytical levels of explanation. These are seen to be necessary, but not sufficient nor determining conditions to the way the Digital Markets Act approaches corporate power.[13] In other words, I commit to the view that in absence of these enabling ideas and institutions, the proposed Digital Markets Act would have been different than it turned out to be. However, they did not determine the way the act was formulated, but a myriad of other causes from contingent ideas of particular actors to the election of particular officials to the key positions of the Commission. However, focusing on the ideational-institutional level helps to tie the analysis to the broader currents of the scholarship of global political economy. Further, this approach also abstains from downplaying the *metis* of those closer to the efficient level of causation in the policy processes.[14]

In terms of methodology, Andrew Abbott vividly describes the practice of social science as a conversation between rigour and imagination (Abbott, 2004, p. 3), but as Cassie Kozyrkov argues in another context, where imagination is cheap, rigor is expensive (Kozyrkov, 2018a). Realist philosophies of science have quite convincingly shown that appealing to a positivist, unified scientific method as the validator of the rigour of an idea is unfeasible in the social sciences. One solution is to reorient social scientific research. More than a natural scientist, the trade of social scientist is one of a lawyer, putting forward evidence in defence of a case in front of a judge. The outcome of this process is not *the* truth but a tentative explanation, subject to further contestation through evidence and reasoning.

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[13] I follow Parsons (2007) in distinguishing the institutionalist and ideational explanations; institutionalist explanations are *positional* arguments, that explain what people do as a function of their position within man-made organizations and rules. Ideational explanations are *interpretative*, and explain what people do as a function of the cognitive and/or affective elements that organize their thinking, and see these elements as created by certain historical groups of people (ibid. 12).

[14] The idea of metis was popularized by James Scott (1998), who defined it "as a wide array of practical skills and acquired intelligence in responding to a constantly changing natural and human environment". In this context, I use this to acknowledge the limitations of this thesis, that result from being detached from the day-to-day practices and processes that shape the policy developments. For such perspectives, I direct the reader to the laudable work of journalists situated in Brussels.

This position invites a pluralistic and eclectic approach to social theories and methods (Little, 2014, 2016, p. 2; Skocpol & Schickler, 2019, pp. 15–16). As Little writes: "[t]here isn't a primary method of inquiry or empirical reasoning that works best for all social research; instead, sociologists need to define significant research topics and then craft methods of inquiry and inference that are best suited to those topics" (Little, 2016, p. 229). This thesis makes use of comparative methodology, in which the researcher attempts "to work out which factors are necessary or sufficient and enhancing or inhibiting, for various social outcomes of interest." (Little, 2016, p. 244). The research design is based on a comparison between an abstract typology of capabilities, derived from a synthetic reading of relevant literature and an empirical content analysis of the relevant articles of the Digital Markets Act. This difference is then analysed abductively and one hypothesis of partial explanation in the level of ideational and institutional factors is put forward.[15]

1.3 Contents and summary

In the second chapter, I engage in modest conceptual gymnastics to defend the view that corporate power is best seen from a capability-centric perspective. I argue that focus on the sources of corporate capabilities helps to clarify some of the debates on corporate power. I then proceed to review recent literature on the platform economy and critically address some of the claims made about the capabilities of platform corporations. The chapter ends with a conceptual typology of platform capabilities, put forward as a useful heuristic to synthesize the fragmented literature.

In the third chapter, I explain the context and history of platform regulation in the European Commission and analyse the Digital Markets Act proposal through the framework introduced in Chapter 2. I argue that most of the banned practices concern the protection of existing platform monopoly,

[15] Abductive inference is a form of inference that starts from a set of observations (explanandum) and then seeks to work out the best explanation. The resulting explanation is hypothetical, subject to further empirical testing and verification. See (Kuorikoski & Ylikoski 2012, 557-558; Little 2016, 253-255).

without addressing the organic dynamics behind the platform monopoly. Some of the novel data-related platform capabilities are addressed nominally, but their exact contents are vague. These findings are reflected in the light of recent scholarship on platform regulation in the European Union. I conclude the chapter by charting some ongoing processes and likely key points of debate.

In the fourth chapter, I explore the regulatory paradigm behind the Digital Markets Act. I argue that by contrasting platform economy to processes of market competition, the proposal veers towards seeing corporations as predominantly market actors. This impacts the type of knowledge consulted and the problems that are considered relevant for policymaking and regulation. I trace this contrast space[16] to the institutional and ideational context of Commission regulation. To highlight alternatives, I map several possible contrast spaces that accommodate broader considerations of the role of platform corporations as actors in modern societies.

The last part collects the threads, summarizes the answers to the research questions and points at avenues for further research.

[16] By contrast space, I mean the (often implicit) alternative presupposed by any question. A common joke summarizing the idea tells the story of bank robber Willie Sutton. When Sutton was in prison, the prison priest asked him why he robbed banks. Sutton replied: "Because that's where the money is". This story is a popular pedagogical tool (Garfinkel 1984; Ylikoski 2007), because it shows intuitively how any question "Why X" is actually a question of "Why X, *instead of Y*", where Y is the implied "normal" state of affairs, i.e *contrast space*. Choosing this contrast space is a matter of pragmatic, political and normative considerations (cf. Garfinkel 1984, pp. 147-155). Interrogating contrast spaces implicit in the definition of policy questions and the consequent range of acceptable solutions is one tool to illuminate the underlying choices and highlight the possible alternatives.

2. Literature review: We are not in Manchester anymore

To understand what is new about the power of platform corporations, there must be some idea of what is *old* about corporate power. I anchor the concept of corporate power to the underlying capability assets, and after a survey of relevant literature on platform economy, I propose a typology of the novel capabilities of platform corporations on the basis of their particular capability resources.

2.1 Making sense of corporate power

Concerning how central a concept "power" is in political science, it is still often discussed in puzzlingly elusive terms. One giant of heterodox economics, J.K Galbraith, put the frustration in words, claiming that the people writing about power tend to surrender to an unnecessarily complex or 'deeply subjective' manner of presentation (Galbraith, 1984, p. 13). He wagered that such authors were striving to avoid criticism through ambiguity and evade the laborious effort to clarify their position.[17] While this interpretation places slightly too malicious motivations on hardworking researchers, at times the concept of power seems to be so ubiquitous that its practical usefulness fades from view.

One way towards a more systematic analysis of power is to go back to the genealogy of the concept. [18] As Heikki Patomäki writes in a recent article, the

[17] Some of the sentiments reflect what Michel Foucault once called terrorism of obscurantism in the context of Jacques Derrida. Here he is succinctly quoted by Searle in February 2000 edition of *Reason:*

"With Derrida, you can hardly misread him, because he's so obscure. Every time you say, "He says so and so," he always says, "You misunderstood me." But if you try to figure out the correct interpretation, then that's not so easy. I once said this to Michel Foucault, who was more hostile to Derrida even than I am, and Foucault said that Derrida practiced the method of *obscurantisme terroriste* (terrorism of obscurantism). We were speaking in French. And I said, 'What the hell do you mean by that?' And he said, 'He writes so obscurely you can't tell what he's saying. That's the obscurantism part. And then when you criticize him, he can always say, 'You didn't understand me; you're an idiot.' That's the terrorism part.'"

[18] Here I follow the idea of essential contestability of concepts, drawing from the dictum of Friedrich Nietzsche: "All concepts in which an entire process is semiotically concentrated elude definition; only that which has no history is definable." (Nietzsche 1887). However, we can still assess the concepts in terms of their *usefulness* in

etymological and historical core of the concept of power is in the capability and/or possibility to bring about outcomes. (Patomäki, 2020, p. 8) This formulation links the concept of power to the debates of causation. Hence, following the developments in the philosophy of science (e.g Raatikainen, 2010, pp. 352–355), we can reformulate Patomäki's definition of power as a capability to make a difference in processes that produce outcomes.

The connection between power and causation is explicit in the standard reference of power in international relations (Barnett & Duvall, 2005). According to Michael Barnett and Raymond Duvall, power is best linked to causation through two analytical frameworks: the *kinds* of social relations power works through and the *specificity* of these relations (cf. Lukes 2005). This analytical framework produces a well-known four-fold typology of compulsory, structural, institutional and productive power. (Barnett & Duvall, 2005, p. 48). The weakness of this approach is that it becomes quite difficult to separate power analytically from other kinds of social activity. If power is causation, what kind of social activity that produces outcomes is *not* power?

This is important because "power" has particular connotations in political science. Using power to *deliberatively* produce X and causing X are two different things. Many moral considerations are premised on the idea of intentional action, the justifications of which are evaluated. This has implications for assigning praise and blame in politics. For this reason, some previous authors have emphasized the need to include the idea of intentionality in the definition of power (Guzzini, 1993; Nölke & May, 2018, p. 5). For instance, Stefano Guzzini makes a conceptual difference between *power* as intentional acts and *governance* as the residual category of the unintentional consequences of actions. (Guzzini, 1993, p. 444). In other words, power is that I intentionally bring about outcomes, but the unpredictable and unintentional consequences are something else best excluded from the definition of power, albeit important in their own right.

illuminating interesting phenomena in the social reality (e.g Abbott 2004, p. 94). See also discussion on social concepts in supra 9.

Barnett and Duvall explicitly refute the need to keep intentionality in the definition of power (Barnett & Duvall, 2005, p. 44). They argue that this formulation would mask the ways capacities and courses of action are affected through unintentional consequences as well as establishing a false dichotomy between power and governance, for the latter always necessitates the former. I do not find these objections convincing. While it is indeed true that unintentional effects are causally efficacious, I see no reason to subsume all social causation automatically under the heading of "power". The separate capability of power seems to be a fruitful conceptual distinction in the vocabulary of political science to address the intentional efforts to shape arrangements of our practical and passionate relations.

We then arrive at the working definition of power as the capability to make an intentional difference in processes that produce outcomes. But what kind of connections does this concept have to real social practices? Little's critique of the canonical work of Steven Lukes can be applied to that of Barnett and Duvall as well:

> "[H]ere is a more basic concern that is visible with the advantage of hindsight: it is very little in Lukes's treatment that sheds light on the s*ocial mechanisms of* power. We would like to have a way of analyzing social relations that allows us to discern how it is that some groups gain *the material and social resources necessary to prevail.* Lukes doesn't address this question, and yet it seems to be the heart of the matter (…) generally, it seems fair to say that Lukes comes closer to offering a *semantic analysis* of the use of the term "power" rather than offering a *sociological analysis* of the causal and structural reality of power". (Little, 2010 emphasis added).

One way to approach this more sociological reality of power is to place the "material and social resources necessary to prevail" at the centre of analysis.

This resource-centric approach opens up interesting avenues for research on corporate power. The underlying intuition is that corporate power derives

from the possession of resources that enable the corporations to act as purposive actors shaping their environments.[19] Such resources can range from financial assets to legal contracts or social networks. These assets can be considered necessary conditions for possessing corporate power. If a corporation is at the mercy of market forces, it is difficult to see how it could have purposive agency in a sense that would warrant analysis to its capability to influence outcomes in societies. (cf. Ylönen & Saari, 2020, p. 30).[20]

Focusing on capability-resources has several benefits. First, it helps to distinguish intentional corporate actions from emergent economic processes. The capability of a corporation to influence policy processes based on privileged access to policymakers is an exercise in corporate power, but causing attention deficit amongst adolescents through social media addiction is not.[21] Second, it helps to remain sensitive to the changes in the types of corporate power we are concerned with. This is imperative for a nuanced analysis of the platform economy. If there is something new about platform power, it must be derived from the possession of some novel capability-resources. It must.[22] Third, it helps to tie the argument on corporate power to the re-emerging analysis of the role of assets as key sociotechnical arrangements in modern economy (e.g Birch, 2020; Birch & Muniesa, 2020; Christophers, 2020; Langley, 2020). [23]

The capability-based approach is not the only framework to analyse corporate power, with alternative frameworks yielding more intellectually fruitful outcomes in other problematics concerning power. However, this approach is useful and necessary for the particular objectives of this research, concerned

[19] The idea of *possession* hints at the legal foundations of capitalism that have recently been theorized by (eg. Carruthers, 2020; Hodgson, 2015; Pistor, 2019).
[20] This is also the working definition of market power in the European Commission. (Lynskey 2019, 193).
[21] For a list of alleged negative consequences of platforms to individual well-being, see https://ledger.humanetech.com .
[22] Otherwise, there is a problem of confounding; from the observation that Amazon can do things that Nokia could not ten years ago it would be difficult to infer that this is not some random variance in the capabilities among corporations or that the differences are not due to the changing context.
[23] In the other direction, it helps to observe parallels in other literatures. Resource-based view of the firm, 'dominant' in strategic management and organizational theory is one example. E.g.. (Davis & DeWitt, 2021).

with analysing the putative changes in the type of capabilities of modern corporations. Anchoring the research on resources helps to pilot the analysis towards "a clear perspective on what is essential" (Galbraith, 1984, p. 13) in the arrangements that enable corporations to make a difference in the shaping of modern societies.

2.2 Platform economy for those in a hurry

Having clarified what is meant by the concept of corporate power, we can now apply it to the platform economy. Conceptualizing the new economy centred around the business models of the likes of Google, Uber, Amazon, and Airbnb is far from simple. Terms like "sharing economy", "collaborative economy", "platform economy", "fourth industrial revolution" "digital economy", "digital colonialism" and "digital capitalism" carry different connotations making the definition "a first-class political act" (González, 2020, p. 78). In this thesis, I have chosen to structure the discussion around the concept of platform economy (e.g. Kenney et al., 2020; Kenney & Zysman, 2016) which seems to be a sufficiently general and neutral term for the purposes of this analysis.[24]

What are the distinctive features of the platform economy? Some authors have highlighted the fact that platforms intermediate online activity through centralized, electronic platforms (Kenney & Zysman, 2016; Montalban et al., 2019). Others have noted that this intermediation is not passive. Instead of merely transmitting connections, the platforms have an active role in curating, creating, and coordinating actions on the platform (Langley & Leyshon, 2017; van Dijck et al., 2019). The third oft-cited component is the accumulation of data. Platforms use their intermediary position to amass tremendous amounts of data, which is then used recursively to optimize services and create new products and capabilities (Rahman & Thelen, 2019; Srnicek, 2017, pp. 13–14).

[24] Ålatform economy is not necessarily the best term in all contexts. For instance, in my previous work I have worked with the concept of platform capitalism. (Ylönen & Saari, 2020)

Combining these insights, I define platform economy as a mode of economic organization that aims to create an infrastructure that mediates interaction and benefits from network effects in a digitally organized space, that also gathers and uses data for primary and secondary purposes. The particular corporations share only weak family resemblance, ranging from online marketplaces and search engines to operating systems and cloud computing environments. These various business-models are still united by the objective to occupy a position as an intermediary infrastructure between market participants, to become a market inside a market and use data as a capability resource. This objective provides sufficient similarity to facilitate productive analysis.[25]

As intermediaries of market action, there is little new about the platform economy. Physical marketplaces, such as stock exchanges and malls have all been premised on the idea of connecting buyers and sellers and taking a commission on the trade. What distinguishes platforms from previous intermediary structures are exceptionally strong centralization dynamics caused by network-effects and data dynamics. The digital intermediary is not constrained by physical proximity, which enables exceptionally strong network effects.[26] After a critical mass of users has been acquired, the data generated from the interactions on the platform can be further used to optimize systems. This generates self-reinforcing dynamics that are particular to the platform economy. (Barwise & Watkins, 2018, pp. 25–30).

The objective of the platform business is the attainment of a monopoly. Crucially, in contrast to previous monopolies, the type of monopoly platform companies strive for is organic (Rahman 2018; Culpepper & Thelen 2020). Whereas the industrial monopolies were often premised on high initial costs in the case of railways and electrical utilities, the platform monopolies are sustained through the combination of network effects and data. In other

[25] For similar argument, see (Nogarede, 2021, pp. 9–10).
[26] By network effects, I mean the dynamic where the value of an asset increases with the number of users. Facebook gets more valuable the more users it has. The network effects also work on both sides of the market. In the case of Amazon, the number of customers makes the platform more valuable to sellers, and vice versa.

words, the platform monopoly does not have to maintain its monopoly through coercive means, nor does it occupy a clear and tangible position in society, like railways, that is easy to regulate. The dynamics *inherent* in platform economies drive the monopolization processes, which has caused problems for institutions designed to address monopolization as sporadic and deliberate exceptions from the normal operations of the market.[27]

The ascent of the platform economy can be succinctly summarized in two graphs. The first shows the development of the stock market capitalizations of the five largest platform corporations, Google, Amazon, Facebook, Apple and Microsoft since 2009, with Nasdaq and Dow Jones general indices as a reference point. The difference is striking.[28] Since 2009, the value of Facebook and Amazon have grown over 20 times faster than the rest of the stock market. Their explosive growth makes Apple, Google, and Microsoft look small. However, these companies were major players already before 2008 and they have still grown in value 4 to 10 times faster than the comparative indices.

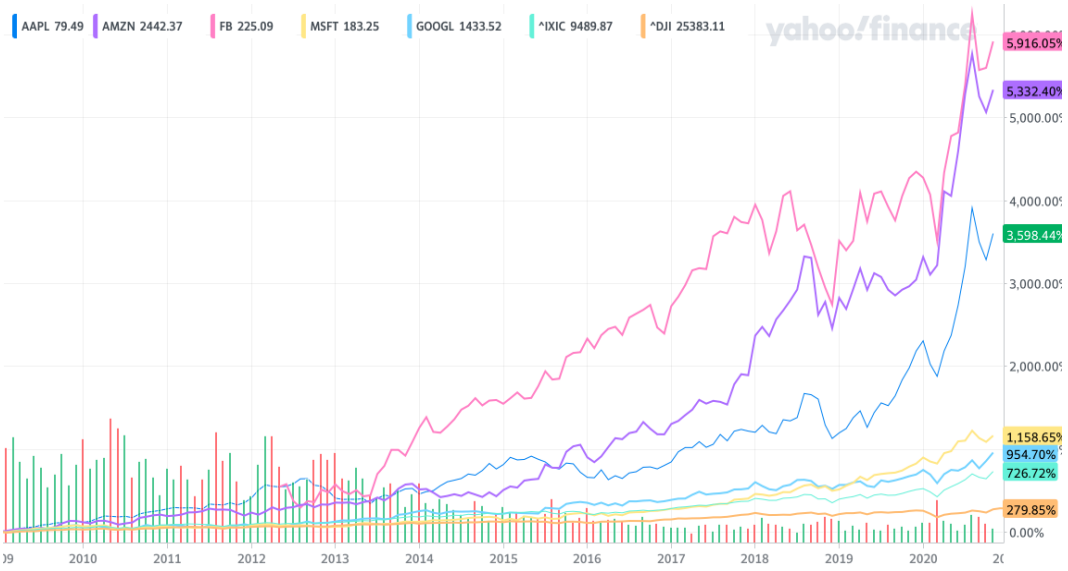

Fig 2.1 Development of GAFAM-stock price, 2009-2021.

[27] This departure from the normal operations of the market can also be approached through the multiplicity of its objectives. Whereas traditional companies maximize a single currency, money, the platforms have multidimensional aims, maximizing also three other currencies: users, data and attention. I thank Konstantinos Kostas for this point.
[28] It is noteworthy that the Nasdaq index includes the platform corporations, which biases the line upwards.

The second figure shows the prevalence of the platform economy in the popular imagination. The rise in importance can be quantified with Google's Ngram viewer. With several relevant keywords, it is quite easy to see when the debate took off from Fig 2.2. Before 2013, there were little to no mentions of the platform economy in the English-speaking corpora. After 2014, the interest has markedly increased, with surveillance capitalism topping the chart. By 2019, the platform economy has solidified its role as part of both popular and scientific imagination (McAfee & Brynjolfsson, 2017; Srnicek, 2017; Zuboff, 2019). The popularization of these concepts has not, however, been paralleled with consensus on the nature, origins and implications of the underlying change.

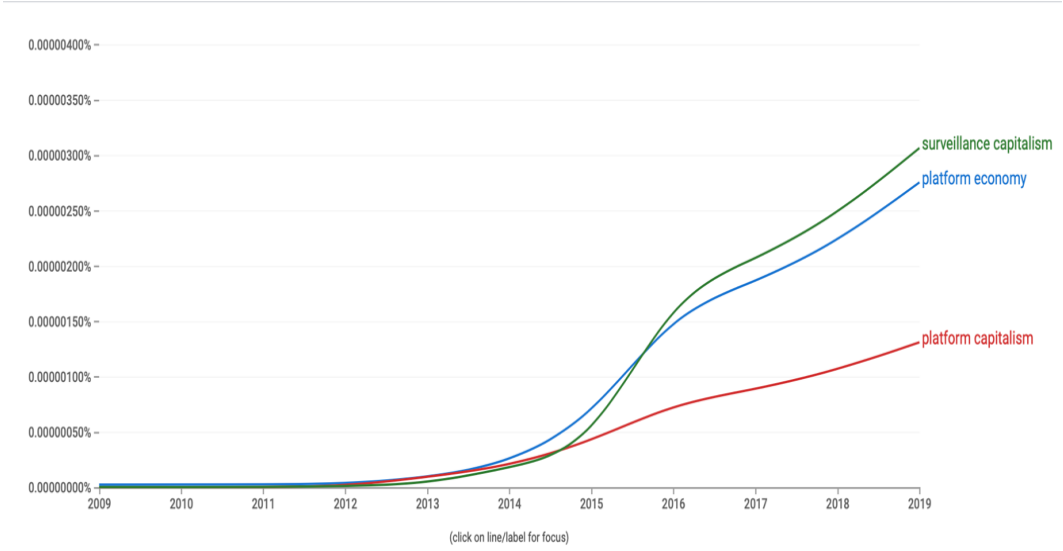

Fig 2.2. Prevalence of the platform economy-related terms in Google Ngram corpus, 2009-2019.

A typical explanation of the emergence of the platform economy in the United States highlights four factors.[29] The first is technological. Advancements in computing capacity, data management and analysis were necessary conditions for the platform economy to take off in the way it did. One of the oft-cited symbols of this explanation is Moore's Law, historical extrapolation according

[29] Here I follow broadly the lucid exposition of Rahman & Thelen 2019.

to which the number of components per transistor doubles every two years. It is difficult to imagine the platform economy on the scale we see today without the ubiquity of portable and connected electronic devices.

Technological development is not a sufficient explanation for the development of the platform economy. The second is economic. The monopolisation dynamics of the platform economy require patient capital needed to finance the loss-making growth phase of a potential platform, colloquially known as the financial valley of death (Kenney & Zysman, 2019, pp. 45–46). The conditions created in the post-2008-2009 financial crisis created an abundance of this type of financing. Low yields and interest rates and a lack of alternative investment opportunities motivated risk-tolerant investors to search for profits in new places. These conditions provided the patient capital imperative to the financial viability of the platform business model (Kenney & Zysman, 2019).

The technological and economic factors would not have been sufficient if the new monopoly-seeking business model would have been challenged in the legal system. One important factor was the change in the antitrust paradigm of the US legal system. By the 1990s, the key criteria for a monopoly position had become consumer welfare. In other words, if a monopolistic company does not charge extra from consumers, it ought not to be regulated (Dunne, 2020; Khan, 2016, 2018). This interpretation, attributed to the Chicago School of antitrust, did not see the centralization of platform corporations as a monopolistic development to be addressed, which enabled the development of the platform economy.

These institutional and material conditions were locked in by political-economic conditions in the United States. As K. Sabeel Rahman and Kathleen Thelen write in a recent article, the political-economic landscape of the United States is exceptionally conducive for the “move fast and break things”-mentality of Silicon Valley due to the fragmented regulatory landscape and lack of countervailing forces (Rahman & Thelen 2019, 189-191). The platform economy also benefitted from the close relationship climate of the Obama

administration (Dayen, 2016). Lastly, the customer-facing platforms have leveraged their exceptionally direct relationship with their customers to fend off regulatory efforts. The detailed practices on how corporations seek to mobilize consumers as sympathetic voters have been studied in recent research by Thelen and Pepper K. Culpepper, highlighting cases ranging from Uber to Airbnb (Culpepper & Thelen, 2020).

While the relative importance of the different elements varies, some combination of these is present in many histories of the platform economy. These conditions were not determined to lead to the new platform economy – luck and contingency also played their part. It is worthy to note that this is only the particular explanation of the United States model of the platform economy, with other regions having their own particularities. [30] Further, when the benefits of the platform business model became obvious, many traditional pipeline industries adopted the new business model. [31] However, highlighting these factors is instructive in directing attention to similar causal developments also in other contexts.

The rise of the platform economy is an uncontroversial fact. Yet, the responses to this new phenomenon are still mixed. Frank Pasquale has argued that there are two diametrically opposed interpretations of the new model of economic organization (Pasquale, 2016). The first narrative emphasizes the positive effects. Platform corporations have stimulated innovation and economic efficiency through resolving information asymmetries, brought new types of flexibility in labor relations, and benefitted from the stellar decline of transaction costs.[32] One dimension of this was the concept of "sharing economy", evoking the imagery of the shared use of resources and mutual

[30] However, as a recent editorial in *Logic* argues, the Cold War-juxtaposition of "American" and "Chinese" tech is mostly a reflection of US hopes and fears in a modern spin of Orientalism. The Chinese has unique dynamics, such as Weibo, WeChat and the interconnections with the surveillance apparatus of the Chinese state, that provides an interesting contrast-space riddle with peculiar characteristics and similarities (Logic, 2019).
[31] Pipelines refer to a traditional business model that seeks to optimize activities across a linear value chain. Platforms, in contrast, create value through expanding an ecosystem in a circular, iterative, feedback-driven process (Van Alstyne et al., 2016).
[32] For one influential summary of the particularities of digital economy in general, see (Goldfarb & Tucker, 2019).

solidarity and help between individuals without the intermediation of the state apparatus. [33]

The second narrative highlights the negative consequences of the platform economy. According to these authors, the platform corporations have benefited from regulatory gaps, enabling the existing regulation. The platform corporations have also been accused of the destruction of value. Through subsidizing growth over profitability, the smaller profitable, value-creating enterprises are competed out of the market. The platform corporations have then emerged as the new feudal lords, controlling the ecosystem of value-creation and extracting rents from all sides of the market. The conflicts between these two narratives are the backbone of contemporary debates on the role of platforms in societies.

While the first narrative was dominant in the early 2010s, the countermovement of the second narrative has started to top the debate in past years. First, the business logic showed its faults. Many of the unicorns have struggled to break even, with corporations such as Uber and Twitter bleeding money seemingly without end, with the former reporting astounding losses of 5,3 billion dollars in the second quarter of 2019 (Wolverton & Rapier, 2019). This has led to calls to recenter the focus from growth back to the traditional pursuit of profitability (Griffith, 2019). The externalities of the platform economy also become more visible. The ambiguous employment status of platform workers, the local effects and the smothering of other enterprises challenge the arguments of predominantly positive economic effects of the platform economy.

Also, the United States legal environment started to change against platforms. In an article for *Yale Law Journal*, young lawyer Lina Khan made an analogy between the platform corporation Amazon and the monopolists of the early 20th century, highlighting the similarities in the ways these corporations

[33] In the extreme form, this idea has been called technological solutionism, where technology is seen as a general-purpose solution for all problems imaginable (Morozov 2013). Of the rhetorical meanings of *sharing economy*, see (Pais & Provasi, 2020).

occupy positions of influence in societies (Khan, 2016). This comparison sparked a new legal movement that sought to revive the ideas of the 20th-century legal scholar Louis Brandeis (Dunne, 2020; Ezrachi & Stucke, 2018). The crux of the Brandeisian approach is that the concentration of unchecked private capability to shape societies is dangerous even when this capability is not exercised. Brandeis feared that economic power was easily translated to political influence that would corrode at checks and balances.[34] (Rahman, 2018b). Hence, regulators are urged to take a precautionary approach and be aggressive in breaking down large corporate monopolies before they end up corrupting the regulatory apparatus.

Lastly, the political environment changed with potential threats to democratic institutions coming to light. Platforms played a role in alleged election manipulations in the cases of the Brexit referendum and the election of U.S President Donald Trump in 2016. This mainstreamed the debates on the broader societal significance of platforms which had been brewing amongst critical tech commentators from the early 2010s (Lobo, 2014; Morozov, 2013). As one particularly poignant testament to the change, Wall Street Journal even proposed "*techlash*: the growing public animosity towards large platforms" as the word of the year in 2018, citing recent scandals of election manipulation, opposition defamation and dominating business models (Forohaar, 2018).[35]

The mainstreaming of the platform critique was perhaps finally solidified when Harvard Business School professor Shoshana Zuboff popularized the notion of surveillance capitalism in her landmark book published in 2019 (Zuboff, 2015, 2019). According to Zuboff, the customer-facing platform economy is marked by the process extraction, processing, accumulation and monetization of personal data from the operations on the platform, which enables the behavior modification of individuals for pecuniary purposes (Zuboff, 2019, pp. 17–18). This process, called 'instrumentarian power', is seen

[34] Louis Brandeis (1856-1941) was part of the institutionalist wave of American legal scholars and economists, who theorized on the nature of corporate power in the early 20th century. See (Ylönen, 2018; Ylönen & Saari, 2020, p. 30).
[35] This techlash could be read as a Polanyian countermovement. See (Kenney et al., 2020, p. 231). The dynamic nature of this transition is also important.

as an existential threat to human autonomy and freedom. The book received widespread attention, becoming a bestseller of sorts drawing comparisons to Thomas Piketty's *Capital* as a 'masterwork' of economic analysis' (Carr, 2019). The ideas of the 730-page treatise were cited in a provocative form in a documentary called the *Social Dilemma,* released on Netflix in September 2020. The documentary was an instant hit, estimated to be the most popular item on the streaming platform in the month of its release (Bean, 2020).

The critique of the platform economy has evolved from the side lines of the debate to popular docudramas and on to the recommended reading list of Barack Obama (Barack Obama, 2019). But what exactly is new about platform economy from the perspective of the power of corporations? With expansion comes entropy. The general wave of commentary depicted in Fig 2.2 could perhaps be rather seen more like an explosion of different strands of research branching off in different directions, developing their positions from particular frameworks and problematics. From the perspective of corporate power, these positions form an incoherent whole, with several studies arguing about the most suitable interpretation of what is essential about *platform* power (e.g. Culpepper & Thelen, 2020; Khan, 2018; Nogarede, 2021; Rahman, 2018a; Zuboff, 2019).

However, when conceptualizing the novelties of platform power, one should caution against ahistorical approach (cf. Ylönen 2021, p. 137-141). After all, platform corporations are embedded in historical socio-economic structures and institutions, pursuing traditional objectives and employing typical practices of corporations. Creating new concepts and frameworks to address these risks needless multiplication of concepts and confusing the analysis. A sharper analysis necessitates some basis for distinguishing everything platform corporations can do from what platform corporations can do *because* they are platforms. To ground this analysis, I highlight three continuations in the actions of platform corporations: the pursuit of traditional business objectives, the neglected materiality of platform economy and the historicity of the regulatory entrepreneurship. This prepares us for the exploration of the novelties of platforms.

2.3 Just old whines in new bottles?

When the façade of digital interfaces is stripped down, the platform economy reveals traditional questions. Scholars inspired by the likes of Marx and Polanyi could emphasize capitalism's perpetual drive to commodify and marketize new areas of social life (Kenney et al., 2020, p. 228).[36] More institutionalist scholars could note that the objective to control the marketplace is only a variation of the age-old objective of corporations to eliminate competition in the markets as much as possible (Nesvetailova & Palan, 2013; Ylönen, forthcoming). Some of the means to control the marketplace are also quite familiar. For instance, in parallel to the organic network centralization, the largest platform corporations have leveraged their financial assets to buy potential competitors (Motta & Peitz, 2020). The Yale University's Thurman Arnold Project, named after a prominent antitrust authority of the early institutionalist period, identifies 249 key acquisitions by Google and 94 by Facebook by 2018 (TAP Yale, 2019).

Another key factor sustaining the potentially misleading novelty of the platform economy is its description as an immaterial, digital realm. This is misleading. Despite the connotations of the digital cloud as 'placeless, mute, ethereal and unmediated' (Hu, 2015), the platform economy has tangible and material roots. Over 99 % of global internet traffic travels through a network of underwater data cables connected to humongous data centers around the world.[37] This private infrastructure has received much less attention.[38] Over

[36] Further, the enabling conditions of platform economy could be argued to be quite familiar, with low interest rates and movements of international capital driving economic bubbles. In one insightful analysis connecting the new platform economy to past forms of accumulation, Hanieh highlights the ways platform economy has been partly enabled by the oil rents of the Persian Gulf (Hanieh, 2018, p. 1). For an analysis that grounds the platform economy in the crisis of capitalist profitability stemming from the 1970s, see (Srnicek, 2017).

[37] One close example is Google's datacenter in Hamina opened in 2017 in the Summa paper mill.

[38] The national security establishments are acutely aware of the importance of submarine cables (NATO CCDCOE, 2019). In Finland, the main underwater cable landing point is in the military area of Santahamina, approximate location of which can be inferred from open navigation charts. The owner of the only direct cable to Germany, C-Lion1, is Cinia Oy, owned 77,5 % by the Finnish state. The full global submarine network is available in https://www.submarinecablemap.com .

half of the world's internet capacity is owned by platforms like Google, Amazon, Microsoft and Facebook, with companies scrambling to build new cables (Internet Health Report, 2019; Satariano et al., 2019).

This material infrastructure opens a new domain of corporate power in which the reigning actor is Amazon, with its cloud computing arm Amazon Web Services (AWS) occupying a market share of 32 %, more than three competitors combined. While retail accounts for 70 % of Amazon's revenue, AWS is by far the most profitable business arm, generating over half of the operating income.[39] AWS creates novel types of interdependences across many scales of business. While computing capacity is a lifeline to many small players, even the largest players are dependent on Amazon's infrastructure. For instance, in 2019 Apple paid Amazon 30 million dollars every month for the use of cloud storage space (Novet, 2019).

This materiality of platforms links the platform economy to the most traditional problematics of the international political economy, the consumption and production of material resources. Data-centers underlying the platform economy consume tremendous amounts of energy, which has implications for the material security and sustainability of their business model in the future (Jones, 2018).[40] The necessary building material for devices such as smartphones and servers are concentrated in few areas, such as China and Congo, giving rise to traditional questions of labor rights and resource chains around the world (Baker, 2020). Understanding these dependencies helps to contextualize the importance of recent international trade disputes (Reuters, 2019).

Several authors have highlighted the exceptional relationship between platforms and regulators as the hallmark of novelty in the platform economy. In her recent treatment, Atal argues that one source of platform power comes from the ambivalent nature of being simultaneously centralized and

[39] This then feeds back into the monopolistic logics, with the profits used to subsidize other branches of businesses. See (Logic, 2020).
[40] Also the training of a single deep learning model can emit more carbon dioxide than five cars in their lifetime. (Hao, 2019).

decentralized, market participant and the market. Using the consequent liminal ambiguity in the nature of their activities, the platform corporations are able to evade existing regulatory tools, such as competition law (Atal, 2020, pp. 5–10).[41] Similar ideas are also put forward by Rahman and Thelen, who refer to strategic exploitation of regulatory cracks caused by the ambiguous business models as "regulatory entrepreneurship" (Rahman & Thelen 2019, 188).

While regulatory entrepreneurship is pronounced in the platform economy, it is hardly unique. In 2017, Dick Bryan, Michael Rafferty and Dungan Wigan noted in the *Review of International Political Economy* how the intangible nature of much of the modern economic activity evades the industrial epistemologies of measuring, managing and monitoring of the global economy (Bryan et al., 2017, pp. 59–60). In general, much of the recent work in the international political economy has centered around the idea of modern corporations exploiting the mismatch between their activities and outdated regulatory tools, manipulating pricing rules to control their wealth chains (Seabrooke & Wigan, 2017; Ylönen, 2018; Ylönen & Saari, 2020, pp. 34–35). While the liminality in the market-participant-roles is indeed novel, it seems likely to be more of an addition of the existing problematic of the mismatch between regulatory capabilities of public power and the capabilities of corporations.

The focus on sources of corporate power clarifies the debate. I argue that the platform business model is marked by two distinct capability resources. First is *infrastructure* as a controlled space of interaction. Infrastructure as a capability is somewhat familiar, with railroads and electrical grids being the obvious analogy. These analogies have served as inspirations especially for legal scholars working from the neo-Brandeisian framework (Khan, 2018; Rahman, 2018a). However, there are also new elements. The platform corporations also have unprecedented capabilities to observe, control and manipulate the processes that happen on their platforms. This capability of

[41] This argument also by van Dijck 2020, 10.

platforms to exercise private quasi-sovereign control over platforms is usefully conceptualized as "functional sovereignty" by Pasquale (Pasquale, 2017). Functional sovereignty and the legitimacy of this control poses new, fascinating types of questions to scholars of political economy.

However, the most novel capabilities are linked to data.[42] As Khan notes, whereas infrastructural monopolies have been dealt with before at least in some form, the "information exploitation" element of the platform economy sets platform economy apart from the previous anti-monopoly efforts (Khan, 2018, p. 333)[43]. While information is an ancient resource in economic affairs, the capability to record and store swathes of digital data has enabled aggregate and individual-level analysis and continuous surveillance in a novel way (Srnicek 2017, 54, Fourcade & Healy 2017, 10-12, Kitchin 2014). Data is a peculiar beast, with claims about derived capabilities ranging from industrial espionage to 'hacking and manipulating a human heart' (Harari 2018, 63). A closer look at the particularities of data is necessary to cut through the thicket of alarmism to focus on what kind of difference it truly makes.

2.4 Google's mind-control ray and other *Märchen*

In modern commentary on platform corporations, data is often treated as a form of raw material that corporations seek to harvest in order to create new capabilities and, ultimately, value (Lo & Brynjolfsson, 2016)[44]. In a seminal article, sociologists Marion Fourcade and Kieran Healy write of "data imperative", the insatiable urge of the modern corporation to gorge all available data from existing processes in the hopes that this trove of data could be turned into value (Fourcade & Healy, 2017, p. 13). Perhaps the most focused treatment of this idea is by Jathan Sadowski.[45] In a popular article, Sadowski argues that "data – and the accumulation of data – is the core component of political economy in the 21st century." (Sadowski, 2019, p. 1).

[42] Recent reviews of the emerging political economy of data, see (Prainsack, 2020) (Brevini & Pasquale, 2020).
[43] Lynskey approaches this as "data power" (Lynskey, 2019).
[44] See also (Schwab et al., 2011).
[45] As of 14.12.2020, the article has received 122 published citations in two years.

Approaching data explicitly as a resource that gives rise to capabilities, the article is a good starting point in connecting data to corporate power.

According to Sadowski, whereas much of the current research approaches data as a commodity, a better approach would be to see data as capital (Sadowski, 2019).[46] He argues that hoarding of this data is similar to previous forms of accumulation, where the internal dynamics of capitalism drive the "datafication" of turning all phenomena into data to be accumulated. Whereas before capitalism was about capital, the new platform economy is about data.[47] Sadowski identifies six ideal-typical ways this data is translated into capabilities and value (Sadowski, 2019, pp. 5–6)[48] : through the capability to i) monitor and target individuals ii) optimize existing systems iii) manage and control "things" iv) model probabilities of events v) build new products and services and vi) grow the value of existing assets. [49] This non-exhaustive list is provided as a starting point for further research.

The analogy of data as capital by Sadowski and others has invoked interesting debates on the ownership of the means of (data-)production and governance. But what might be hidden by this analogy? After all, in many respects data is *not* like capital.[50] Whereas capital in modern economic institutions is standardized, data is merely a sum of recorded abstractions of some underlying process, situated in space and time. Crudely, where capital is universal, abstract, general-purpose, transmutable and obeys linear dynamics of valuation, data is local, messy, particular, non-fungible and valued in a non-linear and relational manner. This poses problems for treating data as a

[46] The term "capital" is subject to many theoretical controversies on whether it is best understood as a social relation or as an object of trade and valuation as a source of future revenue stream. Sadowski seems to use the concept in the latter sense, and it is also compatible with the idea of capability resources. The theoretical controversies specific to the concept of capital have led some authors to opt for replacing it with the concept of asset when used in this latter sense (Birch & Muniesa, 2020, pp. 3–4).
[47] see also (Srnicek 2017, 53).
[48] Similar mechanisms are articulated by Srnicek (Srnicek 2017, pp. 55-56).
[49] Monetizing these capabilities is yet another step, often addressed in terms of "value proposition". Of the problems of the value propositions based on targeted advertising, see (Hwang, 2020).
[50] The difficulties of the analogy are also well acknowledged by Sadowski.

general capability-resource and calls for more nuanced work in trying to grasp what kind of a political-economic resource data is (Sadowski 2019, 5).

A few examples illuminate the scope of the problem. Refurbishing a conventional fridge into a smart version is a qualitatively different capability than probability modelling of future events. Training a computer vision for autonomous vehicles is different than predicting customer behavior. One key difference concerns the longevity of the data. Data from customer purchase decisions has a limited shelf-life[51], whereas industrial data such as pictures of prostate cancer and data from pharmacological trials describe much stabler processes. Data is also a subject of constant labor; to transfer observations to capabilities, there needs to be extensive socio-technical infrastructure in place facilitating this process of abstraction with a plethora of biases and omissions (Kitchin, 2017). These infrastructures are not only passive. The content moderation of Facebook and the labeling of images for deep learning models requires the labor of armies of precarious workers in the underworld of the platform economy (Gray & Suri, 2019).

Being sensitive to these factors has important implications for analysis. First, if the type of data in question has a short shelf-life due to non-ergodicity or rapid changes, the accumulation of data is less important than continuous control over the data exhaust. If data is more of a flow than a stock, from a political economy perspective it matters little if somebody has barns full of hard drives of customer behavior from five years ago. Second, acknowledging that data is a heterogeneous mass in need of extensive infrastructures and labor to make it useful helps to point attention to new questions. Things like standardized data formats and application programming interfaces become a paramount object of interest that underlie the hype of big data.

Peculiarly, these issues often have a secondary role in literature touting the near transcendental capabilities brought by 'big' data (Kitchin, 2014, pp. 3–5).[52] This is especially pertinent in applications related to social systems.

[51] In the machine learning industry, this is known as concept drift (Webb et al., 2016).
[52] On these issues, see Kitchin 2017.

Regardless of the particularities of the context from which the data is derived, the data is seen as exhaustive raw material for knowledge from which to infer facts about reality through machine learning. One of the most influential books on the subject even argues that big data makes it possible to part with the concept of causation altogether in the face of inferences drawn from empirical correlations in swathes of data (Mayer-Schönberger & Cukier, 2013, pp. 17–18). Big data is said to give rise to new disciplines, such as "social physics" that claim to reveal the underlying dynamics of social behavior with mathematical precision (Pentland, 2014, p. 4).

One guiding impetus for the scholarship philosophy of social science has been the aim to refute both parts of the proposition; the naiveté about the relation between data and reality and the capability to infer law-like generalizations from said data (e.g. Kitchin, 2017; Little, 2016, pp. 1–4). While these have traditionally been concerns of philosophers of science, similar debates on the nature of causality and data have recently started to emerge in the cutting edge of the machine learning community (Pearl & Mackenzie, 2018). In a recent paper, Momin Malik summarizes the four key relevant limitations of law-seeking quantitative empiricism in social systems (Malik, 2021, pp. 6–15). First, social action is meaning-laden, purposeful and reflective, which makes it resistant to general laws. Second, it is hard to quantify the fluid and context-dependent processes that generate social outcomes, so one must settle for imprecise empirical proxies.[53] Third, basing the analysis on the quantified empirical side of the question risks delegitimizing the experience of the objects of research. Fourth, the outputs have performative effects on the social systems they seek to objectively describe.[54] These limitations create hard constraints for law-seeking empiricism when applied to social systems.

Acknowledging these limitations of empiricism helps to illuminate the weaknesses of some of the claims made about the capabilities of platform corporations. Perhaps the most notorious of the data-enabled capabilities is

[53] With these proxies, it is easy to smuggle in questionable assumptions about social entities and the nature of causation, see (Abbott, 1988; Little, 2016).
[54] Classic works investigating the role of performativity in social systems are (Lagerspetz, 1988; MacKenzie et al., 2007; Soros, 2013).

the instrumentarian power outlined by Zuboff and other writers (cf. Owens, 2020; Zuboff, 2019, p. 19). According to Zuboff, instrumentarian power "works its will through the medium of ubiquitous digital instrumentation to manipulate subliminal cues, psychologically target communications, impose default choice architectures, trigger social comparison dynamics and levy rewards and punishments — (…) aimed at remotely tuning, herding and modifying human behavior in the direction of profitable outcomes" (Zuboff, 2020). This data-derived capability is then portrayed as a key epiphany of the modern economy and the primary source of the power of platforms.[55]

The political manifestation of this instrumentarian power is illustrated by the Cambridge Analytica scandal in 2016. In a series of articles published in 2016, the data analytics firm was accused of harvesting data from Facebook in the guise of academic research by Alexandr Kogan from University of Cambridge and built a "powerful software program to predict and influence election choices" in the U.S presidential elections and in the Brexit referendum (Cadwalladr & Graham-Harrison, 2018). This capability to harness the instrumentarian power to shape election outcomes has been seen as an existential threat to modern democracies (Harari, 2018), with Zuboff summarizing the position in arguing that combining democracy and surveillance capitalism is an 'existential and political impossibility' (Zuboff, 2021).

However, there is little evidence for these grandiose claims. In terms of advertising effectiveness, independent experimental studies researching the impact of programmatic advertising have found minimal effects on purchase decisions (Frederik & Martijn, 2019; Hwang, 2020; Lomas, 2019; Martijn & Frederik, 2019).[56] Tim Hwang, former global public policy lead for artificial intelligence at Google, has spoken of a "subprime attention crisis", where the whole business model of companies like Facebook and Google is based on a

[55] This capability is typical to the likes of Google and Facebook, less to the kinds of Uber and AirBnb.

[56] As an example, in an article for New York Times Zuboff cites a Facebook study on social contagion published in PNAS as evidence for the existence of instrumentarian power. A closer look into this study reveals that treatment effects are in the range of 0,1 per cent (Kramer et al., 2014).

trillion-dollar bubble about to burst, due to the opacity of advertisement networks, systemic incentives for fraudulent behavior and declining effectiveness of ads.

The political manipulation hypothesis does not fare much better. After Brexit, the British Information Commissioner's Office launched an investigation into the activities of Cambridge Analytica. In a recent communication on the results of the investigation, the Information Commissioner argues that the internal capabilities of the prediction of election outcomes were vastly exaggerated. Low quality demographic-level data bought from data broker Experian was combined with data harvested by Kogan, and the analysis was done on openly available software packages. The investigation concludes that there is little evidence of actual efficacy of these practices, highlighting the exaggerated claims about out-of-sample prediction capabilities (ICO, 2020).

This argument does not disprove all claims about the capability to influence individual behaviour on the basis of data. The point is that postulating extraordinary capabilities on the basis of little evidence might contribute to the perpetuation of the myth of tech exceptionalism (Vinsel, 2021). Both tech corporations and their critics have clear incentives to sustain these myths: corporations, because it helps them to sell ads, and critics, because it helps to drive home the urgency of the need for reform of the platform economy (Owens 2020). However, there are good reasons to take the side of caution in the analysis of data-based capabilities of platform corporations in order to evade the most alarmist concerns.

2.5 A conceptual typology of platform capabilities

The contents of this chapter are summarized in the framework visualized below. In this framework developed for this thesis, I argue that the peculiarities of platform power can be traced to two distinct capability-sources: infrastructure and data. Focusing on these helps to distinguish the novelties of platform economy from more general analysis of corporate power. For analytical purposes, the resultant capabilities are broken down into further

sub-capabilities. This typology is not meant to be logically exhaustive, nor are the categories strictly separate. For instance, purchasing data has material features in the short term. Different business models emphasize different capabilities. While infrastructural capabilities are common to most platforms, data-related capabilities are more refined, with material capabilities being distinctive to industrial platforms and epistemic capabilities to more social action. Despite these caveats, this framework is suggested as a useful abstraction for empirically generative and intellectually interesting research (Healy, 2017).

The infrastructure gives rise to three types of capabilities. First is the most traditional, stemming from the control of access to the platform. This gatekeeper's capability refers to extracting a toll for entry and/or imposing conditions for access. One example of this is the standard 30 % commission Apple charges from major sellers in its App Store (Apple, 2021). The second derives from the overarching control over the platform as a space. This covers a wide variety of issues from manipulating the platform activities to devising rules that structure interactions in the platform. The most obvious example is Amazon, which has been accused of tweaking its e-commerce website to prioritize its own products in user searches (Mattioli, 2019).

The third family of capabilities are protective and ancillary in nature concerned with solidifying the infrastructure. Many platforms use technical and legal tools to prevent users from changing to competing platforms in cases the lock-in by network effects fails. The most obvious of these practices are contracts prohibiting retail sellers from directing users to outside Amazon (Amazon UK, 2021) or Apple's block of the app developers access to iPhones' NFC-chip used for contactless payments in order to prevent competition to Apple Pay. (McGee, 2020)

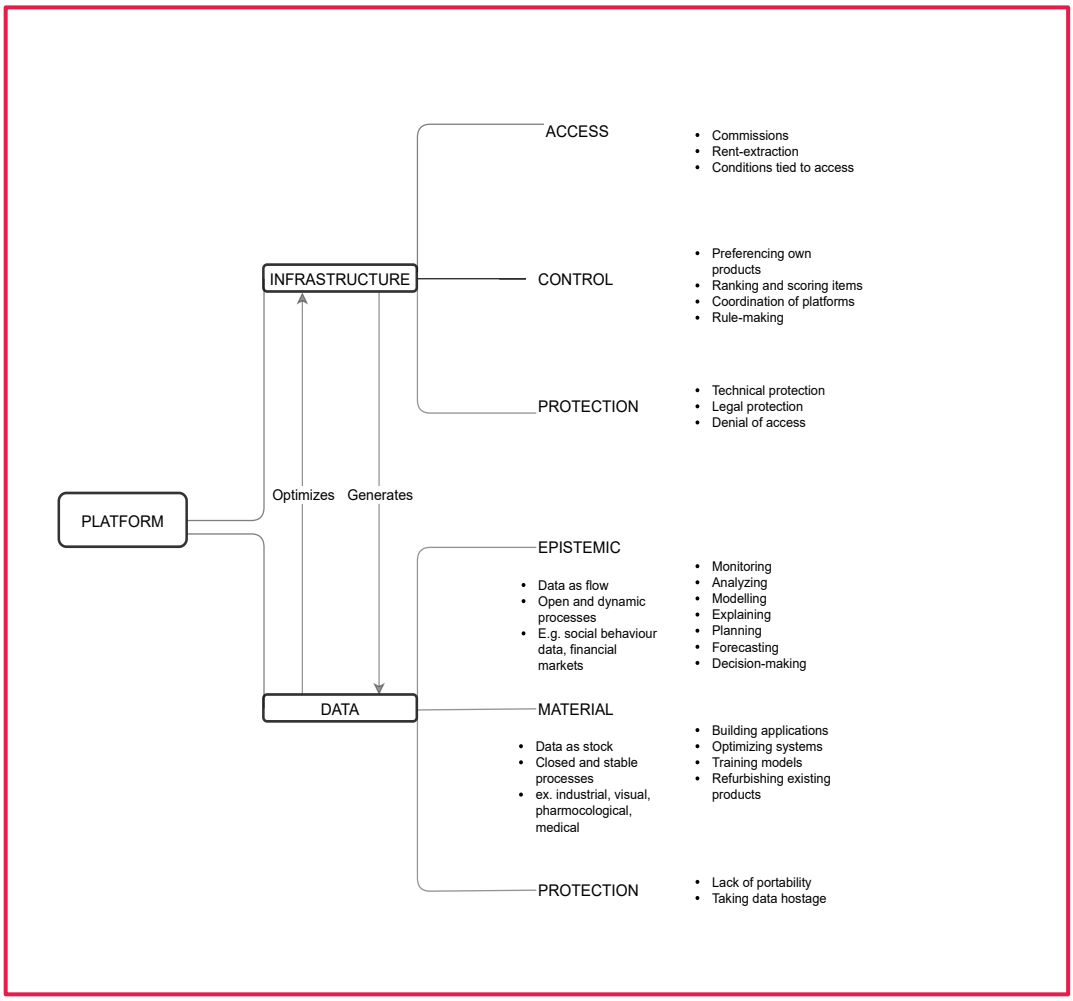

Fig 2.3 The typology of platform power

The data produced in platforms gives rise to four types of capabilities. First, recursive improvement of the platform is a key dynamic sustaining the dominance of a platform. It is difficult to develop a better internet search service than Google, because new searches gradually improve the search algorithm (Google, 2020). Secondly, the data gives a comparative epistemic advantage**.** Even if the data is not a mirror of reality, hegemony over information concerning activities inside some system makes it possible to make more informed decisions that translates to value. [57] For example, Amazon has used the data from its cloud computing services to identify lucrative start-ups before they surface (Mann, 2017), and to monitor

[57] One of the especially peculiar examples is using satellite imagery data to inform business location decisions. (Partnoy, 2019).

transactions in the Amazon marketplace to create competing products without the risks of research and development (Mattioli, 2020).

Third, data can also be a resource in a traditional sense**.** Some applications, such as speech recognition and image recognition need huge swaths of data to train deep learning algorithms. (Brown et al., 2020) The proposed use cases range from pharmacological (BCG, 2020) to industrial, where the common denominator is that the process the data depicts is somewhat ergodic and stable. This makes the portrayal of data as a raw material the exception rather than the norm. Lastly, there is also an ancillary protection element, derived from the capability to abstain from sharing data generated in the platform.

This framework finalizes the treatment of the first research question. I have argued that there indeed is something new about the corporate power of platform corporations. After reviewing the relevant literature, I argued that one useful way towards empirically generative and intellectually useful analytic research on corporate power is to focus on capabilities deriving from control over infrastructure and data. The framework is summarized visually in Fig 2.3. I now proceed to use this framework to analyze the ways the regulators have tried to address the platform economy. My interest is in the recent developments in Brussels, where a five-year engagement with platform economy gradually developed into a draft proposal aimed to regulate the economic power of platforms. This proposal, called the Digital Markets Act (or "DMA", for friends like us) was released on the 15th of December 2020. How does the proposal relate to the typology of platform capabilities?

3. Case: Platforms of Europe – Unite!

3.1 Arboreal paradigms

A typical narrative of the governance of platform economy identifies three distinct regulatory regimes (Aaronson & Leblond, 2018; Hermes et al., 2020). In general terms, the lightly regulated, market-driven American system and the state-led Chinese system are contrasted by a European system more concerned with ethical questions and the protection of European values in the face of the particularities of platform economy (Aho & Duffield, 2020; Lomas, 2020). While Europe used to be seen as the key governance regime for the platform economy, after the techlash regulators in the United States (and even in China) have stepped up efforts to regulate Big Tech.[58] The contestability can be inferred from the resources major platform corporations have started to invest in their efforts to make their voices heard in policy processes. For instance, in Europe the platform corporations top the list in lobbying expenditures, with a substantial uptick in the wake of the new proposals for digital market regulation. (Corporate Europe Observatory, 2020; Vou, 2020).

The majority of the literature on the governance of platform economy emanates from U.S. contexts. Transferring these experiences directly to Europe might lead to a crude analysis due to differences in material conditions, political dynamics and regulatory institutions. In Europe, the domestic platform economy has been slow to develop, leading one recent study to call the European situation a "platform gap". (Hermes et al., 2020). The European status as a platform laggard vis-à-vis the United States has infused the debate with delicate international politics. Some commentators have interpreted Europe's efforts to regulate the predominantly American platform corporations as partial protectionism (Broadbent, 2020, p. 18; Ginsburg, 2021). The European Union is also internally divided on the proper regulatory

[58] The PRC response has been motivated with the fear of growing power of corporations vis-a-vis the Chinese Communist Party. (Ping, 2021). One curious fact is that while writing this in early January 2021, Jack Ma, founder of Alibaba went missing after criticizing the tech policies of the PRC. (Banjo, 2020; Chandler et al., 2021)

approach to platform economy. In addition to grand debates on the ideas guiding the economy[59], certain countries, the foremost of which is Ireland, have pecuniary interests in the lax regulation of platform economy.[60]

Ideas guiding the regulatory paradigm of the European Union also differs from the American one in important respects. In the United States, much of the emerging critical regulatory approaches to platform economy stems from the Brandeisian legal tradition that sees bigness as a threat by its very nature. This approach is explicitly refuted in the European regulatory approach to platform economy. As Competition Commissioner Margrethe Vestager said in an interview in October 2020: "In Europe we do not have a ban of monopolies. They have a different legal basis in the U.S. We would say you're more than welcome to be successful but with success comes responsibility." (Lomas 2020)[61]. In sum, the approach led by the European Commission can be interpreted as optimistic about the capability of regulators to stand up against corporate power and use competition law to focus on their practices.[62] Where the American approach wants to cut the tree, the European approach is satisfied with tidying up the branches that casts a shade over its competitors.

Perhaps the most important political-economic contribution dedicated specifically to platform economy comes from José van Dijck (van Dijck, 2020).[63] In her recent paper for *New Media & Society,* van Dijck argues that the competition law paradigm of the European Union is unsuitable for addressing the novel political-economic dynamics of platform economy. Due to conceptual narrowness of the legal framework, the regulatory paradigm of the Union is ill-equipped to deal with the ubiquitous dynamics of platformization,

[59] See for instance: https://blogs.lse.ac.uk/europpblog/2019/02/04/the-eu-as-an-evolving-compromise-between-french-dirigism-and-german-ordoliberalism/

[60] Ireland is the host country of choice for the largest players in the platform economy. In addition to the five largest corporations, (Google, Amazon, Facebook, Apple and Microsoft) several smaller corporations also have their European headquarters situated in Ireland. (eg. Twitter, Etzy, Linkedin, AirBnb). These corporations play a significant role in the Irish economy. (Smith, 2020, p. 22)

[61] Similar sentiments were expressed even by the Internal Market Commissioner Breton, who noted in the press that "We will never say a company is *too big* – not on this side of the ocean!" (Breton 2020).

[62] The default tool is strong competition law, enshrined in the article 102 of the Treaty on the Functioning of the European Union which prohibits the abuse of dominant market position.

[63] Similar points were hinted at earlier in a paper (van Dijck et al., 2019)

the coordination between platform corporations and the political-economic dimensions of globally interconnected platform ecosystems (van Dijck 2020, pp. 11-13).[64] As a solution, she proposes a shift from "rule-based" to "principle-based regulation", which would see the platform economy as a systemic phenomenon to be regulated based on common good, articulated in "democratic-civil", "normative-legal" and "technical-ethical principles" (van Dijck 2020, pp. 14-15).

While van Dijck makes an important contribution by zeroing in on the mismatch between diffracted regulatory tools and an emergent platform economy, the paper still leaves room for further analysis. First, it remains ambiguous what *exactly* is lacking in the current framework. van Dijck highlights two infrastructural dimensions of platform power (vertical integration and gatekeeping power) and one data-related dimension (using data from one sector to inform others) [65] as examples of phenomena that the competition law paradigm does not address (van Dijck, 2020, pp. 8–10). However, as will be seen below, these issues are at least nominally addressed in the regulatory actions of the European Commission: the vertical integration is addressed through mandated interoperability and constraints on gatekeeping power, and the concerns over usage of data in general have been one of the focal points of the European platform regulation.[66]

Second, the coordination between platform corporations seems more complicated than the picture sketched by van Dijck. Corporations are also fierce competitors in the market.[67] This holds also in the platform economy. For instance, Facebook's 10-K Securities and Exchange Commission filing

[64] Similar concerns are voiced by Orla Lynskey. (Lynskey, 2017, 2019).
[65] The implied idea of leveraging data from one context to another ("transfer-learning") is problematic insofar as it does not distinguish the types of processes the data portrays. It is difficult to leverage industrial data to customer data. There are, of course, cases where this leveraging works well. Combining medical data to customer data can be effective, as the platforms' recent shift to healthcare testifies. See also (Hwang, 2020, p. 86).
[66] The focus on *platform power* in the abstract might be a dead end. As Lynskey notes, to treat platforms as a distinct type of power would need an iron-clad and legally enforceable definition of platform. If platform power is something peculiar to the digital economy, there needs to be a clear idea how it differs from other types of infrastructures to ensure the legal concepts. Hence, Lynskey focus on the practices, instead of focusing on capabilities in the abstract. (Lynskey 2017, 6).
[67] Corporations as competitors in the market (Nölke & May, 2018, p. 7)

from November 2020 explicitly notes the blocking of adTracker in Apple's iOs 14 as a central risk to their business. (Facebook, 2020, p. 59).[68] Microsoft has been active in briefing Brussels' policy makers on the need to reign in gatekeepers (Klynge, 2020). Furthermore, small companies dependent on platforms have been the most vocal proponents of more stringent regulation of platforms. Acknowledging these intra-corporate dynamics is imperative in understanding the evolution of the European regulation of platform corporations.[69]

Lastly, van Dijck does not dwell on the reasons *why* Europe has opted for a rules-based framework instead of a principle-based framework. I argue that this framing is no accident, nor is it particular to platform economy. The EC approach to economic governance in general is conditioned by broader historical path dependencies and regulatory ideas. These are not just remnants of past choices, but formidable and active boundaries etched in mandates and practices. Understanding these boundaries helps to see more clearly the types of obstacles that lie before this jump from certainty of rules to the discretion, and politics, of principles.

In sum, the political economy of the European approach to platform economy needs to be analyzed on its own terms. Fragments of this scholarship are currently few and far between. In what follows I contribute to the analysis by investigating the process that led to the release of the Digital Markets Act. One good place to start the analysis is Brussels, May 2015.

[68] At the moment of writing, Facebook is planning to launch an antitrust case against Apple. (Heath & Sisco, 2021).
[69] See also (Kenney et al., 2019, p. 878)

3.2 The two strands of Juncker: Digital Single Market Strategy 2015-2019

The need to regulate platforms surfaced in the Digital Single Market Strategy, released during the tenure of Commission President Jean-Claude Juncker. The objective of the strategy was to harness the benefits of digitalization that had dramatically changed the global economy in previous years. (European Commission, 2015, p. 1). The document dedicates a specific sector to the role of online platforms, which are seen as playing a central role in modern economic and social life. (European Commission 2015, 10). In typical pre-techlash spirit, platforms are lauded for their role as innovators in the economy, creating growth, jobs and efficiencies.

However, the strategy noted the potentially dangerous dynamics brought by online platforms. As the document states, "the market power of some online platforms potentially raises concerns, particularly in relation to the most powerful platforms whose importance for other market participants is becoming increasingly critical". (European Commission, 2015, p. 9). As examples of this market power, the strategy refers to data hegemony, platforms' strong bargaining power over smaller corporations and the leveraging of platforms in other sectors. (European Commission, 2015, pp. 10–11) As a result, the Commission promised to launch an assessment to gather information on these questions.[70]

A year later, the tone had changed. On the 25th of May 2016, the Commission published a communication specifically addressing the changes brought by the platform economy. The communication emphasized the strategic importance of the platform economy to the European Union. Platform economy had become a geopolitical battle against regional competitors, and according to the Commission, the EU was losing this battle. At the time of the communication, the European Union represented only 4% of the total market capitalization of the largest online platforms, the vast majority of platforms originating from

[70] Orla Lynskey mentions that this might have been caused by political pressure from France and Germany. (Lynskey, 2017, p. 4; The Irish Times, 2015)

the United States and Asia (European Commission, 2016, p. 5). Effectively stimulating platform innovation areas in the EU is said to be 'perhaps the most important challenge the EU faces today in terms of securing its future competitiveness in the world.' (2016, p. 15).

The communication introduced four broad principles that still define the Commission's approach to the regulation of the platform economy (European Commission, 2020i). These principles can be crudely classified into two separate strands. The first strand concerns rights and privacy on the platforms, dealing with issues such as the transmission of illegal and copyrighted material. The second is concerned with the economic power of the platforms.[71] This strand concerns issues such as gatekeeper power, self-preferencing, price hikes from platform corporations, unfair parity clauses and switching costs. The communication declared the launch of targeted fact-finding exercises on the basis of which the Commission would decide whether more EU-level action is needed (European Commission 2016, p. 13).

To facilitate the regulation of these new types of corporate power, the European Commission established a dedicated advisory group, the *Observatory for the Platform Economy,* on the 26th of April 2018. (European Commission, 2018c). The Observatory, consisting of 15 impartial experts, was established to monitor the evolution of platform economy "in order for policy-making to be more information-based and targeted, and, to the extent the application of existing tools such as competition law cannot sufficiently address those issues, to underpin targeted policy measures.". [72] The Observatory gathered relevant research and experiences from other

[71] Communication makes in passing an interesting distinction between the platform itself and the access to data as qualitatively different assets that give rise to different kinds of capabilities to distort markets (European Commission, 2016, p. 12).

[72] In practice, the Observatory was designed to consist of 15 independent experts and Commission officials. 14 of the 15 experts are academics, with the majority being lawyers having a background in competition law. The chair of the group is the Director General of the Centre of European Regulation, a prominent non-profit think-tank in Brussels, with membership including all the platform giants Google, Amazon, Facebook, Microsoft and Apple. Prima facie, this seems dubious from the perspective of the independence of the relevant experts.

investigations into platform economy and conducted several studies through subcontractors.[73]

In addition to fact-finding, the Commission has also attempted to reign in large platform corporations through legal proceedings. It is hard to exaggerate the role of Margrethe Vestager, competition commissioner elected for the Juncker Commission, in the European platform regulation. While initially planning on becoming commissioner for environment (Gotev, 2014), she started her first proceedings against platform corporations within a few months of taking office in 2014 (Hakim, 2015). In the following years Vestager used the instruments provided by the strong market-protection toolbox of the Union to address platform power with the full force of the law.[74]

The brunt of the antitrust action has been borne by Google, with three major antitrust cases. In the first case called *Shopping*, 27.6.2017 Google was ordered to pay fines of 2,42 billion euros for preferencing its products on its price-comparison site (European Commission, 2017). [75] A year later, on the 19th of July 2018, Google was found guilty of exploiting the monopoly position of Android to force manufacturers to pre-install other Google products, leading to damages of 4,3 billion euros.[76] Lastly, in a case called *Advertising,* Google was found guilty of prohibiting advertisers from using competitors' products, leading to fines of 1,5 billion euros. (European Commission, 2019b) In total, Google contributed 8,2 billion euros in fines in two years to the Commission's budget, roughly two times more than Finland did in the same period.

These proceedings were also complemented with new legislation. On the side of content production, some of the key actions were the Commission recommendation of tackling illegal action online (European Commission,

[73] Full list of the knowledge production relating to the platform economy, see (European Commission, 2020j, pp. 3–13)
[74] The first widely published case was the Irish tax-case of Apple. Apple had arranged a deal with Ireland to exploit the loophole in the Irish tax system to shield non-US profits from taxation. Vestaeger deemed this an illegal subsidy by the Irish state, and ordered Apple to pay these back (Weckler & Cogley, 2016). Apple's tax evasion case was reversed in 16th of July 2020 by the court of European Union (Halpin, 2020).
[75] This amounted to 2,5 % of Google's annual revenue in 2018.
[76] This is the largest fine imposed by the European Commission to date.

2018a) as well as the General Data Protection Regulation (GDPR) governing data privacy and security (European Commission, 2018d).[77] In May 2018, the Commission also started an in-depth analysis on algorithmic transparency to study the ways algorithms 'shape, filter and personalize' the information flows they intermediate. (European Commission, 2018b). On the economic side, the most notable is the regulation on platform-to-business relations that came into force on the 20th of June 2019. (Official Journal of the European Union, 2019). This regulation aimed to create a 'fair, transparent and predictable business environment' for business users using the platform by banning some practices, mandating some transparency on the workings of the platform and improving their dispute resolution mechanisms. (European Commission, 2019a).

However, by 2019 the limitations of the EC approach to platform regulation were visible. First, existing tools turned out to be too crude for the platform economy, with the competition toolkit and state-aid rules having only a limited impact on platforms. The new regulation did not help much: platform-to-business regulations applied only to a limited set of practices and did not create hard constraints on the actions of corporations. Secondly, the possibility to appeal strained the investigations. In the case of Google, some of the proceedings finished long after the original complainants were already out of business. As one EU official noted, "there is one thing that competition law cannot do, and that is to revive the dead." (AFP, 2020). Sending ambulances to funerals was found to be a futile exercise.

Thirdly, even when the cases were closed, enforcement turned out to be ineffectual. Cash-rich companies are not deterred by fines imposed by the Commission. For instance, even after fines of over 8 billion euros, Google has not changed its operating procedures, the sum being only 2,5 % of their yearly revenue during that period (van Dorpe, 2019). One analyst noted that for corporations with cumulative revenue of over 400 billion dollars between 2017-2019, the sanctions can be treated merely as the 'cost of doing business'.

[77] The GDPR originally passed on the 27th of April 2016 with a two-year implementation period that ended on the 25th of May 2018.

(Geradin, 2020b). For example, according to a recent study, the three antitrust cases against Google have not affected its dominance in search markets, with a ssmarket share comfortably over 90 %. (Nogarede, 2021, p. 21)

Corporations have also succeeded in smoke-screening the Commission. In many cases, the Commission has tasked the corporations themselves to come up with alternatives for the prohibited actions. As Caffarra notes, this has led to a constant cat and mouse game, where corporations are in a much better position to circumvent the legislation (Caffarra, 2020, pp. 1–2). For instance, in the cases of *Android* and *Shopping,* the changes implemented by Google have been heavily criticized by competitors and industry associations. (DuckDuckGo, 2020; ENPA, 2020).[78] As a consequence of the failures in both enforcement and remedies, a recent article even summarized the European efforts to regulate platform economy as being "a failure" (van Dorpe & Nylen, 2020).

The political atmosphere also became more conducive to the regulation of platforms. The general tech-lash reached Europe too, with the excesses of platforms gaining more attention.[79] Also, some of the impediments weakened. As noted, the regulation of the platform economy has a strong geopolitical dimension. The majority of the large players in the platform economy are American, so regulation disproportionally affects American interests, which has made it easy for platform corporations to frame the debate in the context of regional competition and protectionism. This changed during the Trump tenure. [80] The outright hostilities between Trump and the platform companies as well as general retrenchment from European affairs has decreased the political resources available to these corporations to influence decision-making in the Union. This opened political space to take a more decisive approach towards the platform economy.

[78] More in-depth analysis of these responses, see (Geradin, 2020b)
[79] This shift also verified by Vestager, citing antitrust issues and Cambridge Analytica. (Espinoza, 2021)
[80] Of the regulatory dynamics, see (Williams, 2020). Central to Trump's hostility towards large platform companies is their "anti-conservative bias". See (Clayton, 2020)

The political constraints that had limited the Commission's hand in the regulation of platform economy also diluted. The United Kingdom had been a major advocate of light-touch regulation of the economy in general and platform economy in particular. (Larger et al 2020). After Brexit, the more industrialist policy ideas often attributed to French policymakers have gained more visibility in economic policy discussions.[81] In regards to platform economy, French policymakers have been especially vocal about the need for active regulation to protect European corporations, this more decisive stance sometimes being conceptualized as an effort to maintain "technological sovereignty". (Breton, 2020a; M. Scott, 2019; cf. Miailhe, 2018). The need to regulate platforms was also emphasized by member state authorities after the techlash. In New Strategic Agenda published in June 2019, the European Council emphasized the need to act in order to keep digital markets open. (Council of European Union, 2019).[82]

Despite the initial optimism of the Commission, existing procedures were found to be too slow and ineffective to regulate the platform economy. The political sentiment in Europe changed as well, and the overall deterioration of relations between the U.S. and European Union might have contributed to the possibility to challenge the American corporations more openly. Eyes were then turned towards the tenure of the new president of the European Commission, Ursula von der Leyen.

3.3 Margrethe and Thierry go hunting: Shaping Europe's Digital Future 2020-

Ursula von der Leyen tapped into the shifting tide of the platform economy. In the race for Commission presidency after Juncker, the digital economy was one of von der Leyen's six key areas of political guidelines, with its emphasis on data and artificial intelligence "as the ingredients of innovation in the modern digital economy." (von der Leyen, 2019, p. 13). Keeping her cards close

[81] On the shifting balance of power in the EU after Brexit, see (Krotz & Schild, 2018)
[82] Similar comments were also put forward in June 2020 in the European Council's comments in the *Shaping Digital Future*. (Council of European Union, 2020, p. 19).

to her chest, the political guidelines were quite discreet about actual regulatory actions, only hinting at the potential of a new Digital Services Act that "will upgrade liability and safety rules for digital platforms, services and products, and complete our Digital Single Market."

After the victory of von der Leyen in December 2019, exceptional pressure for platform regulation was also mounted from inside the Union. In a letter dated 4th of February 2020, the Finance Ministers of Germany, France, Poland and Italy urged the new Commission to act before "irreversible distortions in competition on digital markets" (European Commission, 2020b). The ministers urged for a swift timetable, proposals for more stringent platform regulation ideally to be formulated by the end of the second quarter of 2020. The Cabinet of von der Leyen spent the following weeks formulating the work program and consulting different stakeholders, with all the largest platform corporations reporting meetings with Commission officials in early February.

The first work program of the von der Leyen administration was released on the 29th of January 2020, with six headlining ambitions paralleling the ones announced in von der Leyen's political guidelines. (European Commission, 2020a) One of these, *A Europe fit for the Digital Age,* was dedicated to the questions on regulating the digital economy. To substantiate these efforts, three weeks later the Commission released a tangible strategy called *Shaping Europe's Digital Future* on the 19th of February 2020. (European Commission, 2020d).[83] The strategy consists of three pillars, of which the second, "Fair and Competitive Economy" is dedicated exclusively to the topic of platform economy.[84] The language of the strategy is remarkably sharp. The document starts with the assertion "in the borderless digital world, a handful of companies with the largest market share get the bulk of the profits on the value that is created in a data-based economy." (European Commission, 2020d, p. 4). Echoing the idea of data-as-capital, the document reads, "Data has become

[83] The Commission simultaneously published two other related initiatives, the communication on European Data Strategy and the white paper on artificial intelligence. (European Commission, 2020c, 2020e)
[84] The other two pillars are "Technology That Works For the People" and "An Open and Democratic Society".

a key *factor of production*, and the value it creates has to be shared back with the entire society participating in providing the data." (European Commission, 2020d, p. 4, emphasis added).

Platforms are singled out as a key focus of regulation. "Some platforms have acquired significant scale, which effectively allows them to act as private gatekeepers to markets, customers and information". This is seen as a grave threat to the common market. "We must ensure that the systemic role of certain online platforms and the market power they acquire will not put in danger the fairness and openness of our markets." (2020b, p.4) As a solution, the strategy outlines six different propositions concerning the taxation of platform corporations, new consumer agenda, revision of competition rules, new European data strategy on the use of industrial data and new rules for platforms, the last of which is the object of our current interest, with a timetable for a new proposal by the end of the year 2020.

The importance of these questions was reflected in the composition of von der Leyen's cabinet. Vestager continued as the Commissioner for Competition but she was also promoted to be Executive Vice President of the Commission, with overarching powers over European digital policy. She was accompanied by Thierry Breton, who was selected as the Commissioner for Internal Market. Breton, former CEO of the French technology giant Atos has painted himself as the bad cop of European tech policy, threatening platform corporations with forced break-ups, an option that even Vestager has been hesitant to deploy, calling it "the nuclear option". (Corporate Europe Observatory, 2020; Larger et al., 2020). According to some sources, the more aggressive and protectionist approach of Breton has even caused some conflicts between the two (Larger et al., 2020). [85]

The spring of 2020 was initially planned as a time for preparatory information gathering for the new proposals.[86] However, the need for regulation was

[85] These were, however, downplayed by Vestaeger in the press conference on DMA.
[86] The platforms also upped the ante, spending more money on lobbying in the first six months of 2020 than they had spent in 2019 in total. (Satariano & Stevis-Gridneff, 2020).

exacerbated when the COVID–19 pandemic highlighted the systemic importance of the platform corporations (Banjo, 2020; Sokolyanskaya & Lechardoy, 2020; Stolton, 2021a). When physical commerce winded down, platform corporations spiked in valuation.[87] The shift to online increased the dependency of the economy on platform corporations, raising concerned voices about further concentration of 'power, wealth and social influence' (Kenney & Zysman, 2020, p. 751) In the aftermath of COVID-19, the regulatory focus of the European Commission became clearer. The initiative for new rules for platforms was split into two distinct proposals (M. Scott & Kayali, 2020).[88] The content-related issues became the focal point of the Digital Services Act ("DSA"), whereas antitrust concerns regarding the platform economy were relegated to a distinct package called Digital Markets Act ("DMA"). According to POLITICO sources, the Digital Markets Act quickly became a key point of interest among platform corporations. The content moderation plans did not go as far as originally planned, whereas the digital antitrust rules were considered a potential existential threat (M. Scott & Kayali, 2020).

The shift from DSA to DMA changed the dynamics of the policy process. First, according to sources of Politico, the lobbying shifted exclusively to business actors. Civil society organizations well versed in privacy-rights issues did not have much to contribute to the technical digital antitrust debates. Lobbying also became more secretive, with COVID-19 barring public briefings on the issues (Corporate Europe Observatory, 2020). Second, the focus on DMA fractured the unified front of the corporations. Whereas in the fields of content moderation and privacy-rights issues where corporations had often aligned their interests, DMA's focus on a small group of gatekeeper platforms pitted the interests of large corporations, such as major newspapers and game studios against platform corporations. The limitations on regulatory efforts by

[87] See fig 2.1. Also, the financing sources for potential platform competitors were curtailed. Ylönen & Saari 2020, supra 8.
[88] As one example of targeted advertising, after reading this article the POLITICO site was completely filled with Facebook advertisements, emphasizing their important role in helping European governments during the pandemic.

the largest corporations made it challenging for the platform gatekeepers to forge alliances with smaller players.[89]

Evidence from consultation responses

Some tentative evidence can be inferred from the feedback received regarding the upcoming legislation. The European Commission launched a combined consultation for DSA and DMA that started on the 3rd of June 2020 and ended on the 8th of September 2020 (European Commission, 2020f).[90] The objective was to gather input on the types of structural competition issues that might result from the platform economy. In total, 2863 contributions to the Digital Services Act (European Commission, 2020j, p. 17) and 188 for another concerning competition and economic issues were received (European Commission, 2020j, pp. 20–21). While there was some overlap in these consultations, in what follows I focus on the latter for it provides richer evidence specifically on the economic aspects of platform economy. I conducted the analysis in programming language R (Ihaka & Gentleman, 1996), using the *tidyverse* package (Wickham et al., 2019).

The mining of responses is a strictly analytical, exploratory and descriptive exercise. The dataset is noisy, with strong selection bias and no control over sampling and only limited variance. While this would violate most assumptions of traditional enumerative statistical inference,[91] this makes it an ideal prototype for the data-driven mining of hypotheses as an epistemic strategy. From this perspective, the objective of data analysis is not to find evidence for pre-defined theoretical hypotheses but to discover theoretically meaningful questions and hypotheses for further analysis through abductive, inductive and deductive methods (Hubbard et al., 2019; Kitchin, 2014;

[89] The best-known example is Google, who struck out with its efforts to woo the Dutch Bookings.com who went public proclaiming that their interests were "diametrically opposed" to Google's. (Espinoza, 2020)

[90] Actually, it launched two consultations: one focused on the content regulation of corporations and the other more focused on market issues, under the rubric of New Competition Tool.

[91] For instance, there is no clear population on which to generalize the observations. For more general treatment of the limitations of statistical inference and scientific inference , see (Hubbard et al., 2019, pp. 93–94)

Kozyrkov, 2018b). This sets limitations on the kinds of claims one can make on the basis of data. The findings from exploratory data analysis cannot be credibly generalized outside the dataset even when retaining part of the dataset as a test for hypotheses. All the conclusions are hence tentative. This is in line with the realist approach to social science and it has been proposed as a new paradigm of scientific inquiry in the age of abundance of data and computing capacity (Kitchin, 2014, p. 6).

The consultation was open-ended in terms of sectors concerned, with the possibility of broadening the focus beyond merely platform economy.[92] It received 188 contributions from various stakeholders from companies, law firms, industry associations, consumer organizations, public authorities and academic and research institutions. [93] The vast majority of respondents represented business: 65 % declared either being companies themselves or trade associations representing companies. (Fig 3.1). This is in line with the POLITICO-reports, arguing that the shift from privacy and content-related issues to structural market questions has sidelined civil society advocates who have little to contribute to digital antirust debates.

[92] Commission's own, more general description of the responses, see: https://ec.europa.eu/competition/consultations/2020_new_comp_tool/summary_stakeholder_consultation.pdf

[93] There were 4 respondents from Finland: Confederation of Finnish Industries (EK), Federation of Finnish Enterprises (SY), Ministry of Economic Affairs and Employment (TEM) and Technology Industries of Finland.

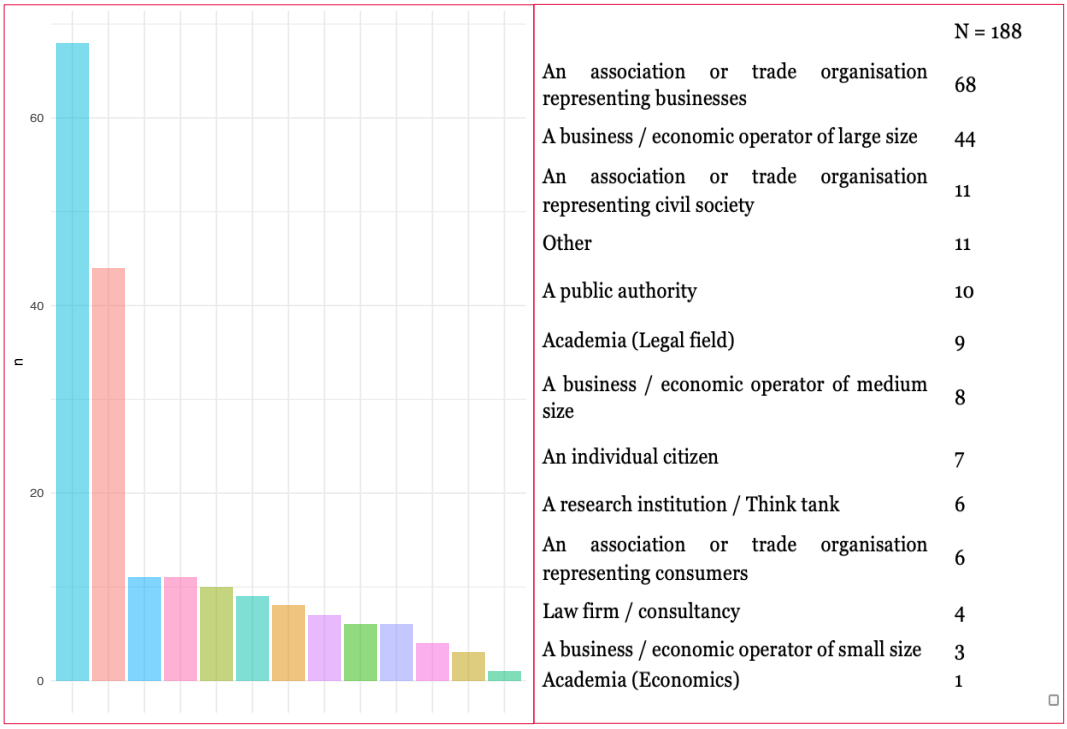

Fig 3.1 The distribution of respondents per type.

There is a clear emphasis on the types of issues that concern the respondents. In sections 6 and 7 of the consultation, the Commission asked 24 questions on potential sources of structural competition problems, with options ranging from "No importance" to "Very important". [94] The complete list of questions can be found in the Annex 1. As can be seen in Fig 3.2, all respondent-groups highlighted similar questions, while differing in intensity. The most important questions (H – M) concern systemic features of platform economy, such as direct and indirect network effects (K – L), hegemony over data (I) and the extreme economies of scale (J). Conversely, the least important questions (C –E) concern high start-up costs (C), high operating costs (D) and regulatory barriers (E).

[94] In this analysis, I excluded the NA's and the option "No knowledge / No experience", leading to a four-point scale (1 = No importance/No relevance, 2 = Somewhat important, 3 = Important, 4 = Very important).

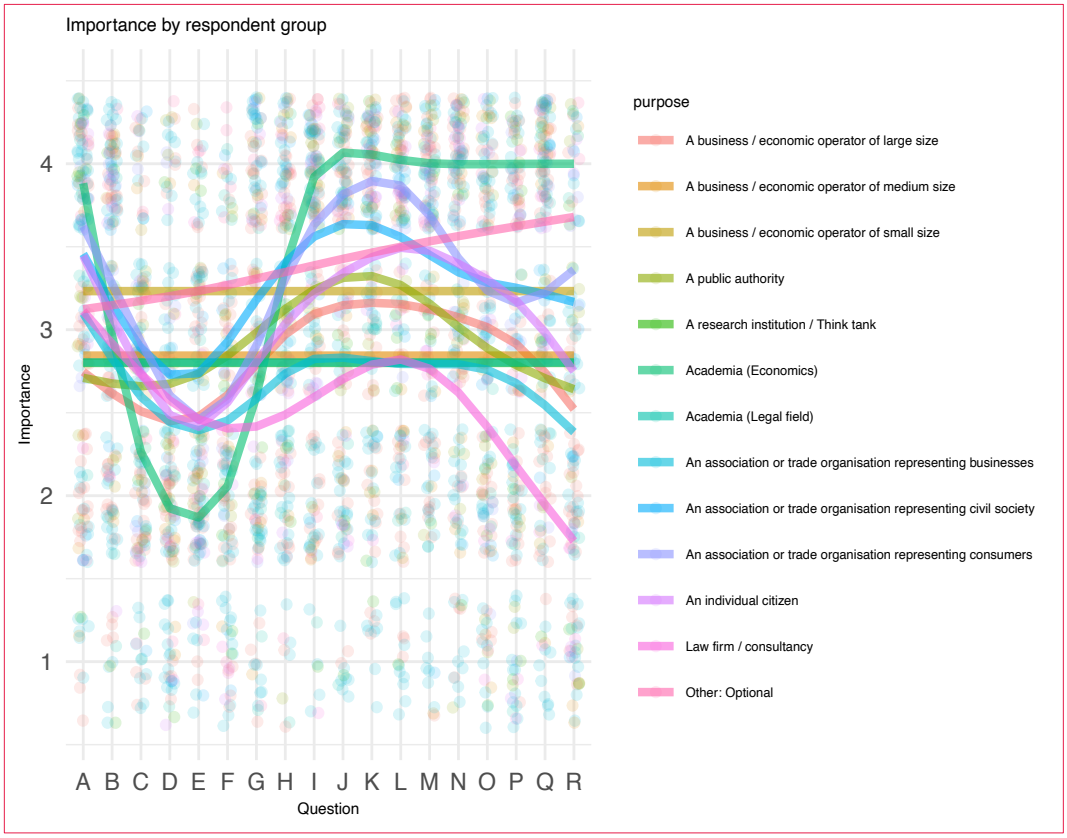

Fig 3.2 Importance of competition problems by respondent group.

There is also evidence of the fracturing of corporate interests. Plotting corporate respondents per country in Fig.3.3 reveals interesting variations. While, less surprisingly, companies headquartered in Ireland (Apple)[95] and the United States did not on average consider the structural competition problems to be very important, corporations from European countries saw the potential structural competition issues to be substantially more severe. Among the critical respondents were some of the largest European corporations. For instance, the French telecom giant Orange and its German counterpart Deutsche Telekom both saw the peculiar dynamics of platform economy as very important sources of competition problems (Fig 3.4). A closer look at the U.S. corporations reveals interesting variations (Fig 3.5). While Google and Qualcomm gave lukewarm responses to the questions and Microsoft, Amazon and Facebook abstained from answering altogether, Oracle was markedly more critical. Researching this interesting anomaly more closely reveals that

95 The Irish state was also one of the 10 public authorities to file a response, arguing against the regulation of platforms. (Government of Ireland, 2020)

Oracle lobbied authorities around the world to reign in Google, with naysayers citing self-interested motives. (Nix, 2020; Oracle, 2020).

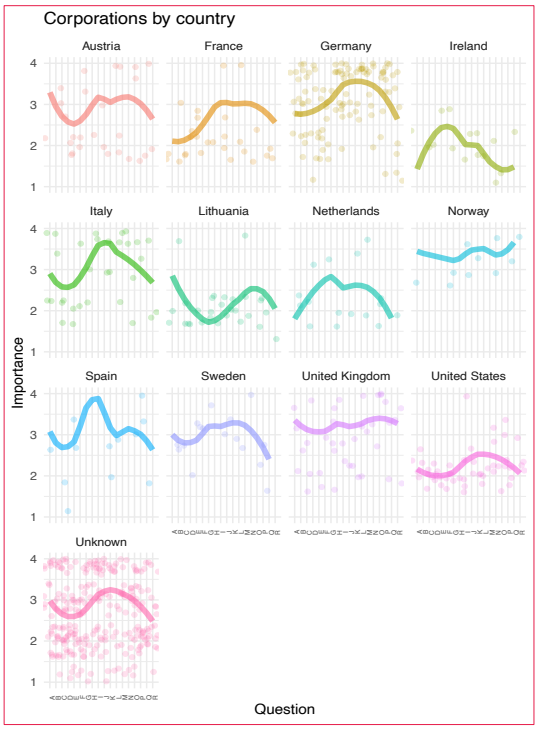

Fig 3.3

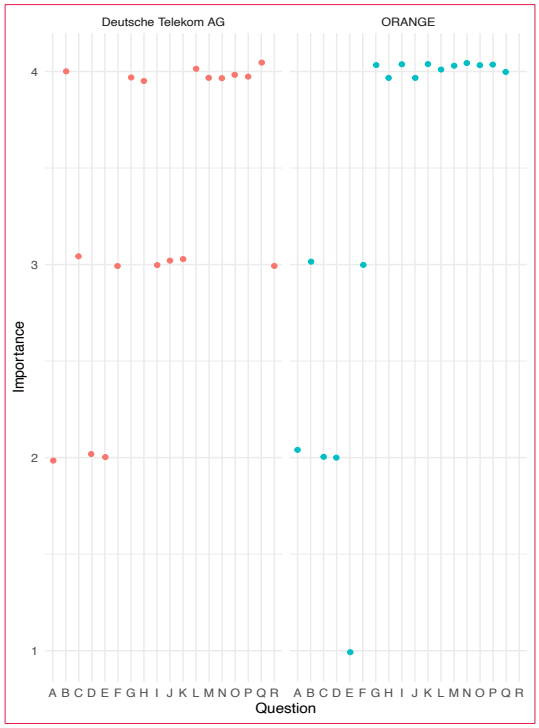

Fig 3.4

Lastly, there is also evidence of the sensitivity of the subject: 24 per cent of the respondents chose to remain anonymous (20 / 45). Especially for those dependent on platforms, the veil of anonymity seemed to be important: 44 % of those who reported to be largely or fully dependent on platforms chose to remain anonymous (20 /45) compared to 23 % of the rest (33 / 138). The dependent parties also seemed to be more worried about the competition issues brought by platform economy (Fig 3.6). Blue lines in Fig 3.6 refer to respondents who responded to be fully or largely dependent on the platforms, with the olive line referring to those who responded not being dependent on platforms.

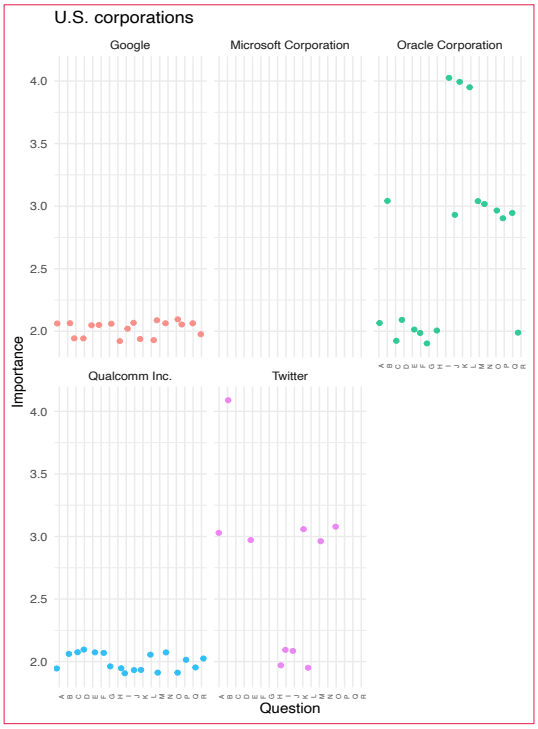

Fig 3.5

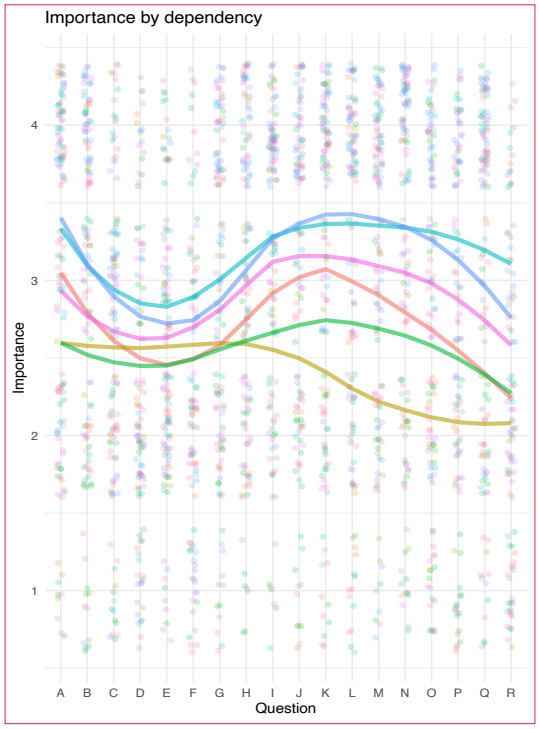

Fig 3.6

The evidence above suggests at four tentative observations. First, corporations and trade associations are active contributors to debates on the platform economy. Second, the most important concerns are related to the monopolization dynamics of the platform economy. Third, there is evidence of opposing interests between corporations. Fourth, the question of platforms is sensitive, with a substantial part of the respondents choosing to remain anonymous, especially if they reported being dependent on platform corporations. It is interesting to reflect on the absences in this consultation. For instance, why Amazon, arguably the largest global platform, abstained from commenting on a policy tool that might be detrimental to their business interests?[96] This could be explained either by the perception that the packages are not salient to corporations or there are other ways to influence policy.[97]

[96] Amazon did provide a comment on the DSA consultation, available in

[97] The five trade associations least worried about the platform power include the American Chamber of Commerce to the EU (AmCham), Developer's Alliance, Computer and Communications Industry (CCIA), and EuroCommerce, all of which are organizations representing either one or all of the platform giants. AmCham EU is one of the most active lobbyists in the area of DMA / DSA. (Corporate Europe Observatory, 2020)

The absence of Chinese corporations is also curious. Alibaba, Tencent and others did not provide input to the consultation. [98]

The last mile

Tensions around the debate were heightened in the autumn of 2020. Especially Breton was vocal during this period. In early September, he used the term "geopolitical war", to describe the technological contestation between EU and China. (Breton 2020a). In his speech delivered on the 28th of September in the European Parliament's Committee on Internal Market and Consumer Protection, he emphasized the determinacy of the Commission to tackle the platforms who have become 'too big to care'[99], comparing them to the systemically important banks in the aftermath of the Global financial crisis of 2008 (Breton, 2020b).

The corporations also ramped up their lobbying efforts throughout the autumn. A leaked lobbying draft from Google, made public by the Financial Times, detailed a 60-day lobbying plan, including commissioning favourable reports, mobilizing U.S officials from Embassies and the Office of the Trade Representative, creating discord between Commission departments and creating pushback against Commissioner Breton, considered to be a threat to Google and other platform companies (Satariano & Stevis-Gridneff, 2020). [100] The episode forced the CEO of Google, Sundar Pichai, to personally apologize to Breton (Espinoza, 2020). On the same day as the leak of the lobbying plan, the European Centre for International Political Economy (Narayanan & Lee-Makiyama, 2020) released a Google-funded study that claimed that the proposed regulation would cost 85 billion euros per year and lead to a loss of

[98] Chinese companies have been more active in the infrastructure field. On the Huawei bans across Europe and unexpected alliances, see. (Treloar & Daly, 2021)
[99] "Sur ce dernier point, je souhaite être clair : nous sommes déterminés. De la même manière que la crise financière de 2008 avait mis en exergue le rôle et le caractère systémique de quelques grandes banques, cette crise a révélé le rôle et le caractère systémique de certaines plateformes qui se comportent souvent comme si elles étaient trop grande pour se soucier des préoccupations légitimes sur leur rôle : « too big to care »." (Breton, 2020b)
[100] In an interesting change of pace, Vestaeger was even highlighted as a potential ally in Google's lobbying efforts against the more hardcore line of Breton. (Scott & Kayali 2020).

2 million jobs. This estimate elicited criticism in the media, with the former EU Chief Economist calling these estimates "ridiculous" (Valletti, 2020).

In November, Amazon joined the jolly group of platform corporations with ongoing antitrust investigations in the European Union. (European Commission, 2020h). At the heart of the Commission's communication was the dual role of the corporation as both the platform as well as the player on the market. The Commission highlighted how Amazon used platform data to develop competing products in the market, making it possible to reap the benefits of successful R&D without bearing the risks. However, in an example illustrative of the European approach to antitrust, Vestager was quick to note that despite the probe, "[Commission] do[es] not take issue with the success of Amazon or its size", focusing instead on "very specific business conduct" (quoted in White & Bodoni, 2020).

The heat increased on the other side of the Atlantic as well. On the 6th of October, the U.S. Senate Subcommittee on Antitrust submitted their report on the monopolistic practices of major platforms, called the Cicilline Report (U.S Senate, 2020). [101] This report emphasized many of the neo-Brandeisian sensibilities. It is noteworthy that one of the main counsels for the report was Lina Khan, the young lawyer who wrote the trailblazing article on the monopolistic nature of Amazon. Two months later, a new antitrust probe was released against Facebook, when the Federal Trade Commission sued Google for anti-competitive behaviour, urging for the break-up of Google (Federal Trade Commission, 2020).

From the beginning of von der Leyen's tenure, the Commission upped the ante on the regulation of platforms. The COVID-19 situation highlighted the systemic importance of the platform economy.(Moreira, 2020) By summer 2020, the regulation of platforms was separated into two regulatory tracks; one concerning duties and responsibilities considering the content hosted and transmitted online and the other focused on economic concerns and

[101] For an example of the criticism this report received from the tech industry, see (Atkinson, 2020).

imbalances. This separation changed the political dynamics surrounding the matter. The focus on the systemic role of several mega-platforms fractured the ranks of corporations, with the interests of many dependent businesses being posited against the interests of platform corporations.

3.4 Not on this side of the ocean! The Digital Markets Act

The proposals for the Digital Markets Act and the Digital Services Act were released on the 15th of December 2020, two weeks after the initial release date. (European Commission, 2020m). As expected, the proposal for the Digital Services Act was limited mainly to content issues, whereas the Digital Markets Act focused on the economic power of platform corporations. (European Commission 2020e, p.3). In this section, I exclude the DSA and focus exclusively on the DMA and map the prohibited practices from the framework introduced in Chapter 2. This helps to illuminate the types of corporate power the Commission seeks to address.

The Act makes several key contributions. First, one of the thorny issues of platform regulation has been defining the scope of regulation so that it would apply only to the actors most threatening to market competition. In the DMA, this issue was resolved through defining platforms according to both quantitative and qualitative criteria. To qualify as gatekeepers, companies will have to be big, important and durable.[102] (European Commission, 2020m, p. 2). These thresholds were defined as (i) a turnover equal to or above €6.5bn or a market capitalization of at least €65bn, the presence in at least three of the 27 Member States of the European Union, a reach of more than 45 million monthly active end users (which represent 10 percent of the EU population) as well as more than 10,000 active business users on an annualized basis.[103] The proposal leaves some room for interpretation at the discretion of

[102] In more formal terms they need (i) to have a significant impact on the internal market, (ii) operate one or more important gateways to customers and (iii) enjoy or are expected to enjoy an entrenched and durable position in their operations. (European Commission, 2020m, p. 36) For other definitions of gatekeepers, see (Rahman, 2018a, pp. 236–240)
[103] Market share has been discounted as a yardstick because it is a competition concept whereas the DMA will be based on EU internal market rules. (Chee, 2020)

regulators. If a platform does not meet these quantitative thresholds, the European Commission can start a market investigation into it as a gatekeeper based on additional considerations, such as user lock-in or network effects. This "dynamic futureproofing" would give the regulators possibility to re-evaluate borderline-cases and maintain relevance in a changing environment.

In terms of sectors, the proposal covers a lot of turf, proposing a closed list of eight sectors: (i) online intermediation services (ii) online search engines (iii) social networking (iv) video sharing platform services (v) number-independent interpersonal electronic communication services (vi) operating systems (vii) cloud services and (viii) advertising services. (European Commission, 2020m, pp. 34–35). The breadth of this list signals at the Commission's view on the pervasiveness of the network effects and data driven monopolisation dynamics in a wide variety of fields, from Amazon Web Services to Whatsapp and Uber (European Commission, 2020l, p. 13).

The proposal also proposes giving the regulators a bigger stick,[104] increasing the fine range to 10 % of the global turnover (European Commission, 2020m, p. 50). This chips teeth even of the largest players. For instance, a single violation would end up costing Google approximately 13,5 billion euros based on its 2019 turnover The proposal also enables rolling penalties that rack up in the absence of action, expanding the theoretical fine-range substantially (European Commission, 2020m, p. 51). In the press conference for the proposal, Breton also brandished the possibility of breaking up corporations as a last option. The proposal also contains several additional requirements, such as the need to have a representative in the Union and the need to inform regulators of possible mergers.

The core of the proposal is chapter III, with a list of 17 prohibited practices (European Commission, 2020m, pp. 40–41). These practices are mapped in the analytical framework in figure 3.7 A full list of the paragraphs of these

[104] The need to "speak softly and carry a big stick" was one of the guiding policy ideas of U.S. president Theodore Roosevelt (1858-1919), who was known for dismantling monopolies in the United States in the early 20th century.

practices can be found in Annex. Below, I limit the analysis to mapping the relevant practices to the framework introduced in chapter 2.

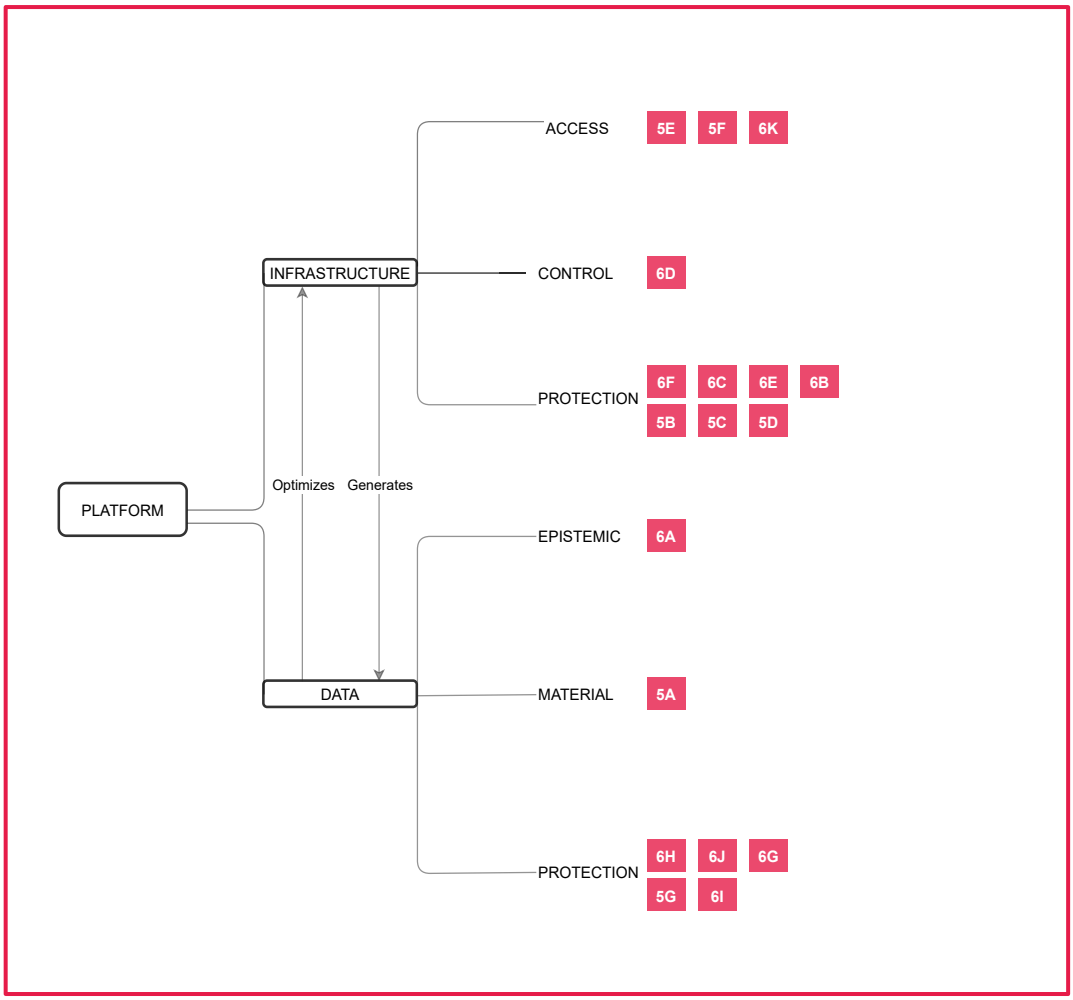

Fig 3.7 Prohibited practices in the Digital Markets Act.

The proposal addresses all three infrastructural capabilities. First, the capabilities derived from the gatekeeping role to the platform concern conditionalities of access. The business user must not be forced to use the identification service of the platform [105] nor to subscribe to any other services by the platform as a condition for access. [106] Second, the capabilities derived from the control of the infrastructure are addressed with the prohibition to prioritize platform owners' products inside the platform. [107] Third, the

[105] §5E
[106] §5F
[107] §6D

capabilities aiming at protection of the platform are addressed in detail, with the proposal listing seven prohibited legal and technical practices. The proposal obliges the platform owner to allow businesses also to sell products outside of the platform[108] and details prohibitions of technical obstacles to shifting to other platforms.[109].

The proposal is not as extensive in terms of data-related capabilities. First, the epistemic capabilities of platforms are addressed with the explicit prohibition to use the data from the platform to compete with business users.[110] Second, in terms of material capabilities, the proposal prohibits the combining of data sourced from different services provided by the platform, [111] directly attacking the centralization dynamics of platforms.[112] As in the case of infrastructure, the bulk of the prohibited practices concern the protection of data. The proposal obliges platforms to give business users direct access to their data [113]and prohibits constraints on moving data outside the platform.[114] It is worthy to note that 3 of the 7 practices are specifically linked to advertising, addressing the opacity of the online advertising business. (see Hwang, 2020)

First, the proposal focuses mainly on the practices that protect already existing monopolies. 12 out of 17 practices are concerned with practices that seek to deliberately lock in users and obstruct changing to competing platforms. Less attention is paid to organic dynamics such as network-effects and data dynamics that solidify a dominant position in the first place, nor to the fees charged for the access. While the proposal wants to maintain the opportunity to shift from Google to an alternative platform, it pays less attention to the dynamics that make users choose Google in the first place. Further, the

[108] §5B
[109] §6E
[110] §5E This obligation changed from the leaked draft from early Autumn, which obligated the platforms to share said data. (European Commission, 2020g)
[111] §5A
[112] This seems to have been inspired by a German antitrust court decision, that explicitly saw the centralization of data itself as a barrier for competition. The German antitrust authority prohibited the combination of data from several sources (Bundeskartellamt, 2019). Whereas the German antitrust authority argued that it is too big of a tradeoff, the regional court of Dusseldorf argued that it is sufficient for consent. (Schlimpert, 2019)**.** This was overturned in the high court in 2020. (Geradin, 2020a).(Bundeskartellamt, 2020)
[113] §6H
[114] §6I

proposal does not extend to more general centralization dynamics that are not exclusive to platform economy. For instance, the centralization of the economy through mergers and acquisitions is only treated through the toothless requirement to "inform the Commission of any intended concentration" (European Commission, 2020g, p. 44). Nothing tangible flows from this requirement.[115]

Second, the proposal prioritizes legal certainty over regulatory discretion. The conservative stance can be seen in the genealogy of the proposal – Cristina Caffarra and Fiona Scott Morton trace the majority of practices as having clear precedents in antitrust cases against the likes of Google, Amazon and Apple (Caffarra & Scott Morton, 2021). These practices have the virtue of having already been tested in the courts of the Union, providing them with clear reference points. As Alexandre de Streel writes, the aim to clearly favour defined rules with legal precedents to protect the competitive process is in line with the ordoliberal tradition that has been institutionalized as a key economic regulatory paradigm in the EU (de Streel, 2021; Miettinen, 2017, p. 307). This is opposed to the principle-based approach advocated by van Dijck, more permissive to active state intervention and political discretion.

Third, the proposal is quite ambiguous on the practices distinctive to the platform economy. The prohibition of combining user data from several sources, if interpreted broadly, could signal the end of the business models of many platforms relying on sourcing data from several sources. The practical implementation of this prohibition is vague. Similar questions concern the prohibition of epistemic capabilities, using the non-public data from the platform to develop its own products in competition with platform users. What would count as "competition" with platform users? How could the regulator prove the use of such non-public data? The success of the seller on the platform could likely be inferred from public data? Lastly, the proposal does not address

[115] See (Caffarra & Scott Morton, 2021). However, de Streel argues that even imposing a requirement to collect such information could be seen as a coercive regulatory device. (de Streel, 2021)

the more principled questions of the legitimacy of the functional sovereignty inside the platform.

These observations provide the answer to the second research question. The Digital Markets Act approaches the corporate power of platforms through the paradigm inherited from antitrust cases, prioritizing clear delineation of harmful practices over leaving discretion to regulators. The majority of banned practices concern practices that seek to protect existing monopolies. Dynamics that lead to monopolies in the first place or are not particular to platform economy, such as concentration through mergers or extraction of rents from other market participants through unfair commissions, receive markedly less attention. Lastly, the capabilities stemming from data are addressed promisingly, yet vaguely formulated.

This chapter started by introducing the position of José van Dijck, who argued that the narrow legal paradigm of platform regulation, of which the European Commission is an example, lacked the analysis of ubiquitous platformization, the coordination between platform corporations and the political-economic dimensions of globally interconnected platform ecosystems (van Dijck 2020, 11-13). This research elaborates on these claims. First, it is important to qualify that the Commission paradigm fails to address the *organic* dynamics driving platformization, focusing extensively on the deliberate practices that try to solidify monopolies. As I argue in the last chapter, this is an important distinction. Second, the hypothesis about coordination between platform corporations should be balanced with the acknowledgement of intense contestation between platform corporations and business users. This contestation has been one of the driving forces of European platform regulation. Third, the importance of the geopolitical setting is obvious in the rhetoric of Commission officials, but incorporating these notions in the proposal would be both diplomatically difficult and institutionally challenging. I return to these issues in in the last chapter.

3.5 The shape of things to come

Researching the present is challenging when events are still finding their shape. The proposal now proceeds to the political debates of the European Parliament and European Council. As one close observer noted, what likely follows is a lobbying war that could rage on for several years. (Umberto Gambini, 2020). Some commentators have highlighted some likely pressure points in the legislation, such as the battle over the precise definition of platforms[116] and the meagre resources allocated towards enforcement.[117] In addition to these substantive concerns, several ongoing processes shape the direction of the legislation.

First, the tech-lash in Europe does not display signs of fading. In early January, rumours circulated in Brussels of two new antitrust cases against Google, the first related to the processing of data and the second related to ad technology. (Larger & Kayali, 2021). After Trump supporters stormed Capitol Hill on the 6th of January, Breton wrote an op-ed comparing the storming of the Capitol to 9/11 and requiring "a paradigm change concerning the role of digital platforms in modern democracies." (Breton, 2021). In more reserved terms, a key official responsible for the DMA / DSA package was cited as calling the discretion of platforms in key social decisions as "unacceptable" (Stolton, 2021b), questioning the functional sovereignty of the platforms in more general terms.

Second, recent political developments in the Union complicate the picture. Several large member states, including France and Germany, have not waited for EU-wide legislation and have started to develop their own country-specific rules. (Meyer, 2021). (van Dorpe, 2021). This has led to unexpected

[116] As Caffarra and Scott Morton write, currently the platform-definition encompasses a broad scope of different business models that are not easily regulated with the same set of rules. (Caffarra & Scott Morton, 2021). The quantitative limits also lead to counterintuitive outcomes: Twitter, Airbnb, Bing, Linkedin, Xbox Netflix, Zoom, and Expedia do not appear to meet the thresholds at present, and Booking.com, Spotify, Uber, Bytedance/TikTok, Salesforce, Google Cloud, and IBM Cloud appear to meet some but not other criteria.

[117] (Geradin, 2021) As a solution, some commentators have called for more close and less adversarial cooperation between platform corporations and regulators (de Streel, 2021). For more general assessment of related enforcement problems, see (Nogarede, 2021, pp. 28–29)

bedfellows. Vestager has urged platform corporations to co-operate with the Commission on DMA to evade a patchwork of laws in different member states. (Espinoza, 2021). While some analysts close to Big Tech have argued that this will push regulation towards a stricter dimension, "irrespective of other national viewpoints" (Carugati, 2021), this might also be considered as a lesser evil than a thicket of country-specific regulations.[118]

Third, If the hypothesis about European platform governance being able to develop due to the deteriorating relations between the U.S. and Europe is true, the development of the Biden presidency will be a process to observe. While president von der Leyen has expressed optimism regarding cooperation (Amaro, 2021), there are also indications to the contrary. [119] The American Chamber of Commerce to the EU already accused the Commission of 'punishing successful companies, that have made deep investments to the European recovery. (U.S. Chamber of Commerce, 2020). Influential think tanks and magazines have also started to write stingy commentaries on the proposal, with one recent column in Forbes blaming the proposal for the populist wave in Europe (Ginsburg, 2021).

These developments are still highly uncertain. At the moment of writing, this uncertainty has not reflected in the stock market. Despite 11 ongoing antitrust suits against platform corporations, there is still no effect on the valuations of these companies as of early January, 2021 (Fischer & Gold, 2021). What is certain is that the process will take years. In the press conference about the proposal, Vestager said that the best guess was two years. Several analysts have proposed timeframes ranging from 3 to 4 years. The regulation landscape will likely to be different when the legislation is finalized, and only the future will tell how this will play out.

[118] On the other hand, member states benefit from jobs brought by the platform corporations.
[119] For instance, the vice president Kamala Harris is known for her close ties to Silicon Valley giants. See (Wakabayashi et al., 2020). During the finalization of this thesis it was reported that Biden had nominated three prominent neo-Brandeisians, Lina Khan, K.Sabeel Rahman and Tim Wu to key positions in the new administration (Demos, 2021; Feiner, 2021; Lerman, 2021).

Unmooring from these evolving processes, I now resurface with the broader lessons. In the last part of this thesis, I argue that the institutional and ideational context in which the European Commission platform regulation happens invokes a particular way of seeing the problem that constrains the contrast-spaces available. This then invites particular professions and knowledges that come to be consulted in the regulatory process. This conditions the way the European Commission addresses platform economy. The interrogation of alternative contrast-spaces reveals the different vectors of analysis and broadens the horizon on political questions of the platform economy.

4. Discussion: Kites over Berlaymont

4.1 Seeing like the European Commission

For readers excited by the idea of platforms as a potentially transformative question of political economy, the Digital Markets Act might feel underwhelming. The problem is hurled at the jarring regulatory machinery of the Commission and filed under the dusty categories of competition policy and the efficacy of Single market. The 'political' dimension of the platform economy is often understood as being a freedom of speech and legibility issue, to be treated under the content moderation rules of the Digital Services Act. This is distant from the political economic echoes of the Commission Work Program of 2020 (European Commission, 2020d), let alone from concerns of scholars who see platform economy as a central epiphany in political economy or an existential threat to social arrangements.[120]

But why is this the case? How and why does the Commission transform a phenomenon so exciting into something so apathetic, so repulsively dull? The immediate answer would point to the mandate of the Act as being concerned only with the competitiveness of the Single Market, the suspicious meditations about broader implications being a subject of other legislation. This argument only kicks the explanatory bucket further, by opening up the question of what motivates the delimitation of the power of platforms to the sphere of the market. Unpacking the underlying ideas and contrasts helps to mine the underpinnings of this stance.

Important work in international political economy has focused on how the international organizations 'see' their policy environments shapes the way they act in those environments (Broome & Seabrooke, 2012; cf. J. C. Scott, 1998). When faced with a new policy issue, the analytical institutions of an international organization construct a primary 'cognitive framework' that

[120] For one example, consider the assertion by Martin Kenney and John Zysman in a recent article: "Indeed, the platform is to this digital era what the factory was to the industrial era, both a symbol and an organizing mechanism (Kenney & Zysman 2020, 227).

seeks to define the problem and provide policy solutions (Broome & Seabrooke, 2012, p. 3). This cognitive framework first delineates the boundaries of the problematic and influences the types of appropriate knowledge that is allowed inside the policy-process as a source for solutions (p.7-8).[121] This knowledge base is then reflected in the practices, policy drafts and consultations that precede the delivered policy suggestion. Through this process, the cognitive framing and ideas come to shape the actions of the international organization.[122]

Constructing a cognitive framework is not a free-floating process at the whim of particular officials but a process embedded in the historical constraints, priorities and purposes of the organization in question (ibid. p. 3-4). The way an institution approaches the question depends on its formal and informal rules, organizational structures, accumulated knowledge, historical experience and social norms (Bulmer, 2009; Parsons, 2007, p. 67; Pierson, 2004). This causes path dependency, a process where "the choice of institutions at one point has the unintended consequence of steering subsequent actions along a particular historical path." (Parsons, 2007, p. 68). These constraints are both positional, derived from tangible constraints such as legal and material issues, and ideational, stemming from intangible causal and principled beliefs (Béland & Cox, 2010; Haas, 1992, p. 18).

The totality of clashing institutional and ideational currents that impact the cognitive framework of an international organization is beyond any empirical research. One useful tool for mining more manageable parts of this totality is the idea of contrast space. The underlying intuition is that every question has an implicit alternative, a contrast against which it is evaluated (Garfinkel, 1982, pp. 143–147; Ylikoski, 2007).[123] For instance, the reason we see the

[121] In the Finnish context, one key case is (Ylönen et al., 2020), studying the role of causal ideas derived from economics as drivers of Finnish corporate taxation.
[122] Some authors are inclined to treat this as a form of power. (Carstensen & Schmidt, 2016) Following my analysis of power in chapter 2, I argue that instead of putting ideas at the center of power, a more useful way would be to approach the power of ideas through the resources of the actors transmitting these ideas, such as central position in some institutional network. For a critique that echoes similar concerns, see (Blyth, 2016, pp. 5–6)
[123] For a study investigating the possibilities of contrast explanation in economics, see (J. Morgan & Patomäki, 2017)

distinctiveness of platform economy precludes that we see it as a deviation from some other previous form of economic organization. The same principle applies to the regulation and critique of the platform economy. Most authors feel compelled to regulate the platform economy because it is seen as a threat to something. What this *something* is varies tremendously between different commentators. Illuminating and comparing these contrast spaces helps to create a more nuanced picture of the differences between perspectives on platform economy.

The clear primary contrast-space in the EC framing of platform economy is the competitive market process. This is stated in the preamble of DMA, in which the key issues of the platform economy are that "unfair practices and lack of contestability lead to inefficient outcomes in the digital sector in terms of higher prices, lower quality, as well as less choice and innovation to the detriment of European consumers." (European Commission, 2020m, p. 1, 2020k). The same framing problem can be found in supporting documents (European Commission, 2020l), the Commission work programme for 2020 (European Commission, 2020a), and the original Digital Single Market strategy from 2015 (European Commission, 2015, p. 11). While allusions to a more general need for "fairness" in digital markets are rife, this concept is often connected with the need to have a "level playing field" between market participants (European Commission, 2015, p. 2, 2020d, p. 4, 2020m, supra 2). This is the dominant contrast-space in the United States as well. The recent neo-Brandeisian initiatives also ultimately rely on a quite narrow contrast-space of competitive economy, only differing in means, advocating break-ups of large monopolies as the best way to restore competitive dynamism.

The framing of platform economy as a threat to competitive economy has conditioned the way the Commission seeks to make sense of the platform economy. First, the expert knowledge is based overwhelmingly on economic and legal knowledge. The supporting document for the Digital Markets Act lists the external expert sources that are used in addition to the Commission's own expertise (European Commission, 2020j, pp. 3–14). These studies are predominantly written by experts of competition law and economics, aiming

to provide evidence on the impacts of the economic effects on platforms and the adequacy of the current legislative framework to address these questions.

The Observatory for Platform Economy displays similar evidence. The Observatory has a group of experts tasked with advising the Commission on the issues of platform economy. As of the 18th of February 2021, 13 of the 15 experts are professors of economics or competition law.[124] Observatory's website lists 34 studies under the heading "Research". Quantitative text analysis of these documents shows the centrality of market power in the considerations of power.[125] First, I extracted from the corpus all mentions of power, with a moving window of 20 words before and after the keyword. The resulting text cloud showing the frequency of words is displayed in Fig. 4.1. The centrality of market in the documents requires little elaboration.

[124] The two others are Bernhard Rieder, Associate Professor of New Media and Culture at the University of Amsterdam and Vili Lehdonvirta, Professor of Economic Sociology at the University of Oxford.
[125] The analysis was done with *quanteda* package for R. (Benoit et al., 2018)

Fig 4.1 Word cloud around keyword “power” in OFPE research corpus 2013-2019

Second, in addition to expert knowledge, the responses to the open consultations also reinforced the problem definition of platform economy as primarily a competition issue. Despite their breadth, the overarching objective of both consultations was to deliver an “in-depth impact assessment of the different policy options and their perceived impact on the *Commission’s ability to improve effective competition in digital markets*”. (European Commission, 2020j, p. 15 emphasis added). The experiences structured through this framing were also channelled into the proposal. The impact assessment report accompanying the DMA refers to the responses from the consultations as a supporting argument for inclusion of certain practices in the list of proposals (e.g. European Commission, 2020l, pp. 9–14).

It is difficult to make strong causal claims from the contrastive framing to the formulation of the final proposal. It is plausible that the knowledge had little to no impact on the actual drafting of the proposal. The proposal might have been formulated independently, with expert and stakeholder input used to legitimize the already formulated positions after the fact (cf. Boswell, 2008). This possible, albeit unlikely, hypothesis is a subject of future empirical

research. For the purposes of this thesis, I abstract away from these particulars to make a theoretical argument on the conceptual importance of this putative contrast-framing.[126]

The intuition guiding this argument is simple: what if the platform economy is *not* a question of restoring competition in efficient markets? Suppose that the Digital Markets Act passes through the European Parliament without amendments and the proposal comes to force as is. What kind of issues would remain for the scholars of political economy? Is it truly the case that our passions ought to be limited to the admittedly fascinating wordings in turgid proposals trying to protect the market dynamism inside the Single Market? Highlighting other contrast-spaces helps to see openings for broader political-economic considerations.

4.2 Enter politics, exit economism

As noted in the introduction, one key difference dividing the contemporary analyses of the role of corporations is the site of their power. One strand of analysis sees corporate power mostly as something that predominantly impacts economic processes, whereas others contest, arguing that corporations as embedded actors also tend to shape societies more broadly. One useful tool for deeper analysis is the concept of economism. In one reading of this concept, Teivo Teivainen has defined economism as a conceptual distinction between economics and politics, in which the economic is seen to be beyond political considerations (Teivainen, 2016, p. 108). This separation is often premised on alleged differences in the underlying organizational principles. Whereas the political is seen to be concerned with collective decision-making structures relying on foundations of legitimacy, the economic realm is seen to be driven by a process of spontaneous and uncoordinated dynamics of the marketplace and hence, it ought not to be subjected to collective decision-making.

[126] Of the role of theoretical argument, see (Sorsa 2019). On the different examples of the theoretical argument given by Ville-Pekka Sorsa, I aim to contribute to the systematic inquiry on the differences between conceptual systems.

Recent work in political economy has questioned the sustainability of this distinction. Contrary to the idea of economic exchange as impersonal and uncoordinated market dynamics, much of the global economic activity is in fact marked by extensive planning and corporate discretion over the pricing of commodities and design of corporate wealth chains (Seabrooke & Wigan, 2017; Ylönen, forthcoming). This has been suggested to open up space to see corporations as truly political actors (Ylönen & Teivainen, 2018, p. 448). The dynamics of platform economy have delivered a fatal blow to this distinction. When corporations start to play the role of the market itself, it becomes quite difficult to maintain the premises of uncoordinated and spontaneous organization. This capability for purposive action, combined with the embeddedness in social systems warrants the analysis of platform economy beyond the narrow confines of market competition.

These notions seem to underline recent calls to create "more powerful, democratic frameworks" to regulate platform economy (Hill, 2021; Nogarede, 2021), as well as efforts to extend the legal concept of harm from beyond merely market power to broader societal consequences for these companies (Lynskey, 2019, pp. 193–195) and the calls to shift from rule-based to principle-based governance of the platform economy (van Dijck, 2020, pp. 14–16). However, there is little consensus on what would be the best alternative framework. Existing proposals vary from reformative proposals from trailblazing legal scholars (Cohen, 2016; Gerbrandy, 2018; Lynskey, 2019, p. 195) to calls to socialize the platforms (e.g. Morozov, 2019b). [127]

The multidimensionality of the debate makes it challenging to identify the key points of interest and facilitate constructive debate. While there have been laudable recent advances trying to systematize these debates (Viljoen, 2020), I argue that more systematic treatment of the contrast-spaces in the platform economy could help to facilitate dialogue across different positions and

[127] For one mapping of different reform proposals, see Pasquale (2018).

generate more constructive debate on the potential framings of the platform economy.

TYPE	THREAT TO	CONTRAST	STAKEHOLDERS	EXAMPLES
MARKET	Competitive process	Innovative and competitive economy	Other corporations, individuals as customers.	Majority of analysis
STRUCTURALIST	Existing social structures	Previous forms of economic organization	N/A	e.g., Kenney & Zysman 2020, Montalban et al. 2019
INSTITUTIONALIST	Legitimacy of political control	Hegemony of democratically legitimate systems of political decision-making	Political institutions, individuals as citizens.	e.g., Rahman & Thelen 2019; van Dijck 2020; Pasquale 2017
GEOPOLITICAL	Relative position of X in the global economy	Europe as a global leader in platform economy	Representatives of nation-states in global competition, national corporations.	e.g., Breton 2020; Miailhe 2019
SOCIAL	Social equity	Equitable distribution of wealth	Individuals as members of societal groups.	e.g., Morozov 2019; Srnicek 2017; Sadowski 2019
INDIVIDUALIST	Individual	Free and autonomous individuals	Individuals as autonomous and free agents.	e.g., Zuboff 2019

Fig 4.2 Matrix of contrast spaces of platform economy

The Fig 4.2 maps six of the typical contrast-spaces of the platform economy. The market contrast space refers to problematics that positions the platform dynamics as a threat to competitive market dynamics. This is the dominant paradigm of platform regulation in Europe and the United States, differing mainly in the best tools to restore the competitive market dynamics. Structuralist analysis observes the changes to social and economic structures brought by the platform economy. This contrast space does not have an explicit

normative objective, with the analysis focusing more on mapping the changes from a descriptive perspective. The institutionalist analysis sees the platform economy as a threat to existing political institutions. This analysis is concerned with the ways platform corporations challenge the hegemony of political decision-making.

The geopolitical contrast space approaches the platform from the perspective of state interests. In Europe this contrast motivates those who are concerned with the relative position of Europe vis-à-vis China or the United States. The social contrast space is concerned with the consequences of the platform economy to social equity. This contrast space is behind calls to address the unequitable distribution of wealth caused by the monopolization dynamics of platform economy. Lastly, the individualist position is concerned with the consequences on the level of the individual. The exemplary case is the scholarship of Zuboff, who sees the threat of platform economy mainly in terms of the freedom of the individual.

The analytical framework helps to see frictions between positions. One of the most vocal divisions is between the social and individualist positions. Several writers rooted in the social contrast space have accused Zuboff of an ahistorical and apolitical approach that neglects the broader social and economic processes in which platform economy takes place (Morozov, 2019a).[128] In the context of European Commission regulation, the most visible tension is between the geopolitical and market contrast spaces. While the historical institutional development of the European Commission regulation is based on the emphasis on market competition, the professed need to promote Europe's relative position in the global platform competition calls for more active and protectionist measures. These two incompatible objectives create contradictions at the heart of the European approach to platform regulation.[129]

[128] In an episode of his popular podcast series, Jathan Sadowski accused Zuboff of reactionary critique, designed to redirect the debate away from the important political economic questions concerning social equity. (This Machine Kills, 2020)
[129] One tangential example is the recent debates concerning the European data strategy, in which the original draft obliged the data intermediaries to stay in Europe. (Stolton, 2020)

As all tools, this analytical framework has limitations. Most authors overlap in different categories. For instance, the literature focused on the rent-seeking of the platforms often positions itself as analysing the market frictions caused by monopolistic platforms (Christophers, 2020; Rikap, 2020) but some also extend this critique also to normative questions about the social equity and the just distribution of wealth in society (Durand & Milberg, 2020; Mazzucato, 2018). The categories also vary highly internally. For instance, the socialist critique contains arguments for both Keynesian welfare-state preserving policies and full-blown socialist internationals. Further distinctions must be made in future research. This scheme still suggests the potential usefulness of contrast-space driven analysis in illuminating the nuances in the debates of platform economy.

Connecting the idea of contrast spaces to the debates about corporate power clarifies some the different possible avenues of academic research on corporate power. The question becomes, what is the role of corporate agency in these possible scenarios? In other words, through the possession of what kind of social and material resources do platform corporations acquire the capability to make a difference in shaping social arrangements beyond the confines of the market? For instance, those focused on the geopolitical contrast-space point their attention to the relationship between state authorities and their national corporations in the global economy (e.g. Babic, 2020). Those with the institutionalist contrast-space in mind might pay attention to the processes through which corporations seek to insulate themselves from political supervision and to influence political institutions. Structuralist analysis in turn adopts a “Polanyian optic” (Kenney et al., 2020, p. 239), focusing on the broader, systemic and unintentional consequences of platform economy.

The last point supports the validity of the conceptual distinction made in chapter 2 between power and governance. Everything corporations do is not an exercise of power, traced to intentions and practices of some particular actors. Phenomena such as the compositional paradox of platform financing,

where only one platform can achieve the monopoly position underlying the valuation of several companies (cf. Kenney & Zysman, 2019, pp. 47–48) and the recent retirement of the bassist of the largest rock band in Finland, citing reasons such as the 'streaming company big guns demanding 9/5 work from artists of inspiration' (Nightwish, 2021) are not exercises of corporate power per se. This also poses problems for current regulatory paradigms contrasted with competitive processes. Because these are results of voluntary market processes, there is little to judge here. Criticism of these phenomena would require changing the contrast space to one based on broader considerations of values and objectives of regulating the economy.[130]

4.3 Reflections on the surface

A dose of pragmatism is in place. First, the alternative contrast spaces in the European Commission approach to platform regulation are not blue horizons ready to be discovered, but silent voices buried beneath the petrified surface of other valid goals, such as legal certainty and protection of innovation.[131] Second, the currently dominant market contrast space is not only a question of fleeting ideas, but this contrast-space has been etched into the institutional structures of the Commission. One could argue that the market-centric approach is the only politically possible approach available for EC with its ambiguous legitimacy and over-lapping competencies with member state authorities. Third, departing from the existing path dependencies is a step into the unknown, and there are no guarantees that the proposals relying on more abstract value-centric principles would be enforceable or institutionally complementary. This poses risks for the regulators.

There are also external constraints for decision-making. Regulation does have real impact on economic activity. The threat of regulation costing 85 billion euros per year is an inhibiting factor for any MEP concerned with employment

[130] Of recent advances in these questions, see (Johar & Begovic, 2020; Mazzucato, 2018; Mulgan, 2020; Teivainen & Huotari, 2020)
[131] For instance, the Hayekian thesis about the superior information processing capability of distributed markets is a strong argument for abstaining from trying to impose top-down structures in economic governance.

and economic growth in the Union. The diplomatic consequences could also materialize, as testified by the recent trade disputes between the United States and the European Union (European Parliament, 2018). These constraints have been strategically highlighted by platform corporations wishing to evade regulation. One core task for future research studying the path of platform regulation could be to investigate the distinction between real causal processes and spurious causal beliefs put forward for pecuniary purposes. (Béland & Cox, 2010; Blyth, 2011, 2013).

The strength of the thesis of the ideational and institutional factors sustaining the market contrast space is open to falsification in further research. If evidence emerges that alternative economic policy paradigms have been employed in other contexts, the strength of the institutions and ideas conditioning platform regulation is in question. Likewise, if the Commission policy officials working in the relevant directorates (e.g. Unit F.2) change and the policies change drastically, the institutional path-dependencies are likely not a key determinant in the choice of contrast space. One key opportunity for empirical testing is when the European Parliament starts to work on the proposal. How much room will there be to propose alternatives? For instance, how will the geopolitical contrast space be complemented by the market interpretation?[132]

The more holistic approach to platform regulation that would prioritize "*common good* by empowering citizens and civil society organizations to help governments design an open and diverse ecosystem" (van Dijck 2020, 14) is argued to face ideational and institutional constraints. The current contrast space of platform regulation centered on competitive markets frames the platform economy as a mostly economistic question. However, highlighting

[132] As an example of the efforts to combine these two, consider the letter to Ursula von der Leyen, sent by the prime ministers of Finland, Germany, Estonia and Denmark on the 1st of March 2021. The letter proclaims the need to make Europe "digitally sovereign". However, the letter defines the digital sovereignty as follows: "Digital sovereignty is about building on our strengths and reducing our strategic weaknesses, not about excluding others or taking a protectionist approach. (…). We are committed to open markets and to a free, fair and rules-based trade. This is what digital sovereignty means to us." (Kaja Kallas, 2021). How this optimistic approach will be complemented with the structural monopolization dynamics inherent in the platform economy is still up for debate.

the alternative contrast-spaces helps to open space for alternative political imaginaries that would be more sensitive to the role of corporations as actors in the political economy.

5. Conclusion: Returning to the One

I set out to answer three questions. The first of them was conceptual: Is there something qualitatively new about the corporate power of platforms? I answered this question in the positive, proposing a novel capability-centric approach to corporate power to highlight where platform power differs from previous forms of corporate power. The results were summarized in Fig 2.3.

The second one was empirical: How does the European Commission's proposal for the Digital Markets Act approach the power of platform corporations? I used the framework developed in chapter 2 to show that the approach of the proposal is conditioned by the history of antitrust cases against platform corporations, prioritizing legal certainty over regulatory discretion. The majority of banned corporate practices are concerned with the protection of infrastructure and data-assets, the proposal having less issue with the dynamics behind the monopolization itself. The novel capabilities related to data are nominally addressed, but the exact contents of these are still vague. The chapter ended by mapping the practices of DMA in the figure 3.7.

The third one was theoretical: What does the approach of the DMA suggest about the institutional and ideational regulatory paradigm of the European Commission? I argued that setting the contrast-space of platform governance to the functioning of the competitive market conditioned the type of knowledge that is used in the regulation of platform economy, leading to a particular approach to platform regulation. I Interrogated the alternative contrast-spaces to show the multidimensionality of the platform economy illustrated in table 4.2 and charted some pathways for future research on the politics of platform regulation.

A possible problem looms. Are these proper social scientific contributions? At the start of this thesis, I argued that the ultimate objective of social science is to explain *why* things happen in social reality, with explanation understood as a capability to answer counterfactual what-if questions. While my three contributions listed above all have their merits on conceptual, theoretical and empirical grounds, a critic could well be excused for asking whether the study has *actually* led to an increase in the capability to respond to what-if questions. What kind of questions can we answer on the basis of this research? What kind of "if not for X, Y" questions can we answer? How is this thesis useful in generating expectations about social reality?

Interpreting the results explicitly in explanatory terms helps to clarify the answer. The chapters 2 and 3 were essential to clarify *explanandum,* the phenomenon to be explained. The broad question "why the Digital Markets Act is the way it is" is on its own too vague for fruitful research. If the contrast is open, the analysis lacks focus (Ylikoski 2018, pp. 23-24): it becomes matter of subjective aesthetic, practical or normative judgment to supplant the question with the alternative. Why DMA instead of telecommunications legislation? Why DMA instead of American antitrust legislation? Why DMA instead of no regulation at all? These different contrasts suggest quite different answers. The conceptual framework developed in Chapter 2 provides the shared contrast-point, leading to fruitful, albeit less straightforward operationalization of the research question: "Why does the DMA map to the conceptual framework introduced in Chapter 2 in the way that it does?". This way of framing the question also builds bridges between academic and policy debates on platform economy.

What about the *explanantia*, the factors explaining this phenomenon? One partial, theory-informed middle-range explanation was put forward: the definition of the platform economy as a question of market aberration conditioned the type of knowledge that was included as policy advice as well as the stakeholders that came to be consulted for the regulations. If this contrast-space had been different, so would the Digital Markets Act. As it stands, the explanation is interesting, and it refers to a credible and

theoretically informed causal process linking contrast space to knowledge production and knowledge to actions. Yet, it is incomplete. The contrast space is not given exogenously by divine benevolence, but it is an outcome of a process that needs explaining: it begs the question why the DMA works on the basis of market contrast space instead of, say, socialist contrast space? A systematic answer to this question is beyond this thesis, but I argued that it can be traced to the complex of institutions and ideas that condition the Commission's activities. The contrast space is not one for the policy officials to choose freely, but a choice conditioned by the particular ideational and institutional context of Commission regulation.

So, in terms of explanation, the crux of my argument is the following. The ideational and institutional factors that condition the activities of the European Commission caused the Commission officials to adopt a contrast space that conceptualized platform economy as an aberration from the efficient market. This contrast space influenced the knowledge production process, which was reflected in the proposal for regulation, released on the 15th of December 2020. This contrast space is not the only possibility, with alternative contrasts pointing towards broader considerations regarding the power of corporations in modern societies.

The weak point of the argument is the inferential leap from ideas and institutions to contrast space. This leap is abductive in nature: because the Commission approach differs from the U.S. regulatory approaches and the academic treatments of platform economy, the reasons are likely to be found in contingent causal dynamics particular to the European Commission as a site of policymaking.[133] The empirical verification of that hypothesis is a subject for further empirical research, with some opportunities highlighted in Section 4.3. Despite that caveat, I hope that the argument fulfils the explanatory objectives in the scope necessary for a thesis of this length.

[133] Of the conceptual distinction between particular / general causal explanations relevant in this context, see Parsons (2007, pp. 14-16).

This study has several limitations. First, for the purposes of focusing on global political economy, the study was focused on the Digital Markets Act, excluding the Digital Services Act. Including the latter to the analysis could have opened up more angles on the role of corporate power as intermediaries of social activity. Second, this study was not balanced in its treatment, focusing primarily on the negative sides of the platform economy. This thesis was written on an Apple Macbook Pro with Microsoft Word software and much of the data collection and literature review was facilitated by Google Alerts and Google Scholar. Being transparent about this helps to be mindful of the true normative complexity regarding platform economy.

Finally, the Digital Markets Act is only a part of the complex of emerging policy questions that concern the role of corporations in the modern, digital economy. In 2021 the Commission is beginning to concentrate on European Data Strategy, that aims to create a single market for data, 'that is deemed to be an essential resource for economic growth, competitiveness, innovation, job creation and societal progress in general.'(European Commission, 2020c). This will be a fruitful locus for debates on the ownership and control of data as an asset. Furthermore, the recent initiatives concerning European cloud infrastructure invokes pertinent questions on the control of the infrastructure that underlies the digital economy. For instance, the GAIA-X project, officially launched as a non-profit organization in September 2020 by European businesses and politicians, seeks to form the basis for the next generation of European cloud infrastructure 'based on European values' (GAIA-X, 2021). Some commentators have interpreted it as an effort to reduce dependence on Amazon, Microsoft and Google and to protect Europe's digital sovereignty. (Schimroszik & Rosemain, 2020).

On the 19th of November 2020, Amazon joined GAIA-X.[134]

[134] Amazon AWS, (2020)

Annexes

Annex for figures 3.2 –3.6

SYMBOL	SOURCE OF COMPETITION ISSUE
A	One or few large players on the market (i.e.. concentrated market)
B	High degree of vertical integration
C	High start-up costs (i.e. non-recurring costs associated with setting up a business)
D	High fixed operating costs
E	Regulatory barriers
F	Importance of patents or copyrights that may prevent entry
G	Information asymmetry on the customer side
H	High customer switching costs
I	Lack of access to a given input/asset which is necessary to compete on the market (e.g. access to data)
J	Extreme economies of scale and scope
K	Strong direct network effect
L	Strong indirect network effects
M	Customers typically use one platform
N	The platform owner is competing with the business users on the platform
O	Significant financial strength
P	Zero-pricing markets
Q	Data dependency
R	Use of pricing algorithms

Annex for figure 3.7

SYMBOL	PROHIBITED PRACTICES.
5A	(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
5B	(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
5C	(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;
5D	(d) refrain from preventing or restricting business users from raising issues with any relevant public authority relating to any practice of gatekeepers
5E	(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;
5F	(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;
5G	(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.
6A	(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;
6B	(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
6C	(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;
6D	(d) refrain from treating more favorably 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 nondiscriminatory conditions to such ranking;
6E	(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,
6F	(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;
6G	(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;
6H	(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;
6I	(i) provide business users, or third parties authorized 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;
6J	(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 anonymization for the query, click and view data that constitutes personal data;
6K	(k) apply fair and non-discriminatory general conditions of access for business users to its software application store

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