global POLICY

Governing a Globalised Digital Economy: How to Make Technology Policy and Regulation Work for Developing Countries

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Abstract

Harnessing the economic opportunities of digital technologies often requires changes in policy and regulation. Domestic regulation and policymaking alone are unable to deal with the multilevel interactions that take place in the governance of digital technologies. In an era of unprecedented levels of interdependence, measures that regulate the global digital economy at the regional and at the international levels are fundamentally important. Despite the growing need for international cooperation in technology policymaking, global governance is falling short of their tasks. In particular, multilateral institutions and formal mechanisms of coordination are not representative of the interests and policy priorities of low- and middle-income countries. Drawing on the findings of a recent study, this essay seeks to understand the relative importance of international coordination in technology policy in developing countries. In doing so, it addresses how low- and middle-income countries can design and adopt much-needed digital regulation while rethinking the international dynamics that shape domestic and cross-border technology policymaking.

Policy Recommendations

- Review of the current multilateral fora where digital regulation is being discussed to understand how current processes are serving – or not serving – the interests of different countries.
- Reform international rule-making bodies to ensure geographical and political representation, including developing countries with different policy priorities in the decision-making process.
- Foster regional cooperation and collaboration between nations with similar technology policy priorities, forging coalitions of like-minded countries, which are more likely to serve the interests of developing countries.

Introduction

The pandemic has 'put the spotlight on the digital economy and the importance of digital transformation', as recently stated by the Prime Minister of Ethiopia. But creating an environment in which firms, individuals and service providers can take full advantage of new digital technologies is not simple. Digital transformation often requires getting policy and regulation right. New analytical frameworks and decision tools are needed to move countries from an analogue past into the present and future of the globalised digital economy. Traditional policy - in areas such as competition, taxation, and intellectual property - is often ill-suited to deal with the multilevel interactions that take place in the governance of digital technologies. Without the appropriate policy and regulation, policymakers are left applying 'analogue' approaches to entirely new problems (Zanatta & Kira, 2018; Ranchordás, 2015).

But domestic policy and regulation can only go so far. No nation is a digital island and even as countries close their physical borders to prevent the spread of the virus, social and economic life remains globally interconnected through digital technologies. In an era of unprecedented levels of interdependence, measures that regulate the digital economy at the regional and the international levels are fundamentally important (Meltzer, 2015). There is a realisation that many pressing concerns of the digital age can only be effectively tackled by cross-border collaboration, which requires new global rules.

Yet, global governance is undermined. On the one hand, after decades of neglect and retrenchment, multilateralism and bilateral cooperation are in decline. The current decade has seen growing tensions between the US and China and the rise of nationalism around the world. The World Trade Organization's (WTO) dispute-settlement system has been paralysed by Trump's refusal to recruit new members to its Appellate Body. The current Covid-19 crisis has brought the World Health Organisation (WHO) under fire for allegedly having acted too slowly and failed to orchestrate a globally concerted response. On the other hand, there is an increased demand for international cooperation as major challenges of the 21st century will not be solved by countries acting alone (Hale, Held & Young, 2013). The world needs mechanisms to facilitate cooperation on issues ranging from technology policy, to global health, and the climate emergency. Faced with this deadlock, while it is unclear how formal institutions could be the genesis of governance solutions, many countries are actively pursuing national domestic policies to address frameworks for regulation which are strained by the digitalisation of the economy.

Drawing on a recent survey we conducted with experts from low- and middle-income countries (Phillips et al, 2020), this essay seeks to understand the relative importance of international coordination in technology policy in developing countries. Policymakers have been trying to balance a wide range of policy priorities while navigating, on the one hand, the weakening of the multilateral world order and, on the other hand, the interdependence of the global digital economy. It is not surprising, therefore, that our study found a general ambivalence about the role of international cooperation. For any given policy priority, international coordination was never identified as the most significant key barrier to success, and the

study revealed that local actors were considered to have the most formative role in policy decisions. However, other parts of the survey revealed that international coordination in general is critical to achieving technology policy goals. There was an apparent contradiction here: international coordination seemed to be both vital, and yet unimportant, except in a narrow range of areas.

In this essay we explore three possible explanations for this result. First, international coordination is a necessary but not sufficient condition for achieving their objectives, especially in light of relevant constraints at the domestic level and the fact that developing countries tend to prioritise issues related to promoting economic development. Second, developing countries are often considered 'agenda takers' (not 'agenda setters') (Woods, 2010), and so international coordination is only relevant for issues that are already on the international agenda. Third, in light of the limitations of large multilateral arrangements to address their priorities, low- and middle-income countries consider regional coordination or collaboration between countries with similar levels of technology development more effective avenues to advance their goals. We detail each of these possible explanations in the following sections.

Based on these explanations, we then propose ways to ensure developing countries can shape emerging international regulatory cooperation and harness it to support the development of their own domestic digital economy. This is particularly relevant as developing countries are already adopting frameworks for digital regulation and negotiating international treaties which include provisions related to digital. For example, a number of states, led by the United States, are pushing international rules to discipline national internet policies and support trade in digital goods and services (Azmeh, Foster & Echavarri, 2019). African governments also intend to negotiate the inclusion of digital trade provisions in their continent-wide free trade agreement, but there is a paucity of evidence to inform their negotiations (Jones, 2020).

First: pressing domestic constraints require the attention of policymakers

The first possible explanation for ambivalence in the findings around international coordination is simply the fact that it may not be the most binding constraint for achieving technology policy objectives. Our research suggests that developing countries are facing many domestic obstacles to advance their policy priorities - including political and technical obstacles. This indicates that while international coordination is undoubtedly important, there may be more pressing domestic constraints related to technology policy that currently require the attention of policymakers.

Furthermore, global policy issues are ever more entangled into domestic concerns (Hale, Held & Young, 2013) and international cooperation is increasingly focused on regulatory cooperation. As argued by Raustiala (2002), this sort of cooperation 'addresses domestic laws that, in a globalising world, have growing international salience'. It is no surprise, therefore, that our survey results showed that technological policy is mainly a domestic matter, but regulatory standards, best practices, and technical standards are the most important roles for international cooperation.

Technical and regulatory standards that work for different countries need to be in place to allow frictionless movement of

digital products and services across borders. Moreover, microservices, application programming interfaces (APIs), civic digital infrastructure, and other forms of interoperability reduce the costs and simplify the creation of new digital services. For example, for the creation of something similar to a societal platform - a shared digital infrastructure that governments, civil society, and the private sector could use to build apps and solutions.

However, it can be difficult for resource-constrained governments to develop and manage such tools alone. The results of our survey support this view. Technical standards and regulatory best practice were much more frequently selected as important by survey respondents (over 80%). This could indicate that many policymakers in developing countries would feel unprepared to address policy issues emerging from digitalisation due to the lack of guidance and institutions to address them. Indeed, governments with limited resources often have no alternative other than adopting proprietary technologies and becoming dependant on a particular standard, which could lead to problems in the long-term in case changes are required. For example, vendor 'lock-in' was identified as the biggest concern among African delegates tasked with rolling out national identification systems, who mentioned that the high costs and risks associated with switching providers were barriers to the adoption of more innovative solutions in the future. Furthermore, it could also be the case that if each country develops unique standards, the market and scalability of any new digital product will be severely limited. Not all developing countries are as big as India, which has been able to effectively develop and implement IndiaStack, which reaches 1.2 billion people.

It is also possible that only a small subset of issues identified as priorities can be solved or improved by international standards. For example, addressing the cross-border technicalities involved in cybersecurity networks requires international coordination, but laying out domestic telecommunications infrastructure may not. Our study revealed that the thematic policy priorities of policymakers differ between high-income countries and other countries. Those working in low- and middle-income nations are primarily concerned with issues more closely related to how digital technologies can affect economic development. Respondents from developing countries were more attentive to 'jobs and skills' and 'telecommunications and infrastructure', while those from high-income countries were more focused on managing risks around privacy, data protection, and cybersecurity. In other words, in developing countries the focus was more on harnessing economic opportunities and building out infrastructure. Thus, if these priority issues are not the areas that are amenable to technical and regulatory standardisation, then international cooperation would have little to offer in aggregate.

Second: asymmetric interdependence in technology policymaking limit the options available for developing countries

The ambivalence around international coordination can also be the result of power asymmetries in international governance of technology. The literature in the field suggests that emerging models of technology governance are now crystallising around a few centres of power, and in practice, developing countries have little influence over these international norms (Bache, Bartle & Flinders, 2016). Indeed, different state

and non-state players coexist and compete for influence in the technology policy debate. These players are linked through a complex network that transcend the borders of a single state. But they are not in an equal position. Some centres of power are still exerting disproportionate influence in the technology policy debate. Indeed, most norms and rules that govern the digital economy have been formulated either by private industrial actors, technical committees, or domestic policymakers in particularly powerful states or actors (Jackson, 2019).

The framework proposed by Farrell and Newman (2019) shows that global networks of informational and financial exchange generate enduring power imbalances among states. Being a central node in a global network confers a strategic advantage that they name ‘weaponised interdependence’, in which ‘the most central nodes are not randomly distributed across the world, but are typically territorially concentrated in the advanced industrial economies’ (Farrell & Newman, 2019). The US and other developed countries have been leveraging their position as 'focal points' of interconnected networks to achieve their strategic aims. While Farrell and Newman show the emergence of strong systematic inequalities in finance and information, similar patterns are now also materialising around digital regulation. Nations that are at the centre of these networks – whether they be financial markets, operational value chains, or information networks – are shaping digital governance across the world. And many of the world’s biggest private sector players are based in more developed countries, further increasing the comparative influence of high-income players in this debate (Jackson, 2019; McDonald & Mina, 2018).

In the context of the EU, Bradford (2019) calls it the 'Brussels effect', whereby companies adopt EU rules in order to be able to participate in the common market, and then impose them across their global businesses to minimise compliance costs. These rules are also often adopted by other governments to reduce friction in accessing international markets. A good example of the 'Brussels effect' is the European Union General Data Protection Regulation (GDPR), which is fast becoming a global standard for data governance (Bradford, 2020). Even though GDPR represents the European normative approach to personal data protection and embeds a particular set of values which are not universal, it is spreading worldwide – often clamping down conflicting domestic social norms and expectations around privacy.

One reason is that the European legislation has been shaping the terms of service and privacy policies of multinational companies such as Apple, another is because several countries have been enacting almost identical provisions as a way to ensure they are allowed to send and receive data from Europe (Yakovleva & Irion 2020). For example, it has been used as a model for privacy policy in many developing countries (Greenleaf, 2018), including the data protection legislation approved in Benin in 2018 and in Kenya in 2019. Smaller and less powerful developing countries have little heft to directly regulate these firms, and this affects their regulatory options.

But policy outcomes depend not just on states. International organisations, such as the WTO, the IMF, and World Bank (WB), can have significant influence in steering domestic policy (Slaughter, 2017). Yet these fora continue to be dominated by a small number of actors (Chenou, 2014; Gruber, 2000).

International discussions about technology policy are dominated by a small number of countries and based on the priorities of developed nations. Due to structural issues such as vote shares, as well as from informal norms, global institutions often do an imperfect job of representing the interests of developing countries, as documented in a long-standing body of literature (eg Woods and Lombardi, 2006; Agam, 1999; Vestergaard and Wade, 2013). It is little wonder that policymakers from developing countries do not see international coordination as a route to achieve their policy goals, when they have limited ability to set the agenda. As a result, emerging global norms are leaving behind the interests of billions of people living in middle- and low-income countries.

Third: regional collaboration and coalition of like-minded countries are more helpful than large multilateral arrangements

Finally, the relative importance of international coordination might be due to the fact that it is often associated with multilateralism which, for the reasons outlined above, is of limited use for developing nations. The failure of global governance, however, does not lead to the rejection of all forms of international coordination. Indeed, our research revealed that other forms of cooperation between countries, including regional bodies and coalitions of like-minded countries appear to be more useful for emerging economies.

This is supported by the literature. Alongside the phenomenon of the 'weaponised interdependence' described above, scholars have observed that the geopolitical order is shifting to greater multipolarity and growing number of interests (Hale, Held & Young, 2013). The relative hegemony of the US and other developed countries have been challenged by emerging global powers such as China, which has been extending its influence in the cyber agenda. It might be too soon to tell how this will affect the governance of digital technologies in the longer run, but the diffusion of power may favour coalitions of non-dominant countries. The move towards multipolarity could give less-powerful states the opportunity to have a voice in cross-border technology debates and to influence the development of these rules. The future of international governance, therefore, could be shaped around 'many constellations of states that will vary across fields and issues' (Roberts, 2017, p. 15).

While global institutions remain dominated by larger, richer nations, international coordination – through regional or other voluntary groupings – presents developing countries with an opportunity to exercise their voices and develop a governance model that works for them, especially where their interests align. For example, there are ongoing debates on the benefits that a deeper regional cooperation in Asia could bring to regulation, trade and investment finance, with larger impacts for developing countries (Chatterjee et al, 2020). From this perspective, it is unsurprising that a common theme revealed by our research was the interest in strengthening and consolidating coordination among regions and countries that have similar levels of technology development. Regional and sub-regional fora emerged repeatedly in our consultations as a solution to address the priorities of developing countries.

Indeed, regional fora are already delivering technical support tailored to the needs of their constituent countries. The United Nations Economic Commission for

Latin America and the Caribbean (ECLAC) has a digital agenda (eLAC) to develop a digital regional ecosystem through a process of integration and cooperation. Similarly, the Association of Southeast Asian Nations (ASEAN) is debating a Digital Integration Framework to promote inclusion in the region. The African Union and the UN's Economic Commission for Africa (UNECA) have proposed a Digital Transformation Strategy for Africa, thereby helping set a vision for a single digital market and avoiding potentially counterproductive behaviour of specific states. Another concrete example of policies to further integration is the Policy and Regulation Initiative for Digital Africa (PRIDA), which aims to create a more harmonised and enabling legal and regulatory framework across Africa, and to strengthen cooperation between national telecommunications regulatory authorities across the continent.

Looking to the future, regional coordination also has the potential to amplify the voices of smaller countries, as larger groupings would represent larger populations and markets than any one country alone. Countries will also find they have more common interests with countries in the same region and, as argued by Roberts (2017), situations of diffuse global power are likely to favour coalitions of like-minded countries. Thus, while there is still a long way to go to fix multilateralism, the future of international coordination on technology may increasingly be based on shared interests and priorities, and not only on geographical proximity or the agenda of powerful nations.

Conclusion: pathways for inclusive governance of digital technologies

Regulation of the digital economy will continue to grow in importance on the global agenda, and the resulting governance mechanisms will be pivotal for those seeking to make the most of the opportunities on offer. The intangible nature of digital technology means that many issues span across borders, demanding some level of coordination. However, for developing countries, the relative relevance of international coordination should be interpreted in light of pressing domestic concerns, power asymmetries in the international order, and the growing importance of regional and like-minded coalitions to address technology issues. Intense rivalries between the major players mean that a consensus is unlikely to emerge any time soon. Global institutions are unlikely to solve the problems of digitalisation for the poorest countries. There are, nonetheless, principles for coordinated action that could work in countries with varied institutional capacities and speak to developing country concerns.

First, many countries are already actively pursuing national domestic policies, rather than multilateral coordination, for a range of issues – not just digital governance. Rather than viewing this study as the definitive answer on what particular issues are important, it is more instructive to understand how current processes are serving – or not serving – the interests of different countries.

Second, any long-term solution to these issues will likely require a rethinking of the role and mandate of international bodies. Developing countries should be more and better represented at multilateral organisations setting technology policy. While smaller, regional, and more representative groupings are increasingly addressing technology policy, most global fora tend to be dominated by the same small number of powerful actors behind emerging international regulatory norms.

Rule-making bodies need to ensure geographical and political representation across the globe, but this will not be trivial. There have been multiple attempts to bring more representation to many multilateral governance institutions, but any fundamental changes will require working diplomatically, engaging with multiple stakeholders, and addressing competing interests.

Finally, developing countries can give a voice to their interests through coordinated action between like-minded states. Through regional cooperation and coalitions between countries with similar priorities, developing countries can leverage their digital assets and start developing models of cross-border regulation that work for them.

Since the study reported here was conducted, the technological landscape has continued to shift, and policymakers' priorities have been upended by the Covid-19 crisis. The pandemic could be an opportunity for governments in developing countries to design and adopt much-needed digital regulation while rethinking the international dynamics that shape domestic policymaking. These recommendations are starting points; countries must decide for themselves where they stand and how to act together, based on their specific context and goals.

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