Local Regulation of Global Digital Platforms;
How AI Algorithms Change the Borders in the Age of Data

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Abstract

Digital platforms, including social media, are not just reforming the economy, but their extreme sociopolitical upheavals, ex. Cambridge Analytica and similar cases, highlight a seriously transformative phenomenon which needs to be confronted. As an obvious manifestation of AI technology in business, these platforms are widely extracting value based on the monopolization of main fields of the digital economy such as: search and e-commerce services. The very nature of this disruptive technology is a challenging research object simply because digital platforms already know our preferences and innermost secrets better than we do, and can easily direct us to behave in desired ways. They seem even more powerful than any national or territorial authorities as to the distributed structure of these platforms so far has employed to disrupt local markets, as well as to trigger a social movement or to contribute toward a given election campaign. The research assembles a unique set of empirical evidence from Iran, China, and the European Union. These are about the political strategy adopted to take control of those platforms and to ensure the governance maintenance of the status quo. Through a case study, this research deals with the question "How different governance regimes take a stance on digital platforms?" Research findings distinguish three main ingredients of virtual nationalism as an initiative over world-wide digital platforms: 1- empowering the state ability to safeguard its citizens' rights over their data like the GDPR in EU, 2- increasing the accessibility of data produced inside a nation for a better governance of the different entities inside the state and 3- developing fair, transparent and efficient domestic platforms to extract and share the national data exclusively with home-made insider businesses.

1 Introduction

Data is said to be the power, and in the information society, an increasing source of authority. For most of the past century, law and regulation have been regarded as effective state interventions to reserve the rights of citizens vs. market failures and also to protect domestic industries against foreign competitors (Birkland, 2015; Hill and Varone, 2014). However, this approach toward regulation, esp. maintained by members of the European Union, strived achieving that promised protective umbrella in digital era. At the same time, digital platforms denote technologies namely AI and big data more valuable as the number of users climbs and an "ecosystem" of co-suppliers grows around it. It is argued that the governments should deal with challenges such as: How can national sovereignty survive facing global tech giants such as Facebook, YouTube, and Twitter which simultaneously violate the social (National Identity) and economic (Domestic Market) borders of each state (de Reuver, Sørensen and Basole, 2018; Lee et al., 2019; Parkeret al., 2016).
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2 Objectives

This article aims at providing a critical perspective on the current approach of national regulatory bodies facing those global tech giants. By shifting the focus through the importance of data sovereignty in the digital era, we examine the performance of what has been traditionally accepted as sectorial regulation. Employing the qualitative policy analysis framework, a decade of regulation of US-based digital platforms worldwide esp. China, Iran and European Union are investigated, relying mainly on the impact assessment of each regulatory intervention. The article seeks to bring about reflections on a contextualized model of encountering digital enterprises, which undermines current tensions and contradictions and empowers the governance system as a whole. It contains sophisticated development of cooperative governance mechanisms to promote domestic alternatives (Margetts and Dunleavy, 2013).

3 Methodology

Beach and Pedersen's process-tracing method (2013) is used to explore three different policies adopted in the face with digital platforms and their challenges through the theoretical path of decision-making as well as the empirical case-specific levels. European GDPR, Chinese Super-app development and Iranian sectorial regulatory policy encompass inputs of the process by which the paper examines both deductive and inductive paths from the initial enforcement date until now. All of the three policies were associated with a plan for algorithm regulation as a primary objective. So, it could be possible to trace different phases of them in a continuous comparison between intentions and outcomes alongside the social assessment of the original context of each intervention. As causal mechanisms describe scope conditions, the initial condition of a causal mechanism (X) and the outcome (Y) is required to establish an acceptable matrix of process-tracing which also calls for a theoretical mechanism between X and Y that produces the outcome. Several variables are employed within the empirical test as dependent measures include penetration rate of digital platforms (US-based tech giants), the penetration rate of domestic alternatives, market share, market power, the total number of national-level employers and employees in each platform, data and internet traffic information, etc.

4 Findings and argument

Results yield a substantive distinction between the passive stagnant sector-based regulation and active, engaged protectionist strategy. The latter seeks some auction-like exclusive opportunities to develop a competitive advantage for domestic startups by sharing public data with them to restrict the utility of external platforms within the country. The platform regulation problem is presented in two different scenarios, i.e. without or with side effects of the domestic alternatives on the operational cost of interventions in this field. However, the simpler scenario has only one simplistic solution that is to produce more legal documents and strengthen regulatory mandates like what happened in the case of European Union; The GDPR allows personal data to leave the EU only if firms have appropriate safeguards in place or if the destination country has "an adequate level of protection"(Cowhey and Aronson, 2017). But, this historical conflict with US-based platforms not only brought about an extravagant cost for European countries but also even as regulators discuss new rules and activists concern about the right to privacy, the shares of global five biggest digital firms have been on a constant upward trend, over the past 12 months, rising by 52%.

The first-order condition of the more complicated scenario gives us a realistic equation that may have several implications. For example, Chinese super-app WeChat has invested in AI application during the recent decade and made it a competitive advantage in the field of social media to an extent which substitutes value extraction of big data with value creation in a large scale, i.e. over 900 million monthly active users. In the empirical part and after presenting some facts and figures, the prediction of our model is extracted for the case in both scenarios that fits to a good extent to authentic data.

4.1 The Case of Facebook's Libra; politics of AI algorithms

Facebook's Libra is built on the Blockchain, which promises secure, fast, and reliable while completely decentralized payments by removing intermediaries such as banks and payment gateways. Unlike other digital currencies such as Bitcoin and Ethereum, Libra has a stable credit to provide more permanency in transfers and transactions and to be more durable. These types of digital currencies are called stable currencies or stable coins. Libra will initially be backed by four valid paper currencies, including USD, Euro, Yen, and Pound sterling.

Though, Libra's distinctive feature does not lie simply in its being a stable coin. Transparency, democracy, traceability, and the block maker's anonymity are distinctive features that made Bitcoin an attractive, unique, inclusive, and of course, a profitable industry within Blockchain. Yet, by limiting the possibility of creating and approving the Blocks by the given number of companies in its coalition, the stable Libra implements another type of Blockchain in

financial transfers upon which the cornerstone of a controllable digital ecosystem would be established.

Not long ago, J. P. Morgan Investment Bank, the Wall Street financial giant, unveiled its stable currency that Libra is more similar to it, among others. The Blockchain of this type is also called permissioned Blockchain, which is commonly used in the supply chain and esp. to track essential goods and documents. As stated initially, Libra will be made public within five years. Although, as mentioned in Libra's white paper, the main challenge is that no one can't be sure that there is a viable solution for a financial transaction system, which is stable, secure, and fast-paced and also operate as a permission-less network (Libra, 2019).

Such operational inconsistencies and the lack of transparency indicate, at best, one can imagine that Libra, after many years, will become like giant corporations with their core and individual shareholders, and a few selected groups of people will deliberately be able to participate in its regulatory decisions. Put it differently, the slogans such as democracy for all, and the impossibility of any censorship or prohibition, on which Bitcoin and other digital currencies maneuvered, will be forgotten. Worse, ironically the slogan on the home page of the Libra's site is "Libra for all," and according to the Libra coalition's policymaking department: "where ever credit card and Visa card is active, Libra is available" (Seward, 2019). Seemingly, Libra's everyone means everyone they want or at least anyone who affords to use it; since credit card and Visa card services are not yet available to many people worldwide, these allied corporations in the future may enforce such rules for any user or nationality and block or limit their digital currencies. So, in the most optimistic view, Libra set up to reproduce, if not perpetuate, US-centric domination structures in financial relations, but this time in the form of digital technologies (FinTech).

Notwithstanding, intense disputes over the Libra's announcement in recent months revealed that it could not be regarded simply as a single response of the U.S.U.S. government to reclaim its sovereignty over open-source cryptocurrencies which are threatening USD's dominance over the global financial system. At the domestic level, Libra's emergence generated a battle between the traditional regulators and the technological forces of reform; those who rebel against the longstanding order of the things in the most critical way that is: taking the initiative over Dollar. In this sense, Libra is expected to be another version of Dollar with different power relations and stakeholder arrangements. With this in mind, some analysts inclined toward the idea that Zuckerberg has to seek its market for Libra elsewhere out of America because its primary steps would not be allowed in Dollar territory.

Although not being reputed for protecting its users' privacy and information, Facebook claimed high security in transactions process and reported that users' financial transactions will not be stored on Facebook, but will be saved on another company of Facebook, called Calibra; so there is no link between Facebook and WhatsApp profiles to their financial transactions, and It is untraceable. Whereas David Marcus, head of the Libra project, in response to how to prevent money laundering in the system, says: "The Libra network is not the choice of criminals and money launders because the names in this system are aliases and are not anonymous or protected, so their choice will still be currencies such as Bitcoin and Ethereum" (Bloomberg, 2019). How can a system be untraceable and at the same time, prevent money laundering? Doesn't that implicate the expansion of America's strict regulation over the digital space?

Besides, another feature of Facebook that, despite all stated problems, reinforces the possibility of pervasion of its cryptocurrency is that all other digital currencies, until now, have lacked user-friendly design principles, and they were difficult to access. As a result of these defects, only certain people in the community used digital currencies, and It is an unfamiliar and strange concept for most ordinary people. Facebook intends to use its global reputation and pervasive social influence as a golden opportunity, and by leveraging the successful user interface experience in its current products, assures the community that using Libra would be as simple as using WhatsApp or Facebook.

Finally, despite Libra's monopolistic and authoritarian features, it can be said that the high technical capability of its coalition to speed up transactions and Facebook's large number of users, makes it possible to globalize Libra. It is not exaggerating if we consider Libra as a smart response of the American macro decision-making body to maintain political power and stabilize its superior economic position so that Libra will be a new form, this time globally, of the U.S. Federal Reserve. It should be noted that besides the current state, dominant digital currencies such as Bitcoin and Ethereum may continue to survive and keep up their features as such, distinguishing them from Libra; but the world financial transfers might be diminished gradually in favor of the U.S. emerging Dollar i.e., Libra.

5   Conclusion

First: if we consider these three policies as political strategies to maintain national sovereignty in the cyber-space or at least expand it beyond the physical control, unsurprisingly there is evidence of a relationship between AI technology application within the development of all-in-one local super-apps and the efficiency of regulatory interventions in terms of

reducing the market share of global tech giants; it means that the Chinese policy has proved a significant contribution either to its economy and political governance. Second: if we ignore the domestic market and suppose that alternative development has no side effect on policy outcomes at empirical level, the GDPR with its international authority must be regarded as an efficient policy through which the EU sought to cost escalation of any misuse or illegal conduct by global digital platforms. Additionally, some factors appeared more likely to be influential in the success and failure of a policy process, regardless of contextual characteristics:

- Stakeholder mapping and risk measurement of cyber-space policy
- Labor policy and societal coverage of those who work through foreign platforms
- Degree of political recognition for sharing economy

Apparently, the argument that social media would cease to be if tech-giants namely, Facebook and Twitter where all of the sudden to be restricted more than what is providing by current approaches such as European GDPR, have misunderstood the main point of this paper. As stated before, a data-driven governance response in this field allows coordination with technological narrowness and flexibility of the cyber-space arrangements consciously. For example, because it takes time and effort to conduct real-time investigation and fact-checking, it would be better to demote(downgrade) such contents in social media or to employ instant labeling for suspicious content of this type. The distinguishing feature of this algorithmic-regulation approach entails the use of technology to deal with the technologically produced misinformation in social media. Foregrounding a data-for-governance perspective, it moves beyond the common "Information Provenance", which almost surely will not lead to compelling results during the crisis, suggesting an intentional bias of algorithms in favor of public interest.

Acknowledgements

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