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POLICY TO SUPPORT DIGITAL TRADE: LESSONS FROM TWO EMERGING ECONOMIES

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EXECUTIVE SUMMARY

This briefing explores policy experiences in the digital economy and digitalisation through a detailed study of two selected countries, Brazil and Indonesia. This critical analysis provides insights into how policymakers can regulate and deal with the challenges of the emerging digital economy. Overall, digital policy directions in these two countries have much in common. While both countries already have core digital regulation and infrastructure in place, policymakers are working to refine policy to ensure that it fits with the changing needs of the digital economy and digitalisation. Both countries are moving beyond market-enabling policies to focus on a number of strategic areas through interventionist policies, rather than allowing a relatively passive diffusion of technology and knowledge. Not all of these initiatives have been effective and some carry costs, but in certain areas they have been associated with more vibrant local sectors that are helping increase local economic value added.

Digital policies in Indonesia and Brazil have important implications for South Africa and other developing countries. The two cases highlight the need to combine regulations that enable the expansion of digital markets with more interventionist policies that build capacities in the digital economy and improve domestic value-added capture.

The two countries highlight lessons for digital policies for medium, small and micro-sized enterprises (MSMEs) and start-ups. For MSMEs, facilitating simpler access to platforms and providing simpler systems for tax and exports are key lessons. For start-ups, policies should move beyond solely encouraging digital start-ups to tackling the challenges encountered in scaling up those start-ups into larger sustainable businesses. Policies that promote domestic venture capital and encourage global linkages are crucial.

The two countries are also adopting a range of policies that aim to promote the localisation of activities by global digital firms through building domestic capacities and using domestic market access as leverage to attract higher value-added activities in the digital economy. To maximise leverage, regional integration to expand the domestic market is important. In both cases, the focus is on economically marginalised groups, as the digital economy is seen as a way to provide economic empowerment to these groups.

INTRODUCTION

Policymakers are working to develop policies to maximise the potential of the digital economy. A previous positioning paper explored the key changes occurring in the global economy and outlined overall policy directions.[2] This briefing expands on this work by exploring digital policy in two emerging economies – Brazil and Indonesia – that can provide comparative insights for South Africa.

Both are emerging economies with ambitious economic and social goals. As large and growing countries with young populations, they are important markets for global digital products and services. The countries also play a major role in regional and global forums and are important actors in debates on digital rules, cross-border data flows and interoperability.

COMPARATIVE DISCUSSION OF DIGITAL POLICIES[3]

Brazil

Overall, the state of digital adoption and digital use among firms and individuals in Brazil is relatively high when compared to the benchmarks of similar emerging nations. Policy is broad-based, with a strong focus on integrating more remote areas of the country, excluded groups and marginal firms.

In Brazil policy focus has shifted over time, from a narrower focus on information and communications technology (ICT) to a broader focus on digitalisation and the digital economy. Underlying this shift is a long-term and substantial investment in digital infrastructure that has led to the expanded adoption and widespread use of digital technologies by individuals and firms. The challenge that Brazil now faces is how to maximise the economic and social outcomes from engaging in the digital economy. It has looked to a range of policies as a way of maximising value. In areas such as e-commerce, various measures – both market supporting and more interventionist – have been crucial in supporting the growth of vibrant domestic sectors. It appears these two policy directions work well together in Brazil, guiding the presence of international digital firms and services in the country while supporting localisation and innovation in strategic areas.

Digital policies in Brazil are typically positioned in economic terms, but also tend to include some social focus, particularly in earlier Internet and broadband policies that looked to address issues related to poverty and digital empowerment. How these considerations are effectively embedded within digitalisation policy is still unclear. Some priority sectors are selected, such as health and inclusive cities, and other plans include a focus on MSMEs. However, further work may be needed to ensure that policy leveraging the digital economy is not only economically advantageous but also economically and socially inclusive.

Table 1 outlines more details of specific policy approaches, linking back to key policy objectives and areas.

Indonesia

The Indonesian government sees the digital economy as strategic to its efforts to modernise and meet the demands of a young population. Considering the scale of the Indonesian market, digital technology adoption is also an important opportunity for economic and social development.

Given its geography, with over 13 000 islands, Indonesia is focused on the physical and regulatory infrastructure of the digital economy. Key objectives in this area are to expand the market for digital products and services, in addition to achieving positive economic and social outcomes – especially for marginalised groups. Issues such as financial inclusion and connectivity of marginalised areas and groups are among the key objectives.

Indonesian policy often looks to provide support for domestic firms with what can be described as 'leverage maximisation'. In this approach foreign firms are persuaded or incentivised to localise. Elsewhere, the policy framework of 'go local' and the use of policies such as local content requirements are also seen as a way to leverage a large and rapidly growing domestic market. The use of more controversial policies such as data localisation is also an attempt to leverage the domestic market to either promote the local digital industry or force greater localisation by global digital firms.

Table 2 outlines more details of specific policy approaches, linking back to the key policy objectives and areas.

TABLE 1	KEY DIGITAL POLICY APPROACHES IN BRAZIL	
POLICY OBJECTIVE	POLICY AREAS	POLICY INSTRUMENTS
Enabling markets for digital trade	Digital infrastructure & regulation	• Supporting regional alignment of regulation as part of the intergovernmental strategy on ICT (e-Latin America and the Caribbean, or eLAC) • Updating digital regulation to align with needs, particularly e-commerce and payment rules (eg, the popular *Boleto* payment system) • Putting in place a large-scale broadband plan (*Plano Nacional de Banda Larga*) with strong inclusion focus • Moving towards more diverse digital infrastructure through support for Wi-Fi and 5G in recent plans
	Nurturing digital ecosystems	• Supporting e-commerce firms to reach international markets through partnerships with logistics and platform firms • Putting in place fintech rules that relax requirements for financial services, to broaden the diversity of the financial/payment ecosystem • Simplifying tax payments for MSMEs in Brazil through the *Simples Nacional* regime, which is particularly useful for e-commerce firms • Creating and supporting alliances and sectoral associations as part of policy creation and implementation
	Reducing 'disbenefits' of digital	• Exploring issues around market concentration in areas such as platforms • Enacting rules that reduce disbenefits in a number of areas, such as payments and ride-sharing • Installing data protection rules (in the process of being installed) • Dealing with taxation issues related to foreign digital firms mainly through taxing tangible aspects of the digital economy (eg, value-added tax, imports, payments)
Digital catch-up	Supporting technological linkages for firms	• Large-scale scheme to attract international research centres to Brazil as part of the *TI Maior* plan • Startup Brasil supports start-ups, but with particular emphasis on supporting linkages (eg, incubators, research and development, Silicon Valley)
	Learning and localisation of digital technology	• Taxes in e-commerce on international payments and imports • Target-based industry support for IT sector through tax relief • Extension of tax relief to digital firms (eg, data centres, cloud computing) • Local production certification used as part of procurement • Large-scale projects (eg 5G, broadband) that tend to use domestic resources and skills
	Leveraging benefits to the wider economy	• New *E-Digital* rules focus on key sectors in which to leverage technology (eg, agriculture, manufacturing) • Targeted tax relief to push leveraging in key sectors (eg, automation) • Digital inclusion plans support large-scale skills projects for youth and women • Support for open data at a government level

Source: Azmeh S & C Foster, 'Bridging the Digital Divide and Supporting Increased Digital Trade: Country Case Studies', GEG South Africa Discussion Paper, 2018 (forthcoming)

POLICY IMPLICATIONS FOR SOUTH AFRICA

South Africa faces similar challenges to those in Brazil and Indonesia with regard to the digital economy. The country is aiming to bridge the gap with more advanced economies in a rapidly changing landscape, but at the same time there is a need to ensure that digital policy is inclusive and new innovations are leveraged to achieve broader societal outcomes. This study holds key implications for South Africa.

TABLE 2 KEY DIGITAL POLICY APPROACHES IN INDONESIA

POLICY OBJECTIVE	POLICY AREAS	POLICY INSTRUMENTS
Enabling markets for digital trade	Digital infrastructure & regulation	• The Indonesia Broadband Plan (IBP) aims to provide more widespread fixed and mobile broadband connectivity and reduce the price of broadband • Palapa Ring Project – undersea and onshore fibre-optic cable network of nearly 22 000km to link the different islands • High Throughput Satellite to broaden Internet connectivity • The national payment gateway (NPG) aims to create an interconnected and interoperable payment system • In the future the NPG will function as a backbone for other government programmes (eg, cashless social support, financial inclusion)
	Nurturing digital ecosystems	• The E-Commerce Roadmap positions e-commerce as an area of high economic potential, supporting the expansion of e-commerce ecosystems • Improving access to 'traditional' credit to digital firms through revising regulations on risk to suit the business model of e-commerce • Encouraging alternative sources of credit through promoting venture capital and 'foster father' schemes • Tax measures to provide incentives for venture capital firms and angel investors and for investors in early-stage start-ups
	Reducing 'disbenefits' of digital	• E-Commerce Roadmap addresses the issue of taxation of domestic and foreign digital firms • Discussion of an 'e-commerce levy' • Active in global and regional forums on taxation of the digital economy • Studying the issue of monopolies in the online economy • Regulating ride-sharing apps
Digital catch-up	Supporting technological linkages for firms	• The '1000 Startup Digital' project aims to create 1 000 digital start-ups with a total value of $10 billion by 2020 • Funding for later stages of digital start-ups (series B funding) • NextICorn programme helps start-ups to increase number of unicorns
	Learning and localisation of digital technology	• Informal negotiations with global digital firms to persuade them to localise knowledge-intensive activities in Indonesia • Local content requirements applied to the digital economy and could be met though domestic apps or through investments in innovation • Studying data localisation measures
	Leveraging benefits to the wider economy	• 'Making Indonesia 4.0' focuses on advancing the industrial sector using technologies such as robotics, 3D printing, virtual reality/augmented reality, Internet of things and artificial intelligence • Using digital technologies to improve financial inclusion

Source: Azmeh S & C Foster, 'Bridging the Digital Divide and Supporting Increased Digital Trade: Country Case Studies', GEG South Africa Discussion Paper, 2018 (forthcoming)

Policy process

There are growing challenges regarding the forms of institutions used to deal with digital issues. On the one hand, cross-cutting policymaking processes are important to bring different stakeholders into the policymaking process. Digital issues are also by definition cross-sectoral, which requires coherent coordination mechanisms. On the other hand, dedicated units, departments and ministries can help build capacities and navigate the complex internal and external policymaking landscape. Given the often-competing interests in digital economy policy, particularly when more interventionist policies are introduced, the Indonesian approach of establishing high-level steering committees with direct involvement from the highest political level in the country (ie, the presidency) is a model that could be explored in terms of ensuring that key activities have sufficient social and political capital.

Regional governance is becoming an ever more important aspect of digital trade. National policymakers need to integrate regional considerations into their strategies. For example, in Africa, policy formation will be an important consideration in the integration between national strategies and the African Continental Free Trade Area. Furthermore, debates around the multilateral governance of the digital economy are taking place in different forums, including the World Trade Organization. Such debates will have important implications for national and regional digital industrial policies. Ensuring consistency between national/regional policies and those involved in multilateral debates is, thus, important.

Beyond policymaking processes, the cases of Brazil and Indonesia highlight the breadth of sectors and policymaking areas that the digital economy and digital trade encompasses. In developing and emerging economies, policymakers may be working with limited knowledge of the broader technological shifts taking place and the best practices in terms of digital policy. To ensure greater expertise in policy planning and implementation, the participatory approaches adopted by Brazil provide insight into effective processes at the policymaking level.

Policy development

While the details of policy implementation in South Africa are beyond the scope of this briefing, a number of policy lessons can be learnt from Brazil and Indonesia. Our analysis suggests that, like these two countries, South Africa would benefit from adopting a hybrid approach to digital policy – incorporating broad-based rules to support markets for digital trade and undertaking selective interventions for digital catch-up in strategic areas.

Enabling markets for digital trade

As in Brazil and Indonesia, policies to enable growth in digital trade are important to provide the framework for the expansion and wider participation in the digital economy.

- Given South Africa's current status, infrastructure regulation and development remain a priority. Consideration is also needed to ensure that current rules fit with the needs of the rapidly changing digital economy in areas such as payments and e-commerce.
- Enabling digital markets should be coupled with social development goals, including gender empowerment and economic opportunities for youth. Financial inclusion, for instance, can integrate marginalised groups into the economy and enable access to financial services.
- Providing support to South African digital ecosystems is important. This includes encouraging start-ups and moving beyond conventional policies around start-ups (eg, incubators) to examine areas related to the risk and cost of failure and challenges encountered in scaling up. For MSMEs, support in areas such as exports and international markets may be useful in guiding these firms to digitalise and grow in a more sustainable manner.
- There is a growing need to address some of the disbenefits of digital transformation. Important issues relate in particular to taxation of digital firms and the rules around use of data.

Digital catch-up

While firms build technology skills and innovate as part of their activities, more institutionalised schemes to

accelerate technology linkages, learning and technology are also important.

- The case studies highlighted initiatives that support linkages within the digital sector, particularly as part of start-up and incubator schemes. Building strategic external linkages to advanced digital firms is important in supporting social capital and skills. In both Indonesia and Brazil, building linkages with foreign venture capital is an important area.
- To promote domestic firms, various industry protection and localisation measures were used, including procurement, tax incentives and localisation rules. Some have proved quite challenging to implement, but targeted rules can be effective in driving core priorities.
- Promoting the localisation of activities by foreign digital firms has been used to strengthen capacities and national value added. In the two cases, policy was part of ongoing negotiations where subsidies and local market access were used as tools. These measures are controversial, but policymakers do see such policies as a core part of digital catch-up.

Interoperability considerations

The issue of interoperability is increasingly central to a range of policies at a national and a regional level; that is, policies that look to provide alignment and interconnection between digital systems, data and services for broader gains. Nationally, ensuring interoperability between different systems will create smoother flows of data and transactions that are central to digital trade. For instance, interoperability in payment systems has been crucial to allow agile and secure movement between fragmented financial services, government schemes and customers. Regionally, interoperability is important to facilitate cross-border exchange of data, financial services and products. Such interoperability is, thus, fundamental to expanding digital markets and facilitating the growth of regional digital economies.

Regional bodies are key to driving digital integration in areas such as e-commerce, data protection and cross-border regulation, and supporting the emergence of beneficial regional digital markets. At present, regional digital activities tend to fall within the direction of 'enabling digital markets'. Digital catch-up policy at a regional level could also be important in the future.

POLICY RECOMMENDATIONS

1. Policymakers should explore a combination of enabling market policy and more interventionist digital catch-up policy. Such an approach supports market entrance while accelerating growth in strategic areas. These two approaches can be complementary.
2. Underlying a vibrant digital economy are strong investments in broadband infrastructure and appropriate regulation. An emphasis on inclusion policies will lead to more broad-based benefits from the digital economy in the longer term.
3. To support local firms, digital ecosystem policy is a crucial consideration in grounding the benefits of the digital economy. This includes policy that supports the growth and scaling of start-ups, and the expansion of MSMEs that trade online.
4. Regional integration is growing in importance in terms of digital policy. Broader markets, interoperability and national-regional strategic alignments are key to expanding markets, attracting foreign firms, and increasing leverage vis-à-vis these firms.
5. As the 'disbenefits' of the digital economy become clear, policymakers need to legislate to reduce challenges in areas such as tax, data protection and the platform economy.
6. Digital catch-up policy provides an important direction for supporting digital growth. There is a broad range of potential catch-up policy instruments (eg, localisation, incentives, and national digital projects) that move beyond traditional industrial policy on one hand, and controversial digital interventions (eg, web blocking, data localisation) on the other.

ENDNOTES

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2 See Azmeh S & C Foster, 'Bridging the Digital Divide and Supporting Increase Digital trade Scoping Study', GEG South Africa Discussion Paper, 2018, https://www.africaportal.org/publications/bridging-digital-divide-and-supporting-increased-digital-trade-scoping-study/, accessed 2 November 2018.

3 For a more detailed discussion, see Azmeh S & C Foster, 'Bridging the Digital Divide and Supporting Increased Digital Trade: Country Case Studies', GEG South Africa Discussion Paper, 2018 (forthcoming).

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