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**Growth Models and the Regulation
of the Data Economy:
The Case of the United Kingdom**

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Abstract

With data becoming a key economic asset in the 21st century, countries are experiencing a gradual shift in the sources of economic growth. This creates incentives to establish suitable conditions for governing data as a resource and growth factor. The present paper argues that incentives to ease the extraction, processing, and use of data are tied to macroeconomic conditions that are likely to characterize a consumption-led growth model. It illustrates the arguments with a study of policy developments in the United Kingdom, where the government launched a proposal for weakening data protection standards after the country left the European Union. The case study highlights how policy action and discourse are linked to several facets of the data economy that have special weight in the country's growth model: the comparatively strong tech sector, reliance on foreign investments, and importance of advertising and data markets in the United Kingdom.

1. Introduction

In the 2000s, when today's globally leading tech companies were building their data-driven business models and when the phrase that data was the new oil was coined (Arthur 2013), political attention to the importance of data was still scarce. It was only in the 2010s that policymakers came to acknowledge the economic importance of data. Notably, the European Union has openly recognized data as a raw material central to future growth as it fuels an emerging "data economy" (European Commission 2017). In this restructuring of the economy, data as a resource becomes relevant well beyond a narrow set of businesses, affecting virtually all sectors and thus amounting to a significant source of economic growth in knowledge societies (Manyika et al. 2011). Data, especially in the form of personal data, allows for the creation of new products, services, and business models in areas as diverse as healthcare, finance, consumption, and customer relations.

With data becoming into an important economic asset, governments face incentives not only to create suitable conditions for harnessing data as a raw material, but also to regulate the flows of data within and across borders (Burri 2021). Governments thus need to devise a suitable and coordinated approach to questions of data governance that determine which data may be extracted, processed, and used how and by whom. They can do so through a variety of policies. These policies can include data protection and data sharing, but also AI regulation and consumer protection, with concrete measures ranging from consent and information requirements to a duty to perform algorithm impact assessments. Hence, data governance, first, matters both for economic development and for the rights of consumers and citizens. Second, as governments pursue diverging paths, the results will be a fragmentation of policy regimes governing data as a resource. While some governments may choose to lower the barriers and burdens for businesses to extract, process, and use data to create value from it, others may opt for more restrictive policies.

Despite the rising importance of data and of policies shaping data-based value creation, these areas have hardly been studied in comparative political economy thus far (but see, e.g., Aaronson 2019a; Ferracane 2021). The present paper aims to shed light on this understudied area by examining how data governance is linked to specific macroeconomic conditions that influence a country's growth model. The concept of a growth model complements the varieties of capitalism framework (Hall and Soskice 2001) through focusing on the relative importance of the components that lie behind overall demand in an economy and on the specific coalitions

that sustain a given economic model (e.g. Baccaro and Pontusson 2016; Hope and Soskice 2016; Johnston and Regan 2018). Central to the literature on growth models is the dichotomy between an export-led growth model that depends on low domestic prices fueling mainly manufacturing exports and a consumption-led model that is sustained through domestic household consumption.

It has been noted that this distinction may be too coarse to adequately capture the growth trajectories of economies after the global financial crisis of 2008 (Hein, Meloni, and Tridico 2021; Kohler and Stockhammer 2021), and that it remains incomplete without analyzing the interdependencies between economies (Schwartz 2019; Schwartz and Blyth 2022). Nonetheless, a burgeoning literature attests to the analytical traction of the growth model framework, relevant not only for distributional struggles (Baccaro and Pontusson 2016) – with links also to electoral politics and party system change (Hall 2020; Hopkin and Blyth 2019) – but also for differences in policy regimes and policy action (Blyth and Matthijs 2017). Previous work has investigated how growth models have given shape to tax regimes (Haffert and Mertens 2021), housing policy (Reisenbichler 2021), and industrial policy aimed specifically at corporate investment (Bohle and Regan 2021).

A common thread in this research is that it demonstrates how policy action has systematically aligned with incentives and constraints that derive from a country's growth model. Additionally, the growth model concept has proven to be valuable when studying how macroeconomic conditions and political institutions (re-)produce specific national models of capitalism in a given historical period. Thus, the growth model framework is particularly relevant when looking at periods of industrial transition, and the framework promises important analytical value in the study of how states react to the emergence of a data economy and the transformation of the economy that it entails.

Drawing on the growth model framework for this purpose, the present papers makes several contributions. First, by adopting a growth model perspective and bringing it to the study of the data economy, it offers a novel sector-specific application of the growth model framework complementing several previous contributions (e.g. Bohle and Regan 2021; Haffert and Mertens 2021; Reisenbichler 2021). Second, it shows how incentives to ease data-based value creation are tied to certain macroeconomic conditions that are particularly likely to be found in a consumption-led growth model. Third, the paper illustrates the developed arguments with a study of relevant policy developments in the United Kingdom (UK), where the

government launched a proposal for weakening data protection standards after the country left the European Union. The country had already adopted EU data protection law and the government's proposal effectively aimed at a policy reversal through more business-friendly regulation. Due to this constellation, as will be detailed further below, the UK is a particularly instructive case and provides a rare opportunity to examine policy action concerning data governance.

The case study highlights how government policy action and policy discourse around the proposal are linked to sources of economic growth that are comparatively important in the country's growth model and that depend on personal data as a resource for value creation. Overall, the study of the British case points to important forces relevant for understanding how countries govern the extraction of data and key processes of creating value from it. It adds not only to the literature on growth models, but also directly speaks to research that deals with policymakers' responses to the increasing importance of data extraction, cross-border data flows, and data-based value creation (Aaronson 2019a; Aaronson 2019b; Burri 2021; Goyal, Howlett, and Taeihagh 2021; Goyal, Howlett, and Taeihagh 2021; Kalyanpur and Newman 2019; Krämer, Whalley, and Batura 2019; A. Newman 2008). The paper is structured as follows: section two spells out the theoretical assumptions and describes how the growth model framework can be applied to the question of how states respond to the emergence of the data economy. The third section describes the research design, followed by the case study in section four. The paper closes with a discussion and conclusion in sections five and six.

2. Growth models in the age of the data economy

2.1 Growth models as responses to economic change

Countries differ with regard to the main drivers behind the growth of their economies. In their growth model framework, Baccaro and Pontusson (2016) characterize countries based on their importance of export-led growth in relation to consumption-based growth: Ideal typical growth models either depend on conditions that boost domestic consumption, possibly assisted by investments from abroad, whereas export-led growth models need to keep wages low and suppress consumption to maintain low prices of exported manufacturing goods. The fact that macroeconomic conditions and policy regimes are interlocking to produce a certain form of capitalist accumulation means that these growth models represent relatively stable

arrangements that are also sustained by the vested interests of “social blocs” (Baccaro and Pontusson 2016, 200; Thelen 2019).

Apart from such path dependencies, there are also structural forces that countries can presume to stabilize an existing growth model. Highlighting an international dimension of growth models, Schwartz and Blyth (2022) argue that global market forces and different positions in the global economy are crucial for understanding the differentiation and viability of growth models. In their account, a growth model based on export specialization cannot be reduced merely to characteristics of the economy alone because it also depends on the division of labor in the global economy and the ability to deposit surpluses in a suitable asset. In a similar vein, consumption-based economic growth fueled by foreign investments – as is the case in the UK – can more easily be sustained if an economy is marked by centrality in global networks (Schwartz and Blyth 2022).

From this perspective, it is no coincidence that those countries which saw a need to catch up with other economies, such as Germany and Japan, developed export-led models. They opted to suppress domestic demand and direct capital in domestic development (especially of more advanced industries) in order to boost growth (Schwartz 2019). Having taken this approach, the entrenched lower level of household consumption keeps pushing these economies to seek growth through foreign markets. These countries’ earlier positions in the global economy and the growth paths available to them have thus led them to a consolidated position in today’s global economic system. Notably, the economic policy that laid the foundation for clearly export-led economies is similar to earlier mercantilism, which served to bolster and protect the position of a country’s own industries and to achieve a positive trade balance (see also Hein, Meloni, and Tridico 2021).

These historical responses to industrial change are acutely relevant today as countries find themselves amidst a new industrial transformation. Like previous industrial transformative processes, industrial change in the early 21st century is tied to a newly available resource: data. Of course, data is not new in a strict sense. However, only in recent decades has it become abundant and utilized as a valuable economic asset due to the low cost and large scale at which data, especially personal data, can be collected and processed. Its relevance goes well beyond the tech sector and its economic importance is quickly rising, creating challenges and opportunities across all industries (Niebel, Rasel, and Viète 2019). In 2018, the EU reported a growth rate of 8 percent for the section of the economy rooted in data-based value creation and

they project that this data economy will comprise 4 percent of gross domestic product (GDP) in 2025 (European Commission 2020, 12). Against this backdrop, countries have incentives to harness this raw material as a source of growth and future economic prosperity. However, countries also find themselves at different positions in the global economy and often start from different growth models with corresponding institutions and policies. This means that countries face differing constraints and incentives on how they shape conditions for data-based value creation through policies.

2.2 Linking the growth model framework to the data economy

Drawing on a growth model perspective, it will be argued in the following that certain economic conditions that make data, primarily personal data, particularly valuable as a growth factor are likely to be found in a consumption-led growth model. This, in turn, creates incentives to ease the extraction, processing, and use of data. Based on these considerations, it will then be discussed how this linkage is reflected in policy action and discourse.

The possibilities of fostering data-based value creation are linked to extant sources of growth in at least three important ways. *First*, the use of data for value creation does not affect different sectors of the economy uniformly. While data also plays an important role in manufacturing, especially as machine data for automation and process optimization,¹ the emergence of a data economy is tied to new business models and value offers in services, in large part based on data in the form of personal data (Aaronson 2019a, 3). This means that the significance that especially personal data has for the overall economy depends on the extant economic structure of a country, with service-dominated economies having more to gain from favorable conditions regarding data collection and processing (see also Ferracane 2021, 66). This should hold especially where information-intensive service sectors are strong.

Second, data-based value creation is tightly linked to private investment in innovation and the process of transforming data into an asset on which firms can capitalize. It is common among data-driven business models to extract data for the purpose of turning it into an asset that is valued in terms of its future expected returns (Birch, Chiappetta, and Artyushina 2020, 474, 479; see also Mackenzie 2015). In this sense, investment in data extraction and data-based value creation can also be seen as a form of rentiership (Birch, Chiappetta, and Artyushina 2020; Edwards 2018), the possibility of which, however, depends on suitable policy

¹ In manufacturing, machine data is generated by businesses themselves and does not conflict with individuals' rights, which means that policies shaping the ease of data collection and use are also less relevant.

frameworks. Certain policies can be a threat to the investment value of personal data. Legal standards that hamper data extraction, data flows, or key activities of creating value from data (e.g. analytics or use of AI systems) all make investments into the data economy less profitable. What holds specifically for big tech firms, that they care about tax laws and “liberalized data and privacy laws” (Bohle and Regan 2021, 97), can be presumed to hold more generally for investors in data-based business models.

Third, because personal data is in large part consumer data, it is primarily relevant for marketing, particularly advertising, and consumer credit lending based on risk assessments. The data deluge has been accompanied by the rise of online platforms and a much less visible data broker industry which collects, compiles, and trades consumer data (Roderick 2014). Such collected data about people’s personal lives and their social relations can yield insights about their preferences and propensities to choose certain products and, therefore, permit the transformation of people’s preferences into inputs for profit generation, particularly through the placement of personalized online advertisements (Zuboff 2019). Large amounts of fine-grained consumer data can also be used to better sort consumers based on their demand for consumer credit and their risk of defaulting on loans, which also offers the potential of extending credit to those formerly excluded (Martin 2015). Indeed, the extension of consumer credit has been an important driving force behind demand for data to build customer profiles (Roderick 2014).

The links between data-based value creation and components of aggregate demand imply that the extant growth model of a country creates distinct incentives to foster this kind of value creation. Specifically, a consumption-led growth model with (1) a strong role of services in relation to manufacturing, (2) driven financial investment, and (3) credit-financed domestic consumption implies stronger incentives to create favorable conditions for harnessing data as an economic asset and thus easing the extraction, processing, and use of data. Especially when the tech sector and data-intense services in a country are already globally competitive, easing data collection and use can help boost it further. This is less likely to be the case when the country’s tech sector is smaller and less competitive – a situation that may instead create a need to catch up, similar to how export-led growth models have historically built up their strong manufacturing base. A stronger role for capital markets and the greater importance of foreign investment furthermore implies that easing the extraction and use of data as an asset can serve to lure capital flows into data-driven business models that can be highly scalable and attain entrenched market positions. Finally, consumption-led growth also means that a growth model

is more dependent on the possibilities of utilizing consumer data for bolstering household demand and for financialization that sustains credit-based consumption.

Hence, easing conditions for data-based value creation is much more of an imperative in a consumption-led than in an export-led growth model, such as in Germany. The latter is marked by a more central role of manufacturing, usually stressing incremental innovation of high-quality products rather than rapid innovation (Hall and Soskice 2001) and a stronger role of banking versus capital markets, such that attracting foreign investment and venture capital is of less importance. Further, using consumer data to boost consumption runs counter to the export-led model's need to restrain consumption to keep prices low. The contrast to the export-led growth model is especially clear. Yet, it should be noted that this is arguably less the case with countries that do not as neatly fall under the distinction between the export- and consumption-led growth model, like the Nordic countries. Nonetheless, based on the above assumptions, we would expect that the more a country realizes a consumption-led growth model is marked by the conditions described above, the greater the incentives to ease the extraction and use of data are. The country would then have more to gain from lowering barriers to data collection, processing, and use. This approach promises to bolster a country's service sector, especially tech-based services, to attract investment specifically in data-intense industries, and to tap the economic value of personal data for boosting (credit-financed) consumption.

Further, if these incentives deriving from specific sources of growth are indeed present, one would expect to see them reflected in certain aspects of policy action and discourse. *First*, if less restrictive data governance is of general macroeconomic importance, we would expect such policy action to be accompanied by little party conflict, possibly even party consensus (Hopkin and Alexander Shaw 2016; Reisenbichler 2021). *Second*, based on the considerations above, we would expect the government to be concerned about attracting investment – and this should be detectable because the government's efforts must be public and overt to promote the country as an attractive target for foreign investment. *Third*, the same cannot be said about a concern for a greater availability of consumer data – a government has little reason to openly state it wants to ease the tapping of this data. Yet, there should at least be signs that the government's policy is in line with what data marketers and advertisers want. Looking at these three aspects thus can serve to highlight how macroeconomic conditions concerning the value of data as a growth factor are linked to data governance policy.

3. Research Design

A case study of the UK will serve to illustrate the preceding considerations. The UK is a particularly suitable case for several reasons. It has been described as a case of a clearly consumption-led growth model (Baccaro and Pontusson 2016), and it shows conditions under which data-based value creation and thus the possibilities to extract and harness data as an economic asset are particularly important, as will be detailed further below. Not only would we expect incentives to ease the extraction and use of data to be comparatively strong under these circumstances, but the British government has also, in fact, initiated a reform of data protection law in late 2021 that aimed at weakening existing standards. This episode provides us with a rare opportunity to study how policy action reflects the importance of data, primarily personal data, for certain parts of a country's growth model: it marks a moment in which this link should become particularly visible.

The government's plan to reform data protection law is especially remarkable as it aimed for a policy reversal and notable change of the status quo. While leaving the EU has given the UK the possibility to unilaterally adopt data protection policy, the UK had already adopted EU data protection law, an international point of reference that has prompted several countries to pass stricter and similar data protection laws (Gstrein and Zwitter 2021; A. L. Newman 2020). Diverging from influential EU standards (differences are described further below) after these have already been implemented in national law may therefore seem a surprising step, especially when considering that, according to former minister of state Ed Vaizey, the British government has greatly influenced the EU's General Data Protection Regulation (GDPR) (Lomas 2021a). Also, businesses have already made efforts to meet GDPR compliance, which introduces switching costs in case of another policy change (Büthe and Mattli 2013, 9). The government's policy proposal, "Data: A New Direction," could thus be perceived as an unlikely attempt at path reversal. Based on the assumptions in the preceding section, one can see, however, that it instead serves to align the country's policies with characteristics of its growth model.

This growth model is based on consumption-led growth and is fueled by foreign investments. Growth of the British economy over the last decades has, in large part, been attributable to household consumption (Baccaro and Pontusson 2016, 186–187). Further, bolstering the finance sector through financial deregulation has not only made the UK an international hub for global financial flows and services, but it has also reduced borrowing

constraints, eased liquidity, and hence increased consumption (Crouch 2009; Oren and Blyth 2019). Indeed, as Oren and Blyth (2019, 612) emphasize, the deregulation and liberalization of the 1980s has “turned finance-led growth into the only available growth model for the UK”. At the same time, credit markets and attracting investments are central for innovations and growth of the economy, and the emerging data economy offers new opportunities to extend these sources of economic growth. Indeed, the UK economy stands out among European countries in terms of the importance of data as a growth factor. This significance becomes palpable when looking at macroeconomic conditions concerning data-based value creation that are linked to characteristics of the consumption-led growth model as described further above.

First, whereas the UK had one of the smallest manufacturing sectors (as a share of GDP) among the EU-28 in 2019 – ranking 24th – its economy harbors an already strong and quickly growing tech sector with data-intense value creation. According to the most recently available EU data,² the value added of its information and communication technology sector amounted to 6.2 percent of GDP in 2018 – the second-largest score only after Malta (7.7 percent). Other larger economies score clearly below the UK, with Italy (3.3 percent), France (4.3 percent), and Germany (4.4 percent) all lying below the EU mean (4.5 percent). More importantly, the UK also ranks high when looking at the part of the economy built on data-based value creation. Data for 2019 lists the size of its data economy in relation to GDP at 3.2 percent of GDP, clearly higher than the EU-28 mean of 2.0 percent. Only Estonia has a larger data economy than the UK. It is furthermore noteworthy that, according to the EU’s Data Market Monitor, UK companies account for 25.3 percent of all entries, followed by Spain with less than half of this share (12 percent). The UK is similarly far ahead of EU countries regarding its number of fintech unicorns. In 2021, the UK had 40 percent of all fintech unicorns in the EU-27 plus the UK. With 27, it counted almost twice as many as the second-ranked country, Germany (15).

Second, capital inflows generally play a significant role for the UK economy, and data-intense sectors are particularly important for attracting capital according to available indicators. Venture capital investment in the UK tech sector is more than that in France and Germany combined (ITA 2021). Drawing on Eurostat data on net FDI, the mean scores for the years 2014 to 2017 underscore the importance of the tech sector, but also of advertising and finance as attractors of foreign capital. The UK is leading in net FDI in Information and Communication, which made up 40 percent of the entire EU-28’s net FDI in that sector. For net FDI in

² Ireland, Spain, Luxemburg, the Netherlands, and Portugal are missing.

advertising and market research, the corresponding share is a whopping 68 percent. In net FDI in financial and insurance activities, the UK ranks fourth among countries with available data, surpassed only by smaller states that specialize in these service sectors: Cyprus, Ireland, Luxembourg, and the Netherlands. Taking larger EU economies again into comparison, net FDIs in financial and insurance activities were, on average, even negative in Germany and France between 2014 to 2017. We thus see that UK capital inflows are high in those areas in which there is a special potential for the assetization of personal data and for creating value from it.

Third, in line with the observation that credit-financed household consumption is an important driver of growth in the UK (Baccaro and Pontusson 2016), the marketing and advertising sector, in which consumer data plays a crucial role, is comparatively large. It amounted to 1.0 percent of GDP in the UK in 2018 and lies clearly above the EU-28 average of 0.6 percent. This score is surpassed only by Malta (2.5 percent) whereas France, Germany, and Italy all score at or below the EU average. The UK also has a flourishing data market according to EU estimates from 2019, ranking third with 0.7 percent of GDP only after Estonia (1.0 percent) and Cyprus (0.8 percent) – and about or more than 1.5 times the size in Germany (0.5 percent), France (0.4 percent), and Italy (0.3 percent).

These indicators, taken together, suggest that the UK consumption-led growth model shows a comparatively strong dependence on favorable conditions for extracting, processing, and using data as an asset – for its thriving data economy with its data-intense tech-based services in general as much as for attracting investment and harnessing individual consumer data. It is against this backdrop that the analysis in the next section discusses the government's efforts to reform data protection law. The following section will highlight how the macroeconomic conditions described above are reflected in policy action and discourse. The analysis will, *first*, describe the government's policy proposals, pointing to important differences from EU data protection policy. *Second*, following the arguments on where the link between sources of growth and data governance policy should be most visible, it will examine to what extent there has been (1) party consensus, (2) overt government concern for attracting foreign investment, and (3) conformity with the interest of the data marketing and advertising sector.

To this end, the analysis draws on relevant policy documents, speeches, press releases, newspaper articles, and responses to the government's consultation regarding its proposal. It

should be noted that the analysis studies policy action in the area of data governance as an expression of macroeconomic incentives to regulate the conditions for creating value from personal data. Thus, the government's initial policies, the objectives, and policy ideas expressed in them and how these align with the country's growth model, are more important than the content of the law ultimately passed. It is the initial proposal that most clearly shows the direction in which the government intended to go, and this thrust of policy change is of main interest in the analysis.

4. Analysis

4.1 The government's proposal to change data protection law

As an EU member state, the UK had adopted the GDPR in 2018, while still in the process of negotiating the terms and conditions of exiting the EU. Not long after the Brexit referendum, some political circles saw the severing of ties with the EU as an opportunity to overhaul the UK's data protection legislation. Despite concerns about failing to maintain data protection adequacy with the EU looming large, the Johnson government pushed ahead with an initiative for reviewing and changing data protection law. In September 2021, it published a proposal containing a range of possible and envisaged changes that amount to a lighter touch approach toward data protection. The proposal aims at a clear softening GDPR standards to make data more available as a key raw material for value creation – not only in the UK and for UK businesses, but also for transfer to third parties. Indeed, the government made no secret of its generally skeptical stance toward EU data protection standards. As Dowden stated: “Now that we have left the EU I'm determined to seize the opportunity by developing a world-leading data policy that will deliver a Brexit dividend for individuals and businesses across the UK” (DDCMS 2021a). The language of the government's policy proposal altogether stressed the goal of better reconciling data protection with business activities. Overall, the government expected that easing the cost of compliance for businesses would lead to net benefit of over 1 billion pounds over 10 years. This was to be achieved with an “ambitious, pro-growth and innovation-friendly data protection regime that underpins the trustworthy use of data” (DDCMS 2021b, 6).

Among the proposed changes, several stand out in comparison to the EU's data protection regulation. What the government loosely refers to as an “agile regulatory approach” (DDCMS 2021b, 53) was supposed to boost international trade through more flexible rules for

international data transfers and by removing barriers to cross-border data flows. Likewise, the government wanted to clarify legitimate interests in such a way that it avoided what the government deemed an overreliance on consent and to lower consent requirements for cookie use. The proposal aimed at a weaker and more flexible accountability framework, lowering the burdens for businesses by eliminating the requirement to designate a data protection officer, to perform data protection impact assessments, and to comply with record keeping and breach reporting obligations. It also brought up the idea of introducing a fee for data subject access requests and expressed the desire to amend the right not to be subject to solely automated decision-making, which is guaranteed by Article 22 of the GDPR. Finally, the government's plan meant a major change of the data protection authority's role: The Information Commissioner's Office should foster "an innovation-friendly and streamlined regulatory landscape" (DDCMS 2021b, 114), meaning that its actions should also be oriented toward economic growth and innovation when performing its functions. These additional priorities together thus threaten to constrain its ability to act as an independent actor. The changed role of the agency is also reflected in the change of personnel, with former New Zealand Privacy Commissioner John Edwards having replaced Elizabeth Denham at the end of October 2021 and Oliver Dowden depicting Edwards as the ideal choice to "pursue a new era of data-driven growth and innovation" (DDCMS 2021a).

4.2 Linking policy action and discourse to data-related growth factors

Political division vs. consensus. Given the overall substantial changes to data protection law that the government proposed, its proposal would seem like a clear opportunity for the opposition to criticize and attack the government. However, the Labour Party, traditionally a stronger advocate of consumer protection than the Tories in government (Howells and Weatherill 2005), was the proverbial dog that did not bark. Notable criticisms or attacks by the Liberal Party were not registered either. This is remarkable when considering that the opposition could easily have joined various critical responses, among others, by the Information Commissioner's Office, by NGOs like the Open Data Initiative, and by academics, such as from the Horizon research center at the University of Nottingham and the LEADS lab at the University of Birmingham.

In the same vein, it would have been possible for the opposition to exploit the divisive nature of the proposal with regard to business interests. Although the government publicly justified the policy change with a lower burden for small businesses, weakening data protection without measures to level the playing field for domestic smaller companies could enhance an

already-existing competitive advantage of large international competitors. Smaller businesses can also be presumed to face greater risks in case adequacy with EU standards cannot be maintained. For instance, one UK-based startup publicly criticized the government's plans for imposing a great risk on British startups with strong EU business ties (Lomas 2021b), and similar concerns can be presumed to occupy other small domestic firms. Yet, no division in party politics was visible in response to the government's presentation of its plans. The silence of the opposition is a sign of a general, shared perception that reforming data protection law was in the general interest of the country. In sum, it appears that realizing a "data dividend" to foster economic growth was macroeconomically common sense in the political arena.

The importance of attracting investments. While the government's policy can generally serve to better harness data as the central asset in an emerging data economy, it can also make investments in data-based value creation more attractive. This is reflected in how strongly the government emphasized the goal of attracting foreign capital through a strong tech sector and through easing data extraction and flows. How important this goal was for the government can be glanced from the 2020 UK Report issued by the quango Technation (2020). The report emphasized the highly favorable conditions for businesses investments in the UK, especially in fintech, stressing the country's 2019 record high of venture capital investment in the UK. It is notable that the report led with a foreword by none other than the Prime Minister himself, indicating that it was a top priority of the government.

That attracting more investment based on a favorable environment for business in the tech sector was a central mission of the government equally becomes palpable from other actions. These indicate a clear strategic agenda. Just one month after presenting its proposal to reform data protection law, the UK government hosted the first Global Investment Summit in 2021, bringing together global leaders, investors, and innovators. This event sought to encourage foreign investment by showcasing British innovation. At this investment summit, Prime Minister Boris Johnson announced in a speech that "technological revolution is being turbocharged" through "using our new freedoms – outside the EU – to do things differently and regulate better." He praised the country's leading role in tech and emphasized as one of the country's strengths: "Data, data, data" (Johnson 2021).

Already one year earlier, in October 2020, the government had announced the creation of an Office for Investment specifically for the purpose of attracting foreign investment through its reputation as a world leader in tech as well as in other sectors (Department for International

Trade 2020). This office's role clearly complemented the government's tech trade strategy that the former international trade secretary Liz Truss had launched in June 2020. In her speech, she made it clear that foreign investment and tech are wedded as inseparable parts of the government's strategy: "What I've announced today, is our new Future Tech Trade Strategy, and this is all about attracting more investment from around the world into UK tech, but also promoting UK tech around the world" (Truss 2020).

The plan to reform data protection was altogether well in line with the goal of attracting investments in UK tech. That this is the case can also be read from a response by the U.S. Chamber of Commerce to the government's proposal. One should note that U.S. investments in the UK's Information and Communication Technology (ICT) sector are comparatively large. Investment of U.S. multinational enterprises in the UK's ICT sector amounted to a share of 19 percent of all such investments in Europe in 2019. For comparison: the numbers are 6 percent and 3 percent for Germany and France, respectively. In light of the importance of U.S. investments in UK tech, the U.S. Chamber of Commerce's (2021) comment carries special weight. While it referred mainly to the general approach of the government's reform proposal, the comment welcomed the government's plan to aim for more regulatory flexibility and even suggested that the updated approach to data protection law should then be exported to other countries before these achieved equivalence agreements with the EU. Among the specific measures that the Chamber endorsed are lower barriers to data collection via cookies and through establishing more instances in which consent requirements are relaxed.

Congruence with interest to use data for spurring consumption. Finally, there are also clear signs that the government's proposal served certain data-intense sectors, particularly data marketers and advertisers. The content of the policy as such, especially the less restrictive accountability framework, the lowering of consent requirements regarding online data collection (through cookies), and removal of requirements of data protection impact assessments, of data protection officer (DPO), of record keeping, and of data breach reporting, altogether mean lower burdens for businesses creating value based on consumer data.

Tech sector interest groups did not subscribe to all of these proposed or considered changes. However, one needs to bear in mind that business interests may favor weakening data protection in general but still oppose measures because they threaten equivalence with EU data protection standards – and thus destroy access to an important market. The International Regulatory Strategy Group, which represents the financial and professional services industry,

was in favor of a more light-touch approach to data protection but wary of threatening adequacy with the EU, thus warning of changes that are especially likely to lead to incompatibility (IRSG 2021). Similarly, techUK, the major tech sector interest organization in the UK, did not agree with several provisions considered by the government, such as removing the DPO requirement and scrapping GDPR Article 22, which gives citizens the right to object to being subjected to solely automated decisions. In its response to the government's consultation (techUK 2021), the organization expressly stated that eliminating or weakening Article 22 would endanger compatibility with EU standards – and thus threaten adequacy. In the same vein, the organization said it was open to weakening impact assessment requirements, but still opposed this as it feared that this would undermine data sharing agreements. At the same time, techUK supported more flexibility in general, a weakening of the purpose limitation requirements, a less restricted use of data to train AI systems, the weakening of the accountability framework and consent requirements, and the proposed changed role of the Information Commissioner's Office.

Given the central role of consumer data for data marketers and advertisers, the position of the DMA, the Data and Marketing Association, on the government's plans is of particular interest. Like techUK, the DMA (2021a) opposed several measures that one might think to be in the organization's interest as they lower standards and introduce greater flexibility. It opposed a reform of the accountability framework as this would not change much in practice and it was for keeping the DPO requirement as well as record keeping and breach reporting requirements. Overall, however, the DMA's response is resoundingly positive, even more so than the techUK response. The DMA's response strongly supported the lowering of purpose limitation and consent requirements regarding cookies and it expressed support for the proposed changes to the Information Commissioner's Office – which would undermine its independence from government and align it with economic objectives. Strikingly, the organization even claimed on its website that its lobbying efforts had made an impact and that the government's proposal contained several of its suggestions (DMA 2021b). In sum, the government's proposal was well aligned with the interests of businesses using personal data as a key asset specifically to drive consumption.

6. Conclusion

The preceding analysis has shown how the growth model framework can be leveraged for the study of governments responding to the increasing economic importance of data as a raw material. Certain macroeconomic conditions characterizing the UK's consumption-led growth model, it has been argued above, create incentives to lower barriers to the extraction and use of data, especially personal data. In a nutshell, the country's strength of data-intense service sectors in the economy generally makes data more central to economic growth. Second, the comparatively strong role of foreign investments makes it more important to have favorable conditions for transforming data in an asset that attracts capital. Third, a central role of credit-financed household consumption for economic growth means that the availability and the free flow of consumer data for advertising and credit lending to boost consumption have greater weight. Taken together, these conditions mean that economic growth is more dependent on the ease with which businesses can extract and use data as resource for value creation. In this sense, the government's 2021 proposal to reform data protection law, which aimed at a lighter touch approach, can be seen as an attempt to bring the country's data governance more in line with its growth model – made possible by the country having left the EU.

This post-Brexit divergence from previously adopted EU data protection law forms an episode that is especially suitable for studying how macroeconomic conditions are reflected in the shape of data governance. Specifically, the case study has served to illustrate how the macroeconomic relevance of data as a growth factor in the UK manifested in different aspects of policy action and discourse. First, there was a notable absence of party conflict and dissent even though reactions to the government's plan were divisive and included strong criticisms by NGOs, academics, and even the Chief Information Officer. Second, the government has made strong and coordinated efforts to attract foreign capital, publicly outlining a strategy in which a vibrant tech sector and the availability of data as an asset are crucial for attracting investments. Third, the government's plan clearly aligned with interests of data marketers and advertisers as those businesses which are highly dependent on the availability of consumer data – and these businesses even openly stated that the government's proposal met their interests in important respects.

All in all, the analysis demonstrates how a growth model perspective can serve to study data governance and what gives shape to it. The above discussion also has important implications for our understanding of an emerging data economy and data governance across

the globe. Not only does it imply that existing growth models affect how countries harness data as a raw material and particularly how they will differ regarding policies they adopt to regulate the extraction and use of this resource, but it also follows that different macroeconomic conditions within the EU could lead to struggles over data governance in the future. The discussion above provides an analytical lens for studying these developments.

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