

# EXPLORING POLICY TOOLS FOR PROMOTING DIGITAL TRADE

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## EXECUTIVE SUMMARY

The global economy is experiencing major technological shifts, with the rise of digital technology a key driver. These shifts are likely to intensify in coming years with new technologies such as artificial intelligence, cloud computing, and autonomous vehicles.

In this context, developing and emerging economies face a serious challenge. The digital economy – broadly defined as the use of digital technologies to facilitate business transactions such as production, exchange, and consumption, and encompassing e-commerce, digitally delivered services, online payments, and digital media, among others – provides an opportunity to leapfrog and achieve economic and technological catch-up through using digital technologies and building capacities in the digital economy. However, technological shifts also threaten to widen the technological divide, with advanced economies reducing further the value added in developing and emerging economies and making ongoing catch-up efforts ineffective.

## POLICY RECOMMENDATIONS

- 1 Digital inclusion of the population is important in building a vibrant economy. At the same time, it is vital to ensure that those who interact with digital products and services do so in ways that do not lead to uneven relationships with global digital firms.
- 2 Developing nations need to design and implement more coherent digital industrial policies to ensure that they are able to compete as GVCs digitalise.
- 3 There are two broad directions to policy that policymakers need to consider: a broader, market-enabling approach and a more focussed interventionist approach.
- 4 In the market-enabling approach, policymakers should provide favourable conditions for both local and foreign digital firms in order to expand while reducing risks and encouraging localisation of functions.
- 5 Policymakers should also consider more interventionist activities that actively shape digital economies in order to support the growth of local industries and reap wider benefits from the digital revolution.
- 6 Focusing digital policies on promoting weaker economic and social groups is essential. The focus should be on limiting the ‘disbenefits’ of digitalisation to these groups while promoting their economic position in the digital economy.

This policy briefing provides a framework for examining these opportunities and challenges in more detail. It highlights the overarching economic shifts taking place as a result of digital transformation, and then provides a framework for systematically analysing these policies, looking both at policies that support markets in enabling digital trade and at digital catch-up policies.

## DIGITAL TRANSFORMATION AND THE GLOBAL ECONOMY

Important technological changes are taking place in the global economy. The evolution and dissemination of digital technologies are causing significant shifts in the organisation of the global economy across different sectors. While such changes were initially felt in areas such as e-commerce, media, and entertainment, it is evident that these shifts are beginning to have cross-sectoral economic impacts. In addition to the continuous growth in e-commerce, we are today seeing major changes in a wide range of economic activities such as services, manufacturing, and agriculture.

Data is emerging as an important resource in this digitalised economy. There is a rapid expansion in the collection of consumer, mobility and industrial data in different economic activities. This is accompanied by advancements in data analytics, artificial intelligence, and other tools that are important for extracting more intelligence and value from data.

### DIGITALISATION AND GLOBAL VALUE CHAINS

Digitalisation is starting to have important impacts on the organisation of global value chains (GVCs) in a number of sectors. More products and services are being delivered digitally. In many cases, this can be seen in the entry of new digital actors into economic sectors based on the growing role of data. In other instances, new digital-based firms are providing services and developing partnerships with incumbent firms.

Organisational changes also alter the geography of these chains. Digitalisation promises to have important implications in terms of deciding where activities in the value chain will be conducted through technologies such as robotics and 3D printing. Furthermore, digitalisation could affect the type of skills needed

for specific activities in GVCs, which could also have implications for where these activities take place. Such dynamics could affect the degree of fragmentation in GVCs and lead to a narrowing down of these chains.

Digitalisation creates new resources through which value can be generated, with data and Internet intermediation the most obvious. Large economies of scale and the 'network effect' involved in the digital economy, especially at the platform/intermediary stage, also form barriers to entry and are leading to a rise in data and platform monopolies, with serious implications for the future of value chains.

### DIGITALISATION AND THE DEVELOPING WORLD

While these transformations are likely to have implications across the global economy, the nature of these changes will differ between countries according to the policies they institute. Countries that gain knowledge and control of these new technologies are likely to benefit from these shifts. Alternatively, countries that fall behind the 'digital technological curve' are likely to lose value added and see their global economic position weakened.

It is still an open question how digitalisation will affect development strategies in developing countries. Technologies such as data platforms, 3D printing and robotics could change the nature of GVCs, with global digital firms potentially crowding out domestic firms. New ways of digitally delivering goods and services across borders may also erode existing trade rules that protect domestic service industries from foreign competition.

While it is important to recognise the challenges created by digitalisation, there are also important opportunities. If the right policies are implemented, digitalisation can offer developing countries the chance to achieve technological 'leap-frogging' by adopting and disseminating digital tools. Growth in trade through digital platforms provides important opportunities to exporters in the developing world to expand into new markets, including export of services. Internet platforms offer an opportunity to micro, small and medium-sized enterprises (MSMEs) to participate in and benefit from international trade. This is particularly useful for a continent such as Africa, where 80% of enterprises are MSMEs. Such integration could offer significant

benefits to disadvantaged social groups, such as more opportunities for women-owned enterprises. Through regional digital integration, digitalisation could also offer an opportunity to re-orient the economies of developing countries away from a South–North dependency by increasing regional trade, including trade in services and small-scale trade.

To realise these opportunities, developing countries need to develop the digital capacities of their economies. This includes not only better connectivity but also greater participation in the ‘control and command’ aspects of the digital economy. The most dominant platforms and apps in Africa, for instance, are mainly owned by US and Asian firms, instead of by local ones. Similarly, human capacities in this field are heavily concentrated in the advanced economies, and skilled workers from the developing world often migrate abroad for better paying positions.

## DIGITAL INDUSTRIAL POLICY

Ongoing developments in digital technology are taking place not only because of market forces but also because of active digital industrial policies to support firms and build national capacities. The experiences of other countries can highlight prudent directions for developing-country policymakers.

The EU was relatively slow to respond to the economic shifts created by digitalisation. A key challenge the EU faces is the strong position of US digital firms in the European market, sometimes enjoying market shares that are higher than their respective shares in the US market. Stemming from this and the desire to promote European digital firms, there is now a range of European initiatives and policies in the digital economy. These policies range from efforts to enlarge the European market through removing digital barriers between different European economies to more active support for building European digital capacities.

China has adopted a different approach to digital catch-up. In many aspects, the Chinese approach resembled a classic ‘infant industry’ model by limiting market access to foreign firms and encouraging local firms to copy foreign technology. China was able to achieve this owing to its more integrated domestic market and the nature of its political system. As a result of these policies, Chinese firms such as Baidu, Alibaba

and Tencent (often referred to as the BAT) have emerged as powerful Chinese digital platforms. China has also managed to build an active and vibrant start-up scene.

## DIGITAL POLICY FOR DEVELOPING COUNTRIES

Following the examples set by the EU and China, this policy briefing highlights two general policy directions related to broader liberal strategies for enabling markets for digital trade and more planned approaches for pushing digital catch-up. The two directions are not mutually exclusive and could complement each other.

### ENABLING MARKETS FOR DIGITAL TRADE

Innovation in digital technologies, services and tools has typically been led by developed countries with advanced research and development capacities. For digital trade, the goal is to develop the national economy in order to support and maximise the impact of technological diffusion. Following recent work in this area, this approach can be subdivided into three important strands.<sup>2</sup>

- Regulatory shaping and infrastructure have long been a core area of policy in market-driven economies and are especially important in terms of attracting new investment.
- The notion of the digital ecosystem refers to a wider set of capabilities, organisation and support that can facilitate digital trade. For example, having functional payment ecosystems is essential for the effective operation of e-commerce in a country.
- The concept of ‘disbenefits’ emerges from recent observations that, as digital trade grows, it may have significant negative impacts. For example, labour transactions facilitated by platforms often lead to poor conditions for workers. This might require the introduction of specific rules or regulations to reduce such risks.

### DIGITAL CATCH-UP

One should also consider policies that accelerate digital trade through more rapid technology learning and localisation. Such approaches, being more

interventionist, are liable to require more political capital and occur within key strategic areas. Three policy areas are essential to digital catch-up policies.<sup>3</sup>

- Building technology linkage refers to the need for local firms to link and use new digital technologies, even if this is initially only for simple tasks. Access to new innovations and technologies then forms the basis for wider technology learning.
- In order to gain the largest benefits of digital trade, learning and localisation of digital technologies is a vital step. This moves countries from being passive

receivers of technology to being more active and innovative upgraders.

- The gains from the digital economy for local firms may be minimal, and skewed towards elites. Thus, leveraging digital technologies and services in the wider economy is key to scaling and extending digital activities.

As outlined in the discussion paper<sup>4</sup> and summarised in Table 1, we link these policy goals to specific policy instruments. How policymakers choose to pursue these directions in terms of policy instruments will depend on

TABLE 1 SUMMARY OF POLICY DIRECTIONS, FOCUS AND POTENTIAL INSTRUMENTS (BASED ON GLOBAL DIGITAL POLICY ANALYSIS)		
POLICY DIRECTIONS	POLICY AREAS	POSSIBLE POLICY INSTRUMENTS
Enabling markets for digital trade	Digital infrastructure & regulation	<ul style="list-style-type: none"> <li>• Ensuring regulation for broad adoption of digital technologies</li> <li>• Digital infrastructure investments</li> <li>• Digital inclusion policy and practice</li> <li>• Policy related to digital economy infrastructure</li> <li>• Payment infrastructure and regulation</li> <li>• Payment interoperability</li> <li>• <i>De minimis</i> considerations</li> </ul>
	Nurturing digital ecosystems	<ul style="list-style-type: none"> <li>• Supporting digital ecosystem firms</li> <li>• Promoting foreign digital localisation</li> <li>• Business–government policy interface</li> <li>• Government interfaces for firm rules and taxes</li> <li>• Advanced e-payment systems</li> </ul>
	Reducing digital ‘disbenefits’	<ul style="list-style-type: none"> <li>• Regulation for platform operation</li> <li>• Digital firms licencing in key sectors</li> <li>• Anti-monopoly rules</li> <li>• Data protection rules</li> <li>• Tax and fiscal rules</li> </ul>
Digital catch-up	Supporting technological linkages for firms	<ul style="list-style-type: none"> <li>• Supporting entrepreneur skills and linkages</li> <li>• Inducing foreign firm linkages and technology transfers</li> <li>• Encouraging diaspora investment and support</li> </ul>
	Learning and localisation of digital technology	<ul style="list-style-type: none"> <li>• Limiting international firms within sectors</li> <li>• Policy shaping of international/local firm balance</li> <li>• Instituting fiscal measures to support local firms</li> </ul>
	Leveraging benefits to the wider economy	<ul style="list-style-type: none"> <li>• Large-scale leveraging strategies in digital</li> <li>• Ad-hoc leveraging by technology</li> </ul>

Source: Authors’ research based on global review of digital policy. See also Azmeh S & C Foster, ‘The Digital Divide and Supporting Increased Digital Trade: Scoping Study’, Discussion Paper. Johannesburg: GEG Africa, 2018

local contexts, finance and politics. One key aspect that may influence decision-making is that some policies may facilitate broader development through MSMEs' involvement in digital trade, while others are more focussed on national economic growth and larger firms. Overall, digital policy should not be seen as a stand-alone but as part of a broader comprehensive economic and industrial strategy.

## CONCLUSION

This briefing has highlighted the significant changes that are taking place in the global economy. Digitalisation and the digital economy are impacting developing economies, changing patterns of production and consumption, and transforming GVCs.

## ENDNOTES

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- 2 Bukht R & R Heeks, 'Digital Economy Policy in Developing Countries', DIODE (Development Implications of Digital Economies) Working Paper, 6. Manchester: University of Manchester, 2018.
- 3 Foster C & S Azmeh, 'Digital Latecomer Economies and National Internet Policy: The Case of China', Paper presented at Internet, Policy & Politics 2016 conference, Oxford, September 2016.
- 4 Azmeh S & C Foster, 'The Digital Divide and Supporting Increased Digital Trade: Scoping Study', Discussion Paper. Johannesburg: GEG Africa, 2018.

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