INTRODUCTION: DIGITAL PLATFORMS, UNFAIR TRADE, AND COMPUTATIONAL COMPETITION

Gbadebo Odularu* and Caiphas Chekwoti*

Abstract: The existence of inequality between digital markets or technology companies, on the one hand, and their clients, on the other, underscores the inherent inequity characteristics of large technology giants or companies and the distortionary impact of their anti-competitive market powers such that incumbent digital platforms reap off millions of opportunities that could have been maximised by emerging or budding micro, small and medium enterprises (MSMEs) in Africa, especially in the creative industry. Thus, this chapter investigates the existence of trade malpractices and 'winner-takesall' behaviour on digital platforms in Africa, especially when these dominant online firms conduct themselves to exclude their rivals, thereby contravening national and continental competition laws in Africa. Retrospectively, the research finds that existing competition laws in Africa adopt a command-andcontrol approach based on the theory of harm rather than a computational competition methodology that is more forward-looking and adaptive.

Key words: network effects; contestable markets; switching costs; consumer privacy; unfair trade; personal data protection; consumer choices; market structure; Jumia Africa; Takealot; 'winner-takes-all'; discriminatory practices; exploitative treatment; harm theories; remedies

1 Introduction and the problem

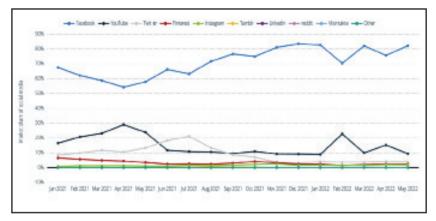
There is no gainsaying the fact that digital economies are rapidly shaping African markets, businesses, social media, politics and entertainment. Consequently, many African companies are modelled around Bitcoin, Spotify, Wikipedia, Airbnb, Alibaba and Facebook. As of May 2022, Facebook recorded the largest market share among social media platforms in Africa, reaching a traffic generation capability of 82,2 per cent, followed by YouTube at 9,4 per cent (see Figure 1). Though several interrelated

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factors increasingly influence Africa's trade landscape, the COVID-19 pandemic has accelerated the pace and the need to harness digitalisation, intelligent deals, and transformative technologies to enhance sustainable development.

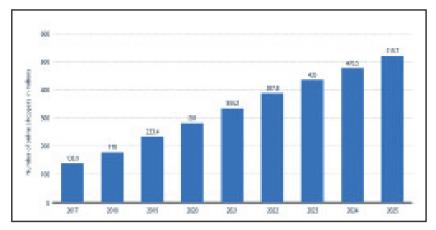




Source: StatCounter.

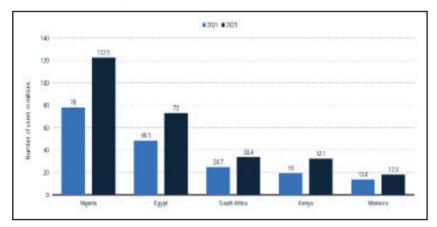
As the African digital economy evolves, more consumers and businesses operate in e-commerce clouds (see Figure 2, Figure 3 and Figure 4). Most of Africa's originated digital platforms are local start-ups such as payment providers, logistics or mobile application providers by providing local skills, but often with imbalanced relationships with larger platform providers, which share the future growth of these African-based digital platform actors or agencies. The figures respectively show the explosive growth of online shoppers, e-commerce users, and e-commerce penetration rates in selected African countries); there has been an uptick in the number and trends of anti-competitive practices such as abuse of dominance, price gouging, margin squeezing, predatory practices, price fixing, collusion, abuse of buyer powers, and cartelisation in the services sector, thereby undermining consumer welfare and the gains from trade.

Figure 2: Number of online shoppers in Africa from 2017 to 2025 in million users



Source: Statista, Statista Digital Market Outlook.

Figure 3: Number of e-commerce users in selected African countries in 2021 and 2025, in million users



Source: Statista, Statista Digital Market Outlook.

4 Chapter 1

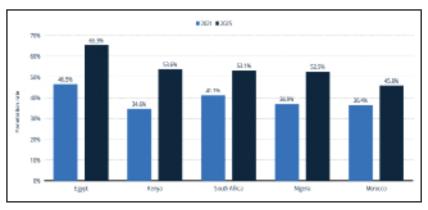


Figure 4: E-commerce market penetration rate in selected African countries in 2021 and 2025

Source: Statista, Statista Digital Market Outlook.

Africa's regulatory authorities are increasingly saddled with more statutory responsibilities of curbing the anti-competitive excesses unleashed through artificial intelligence, big data, and other disruptive technologies. Figure 5 presents the share of e-commerce in national gross domestic product (GDP), with South Africa ranking first, followed by Morocco and Nigeria at 56 per cent, while Egypt was at 40 per cent in 2020.

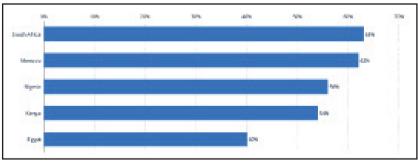


Figure 5: Share of mobile e-commerce in selected African countries in 2020

For example, Figure 6 presents millions of M-Pesa customers from 2017 to 2021. As M-Pesa, a non-banking application, is redefining the way East Africans transfer cash and pay for commodities, taxi-hailing applications are disruptive innovations by redefining how Kenyans consume mobility services while edging out traditional road transportation players. Furthermore, the East African Community (EAC) aviation sector

Source: PPRO.

comprises Rwanda Air, Precision Air, Kenya Airways and Uganda Airlines. EAC Competition Act for the aviation sector, as an example, promotes intra-EAC competition by fostering an open sky policy and competitive ecosystem for local market airlines originating from other countries such that consumers are always the most significant winners. Furthermore, the African Competition Forum (ACF) Eight-Member Cross-Country Study – South Africa, Kenya, Zambia, Nigeria, Angola, COMESA, Mauritius and The Gambia – presents the airlines market structure, alliances, state involvement, regulatory setting, and competition concerns confronting the respective Competition Agencies.¹ As Africa implements its African Continental Free Trade Agreement (AfCFTA) e-commerce Protocol and the e-commerce conclusions during the WTO Ministerial Conference (MC) 12, competition and data protection regulators should cooperate towards effective competition that will protect consumers' right to privacy.

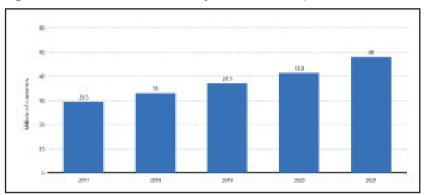


Figure 6: M-Pesa customer numbers from 2017 to 2021, in millions

Source: Vodafone.

2 Research objectives, methodology, motivation, and the structure

Typically, digital markets, trade facilitation, data infrastructure, and an enabling policy ecosystem foster innovation, productivity growth, and socio-economic outcomes due to the effective networking and information exchange facilities provided through digital platforms. Nevertheless, this story is slightly different in Africa (i) mainly because digital platforms also compound inequality; and (ii) partly because the major platforms

African Competition Forum (ACF). 'ACF Cross-Country Study on Airlines,' 2021. Available online at: https://www.compcom.co.za/wp-content/uploads/2021/10/ ACF-CROSS-COUNTRY-STUDY-ON-AIRLINES_amend-12.pdf (accessed 1 May 2021)

6 Chapter 1

and data providers sharing local digital economies are owned by large multinational enterprises that operate in the developed economies. Based on this background, the aims of this chapter are in two prominent folds. The objectives of the first fold are to (i) expatiate on the economics of digital platforms and the theories of harm from both market dominance and disadvantageous outcomes for consumers; (ii) analyse Africa's digital platforms within the legal context of fairness and contestability; (iii) identify and discuss cases of trade malpractices and 'winner-take-all' behaviour on digital platforms in selected African countries; and (iv) provide forwardlooking and adaptive remedies for promoting pro-competition practices in digital markets based on the theories of harm.

The second fold objective articulates the book road map, the rationale behind this book project, the summaries of each chapter, and the way forward. The increased attention by African competition authorities in digital markets and the preparedness of African governments for the future of digital markets motivate this study. The methods adopted in this study are descriptive statistical techniques as well as doctrinal research. While descriptive statistical methods analyse the growth and emerging trends in selected digital platforms' activities and indicators, it also presents some evidence of harm caused by incumbent digital platforms in Africa. The doctrinal research approach to this study focuses on a review of relevant literature on the theories and economics of digital platforms, trade malpractices and competition law. The analytically doctrinal approach includes some focused group discussions with selected officials from African countries' competition authorities that specialise in trade imbalances notifications on digital platforms.

Structurally, the second section introduces this chapter, and the third section presents the study objectives, methodology, and motivation. The fourth section discusses a primer on the economics of digital platforms, winner-take-all, and the theory of harm. Section five focuses on fairness and contestability within Africa's digital platform landscape. While the sixth section discusses a couple of trade malpractice cases on Africa's digital platforms, the seventh section presents the forward-looking remedies for correcting the trade imbalances and anti-competition behaviour of these incumbent digital platforms without dampening innovation. Finally, the eighth section presents and summarises every chapter in this book project.

3 Deeper into digital platforms' bargaining powers and winner-takes-all effect

By definition and for the focus of this chapter, digital or online platforms are websites, online or mobile applications (apps), operating systems,

digital assistant, or online services that (i) enable a user to generate content that can be viewed by other users on the platform or to interact with other content on the platform; (ii) facilitate the offering, sale, purchase, payment, or shipping of goods and services, including software applications, between and among consumers, and businesses not controlled by the platform; and (iii) enable user searchers or queries that access or display a large volume of information.²

The economics of consumer privacy protection, the equilibrium level of privacy and its welfare consequences depend on the mechanisms employed by two-sided platforms to mediate the exchange of consumer data, thereby determining the scale and granularity of consumer data intermediation. The critical driver of a digital platform's bargaining power is whether it is instrumental for a match between consumers or producers or enabling the match to occur under better complete information. Thus, the intermediary role of most digital platforms connects many users to commodities producers.³ The essential data-intermediation role requires a digital platform to generate information from multiple users, monetize it through multiple producers or firms of merchants, and lastly, consumers and producers may meet to create off-the-platform opportunities. A single platform may either increase consumer welfare if network effects are significant or welfare-decreasing due to higher prices or a reduction in platform variety.⁴

Platform Economics is increasingly shaping privacy issues into a social, competition, and regulation complexity such that the platform dimension of privacy and the dual role of digital platforms as gatekeepers of information and competition portends some socioeconomic challenges that require more a-platonic modeling approaches. According to Deutscher,⁵ digital markets comprise three distinct features: (i) the importance of multi-sided intermediary platforms; (ii) the prevalence of extreme economies of scale and scope, network effects, and market

- 2 Based on this definition of online platforms, they are also similar to core platform services which include (i) online intermediation services, which include marketplaces and app stores; (ii) online search engines, (iii) online social networking services, (iv) video-sharing platform services; (v) number-independent interpersonal communication services, such as WhatsApp; (vi) operating systems; (vii) advertising services; and (viii) cloud computing services.
- 3 A, Bonati. 'The platform dimension of digital privacy'. National Bureau of Economic Research (NBER) Tutorial on the Economics of Privacy. May 2023.
- 4 C. Farronato, J. Fong, & A. Fradkin. 'Dog eat dog: measuring network effects using a digital platform merger'. NBER Working Paper No. 28047. November, 2020.
- 5 E Deutscher 'Reshaping digital competition: The new platform regulations and the future of modern antitrust' (2022) 67 *The Antitrust Bulletin* 302.

tipping; and (iii) the presence of vertical or diagonal integration which shapes incentives accruable to incumbent digital platforms, as well as horizontal interaction among competing platforms, business users, and end users.

The importance of extreme returns to scale and scope, as well as network effects that increase the incentives of incumbent digital platforms to tip markets in an irreversible manner, is evident in the horizontal relationship between platforms. Invariably, and as markets tip in favour of digital platforms, they entrench their market power and generate monopoly profits via different monetisation channels. Based on this monopoly position, digital markets become more market dominant over time and threaten new or small enterprises from entering the market. By implication, these asymmetric dynamics empower an incumbent digital platform to spend more or sacrifice more profits to insulate its monopoly profits from potential competition than new entrants may be willing to invest in order to remain competitively viable in the market.⁶ Invariably, incumbent digital platforms possess huge incentives to eliminate horizontal competitors by engaging in exclusionary conduct or acquiring new market entrants, which largely explains why competition authorities investigate mergers and acquisitions before their approvals. Thus, manipulation by incumbent digital platforms.⁷ Lack of transparency in decision making and centrality of vertical integration considerably undermine competition in 'search', digital advertising and social media sectors while posing various harmful effects on consumers. If all these anti-competition excesses are not strategically curtailed, they transform an incumbent digital platform into a 'winner-take-all' player. In addition to the 'harm' inflicted on digital platforms and 'competing firms', the economics of digital platforms from consumers' perspective focuses on the misuse of consumer data and harm to their privacy. In a similar case, Liu, Brynjolfsson, & Dowlattabadi analysed the question: 'Do digital platforms significantly affect moral hazards or service quality, compared to traditional settings?' by analyzing trip-level data, and found that Uber technology platform and pricing scheme reduce driver moral hazard behaviour where taxi moral hazard return is high.⁸ In consistency with the agency theory, taxi drivers detour

- 6 E Hovenkamp & SC Salop 'Asymmetric stakes in antitrust litigation' USC Legal Studies Research Papers Series 20-12 (2020) 1, https://papers.ssrn.com/sol3/papers. cfm?abstract_id=3563843.
- 7 Digital platforms wedge power over upstream and downstream markets and other related markets, prices, and client traffic towards enhancing and attaining network effects. A good example is raising prices and harming consumers after eliminating a competitor.
- 8 M Liu, E Brynjolfsson, & J Dowlatabadi. 'Do digital platforms reduce moral hazards? The case of Uber and taxis'. NBER Working Paper No 25015. 2018. Available online

more relative to Uber drivers on airport routes, and especially among non-local riders.

4 Emerging trends in energising competition and consumer protection law enforcement: Fairness and contestability within Africa's digital platforms landscape

The increase in smartphone ownership and internet penetration has enhanced access to large quantities of personal data in Africa, thereby deepening the challenge of data theft and the dire need for data protection and privacy laws in the face of rife anti-competitive practices. According to the African Competition Forum (ACF) and the Competition Commission of South Africa (CCSA), digital markets, which include online intermediation platforms, are the fastest growing segment of African economies - South Africa, Egypt, Kenva, Mauritius, Nigeria, and so forth. Online intermediation platforms facilitate trade, business, and transactions between business users and end customers (B2C platforms) in the following areas: selling goods, services, software such as apps for business and household consumption, online classifieds, price comparator services, and intermediated services for food delivery, travel and accommodation. The leading platforms in South Africa are (i) Google search in general search (as an input to platform competition); (ii) Apple App Store and Google Play store in software app stores; (iii) Takealot in eCommerce; (iv) Booking.com, Google.com, and Airbnb in travel and accommodation; (v) Mr. Delivery and UberEATS in food delivery; (vi) Property24 and Private Property in property classifieds; and (vii) Autotrader and Cars. co.za in automotive classifieds. Since these tech-driven digital platforms advance much more quickly than most people anticipate, Africa needs more dynamic socio-economic and political structures, institutions, and paradigms to address these platforms' ethical and legal challenges. Jumia9 is Africa's number one e-commerce giant, with monthly visitors hitting around 32 million in April 2021. Takealot.com is Africa's second largest e-commerce zone, with an average of 10,5 million monthly visits, while the online retailer Soug, now Amazon, registered about 10 million visitors per month (see Figure 7). According to Statista's Digital Market Outlook report, due to rapid growth in internet penetration and accelerated digital transformation, Africa's e-commerce users are forecast to surpass the halfbillion mark by 2025.

at: https://www.nber.org/system/files/working_papers/w25015/w25015.pdf

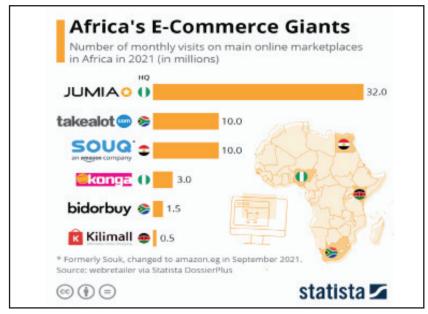
⁹ Jumia operates like multicrop Amazon because it sells pretty much everything from groceries to clothes, own food delivery service – Jumia Food – and hostel booking service, Jumia Travel.

The trade malpractices or unfairness on digital platforms are evident in the unequal relationship between businesses and dominant platforms and the need to implement a principle of a balanced exchange between the two sides. This captures the definition of fairness in that it should allow businesses to multi-home while offering their services via more than one platform, as the platforms are not allowed to give preference to their services at the expense of those of rival businesses operating through the same platform. Furthermore, indirect harm arises during unfair terms for business users of platforms, unfair access to consumers through platforms. and unfair restrictions on the use of alternative platforms.¹⁰ This largely explains why digital platforms are increasingly experiencing regulatory scrutiny, as Farronato, Fong, & Fradkin deployed a difference-in-differences approach to estimate if a single platform may enhance consumer welfare if network effects are large or may decrease welfare due to higher prices or reduction in platform variety.¹¹ The analysis revealed that consumers are, on average, not substantially better off with a single combined platform than with two separate and competing platforms. Furthermore, acquiring platform users benefited from merger due to network effects, while acquired platform users experienced worst outcomes.

¹⁰ N Dunne 'Pro-competition regulation in the digital economy: The United Kingdom's digital markets unit' (2022) 67 The Antitrust Bulletin 341-366.

¹¹ C. Farronato, J. Fong, & A. Fradkin. 'Dog eat dog: measuring network effects using a digital platform merger'. NBER Working Paper No. 28047. November, 2020. Available online at: https://www.nber.org/system/files/working_papers/w28047/w28047.pdf

Figure 7: Africa's e-commerce giants



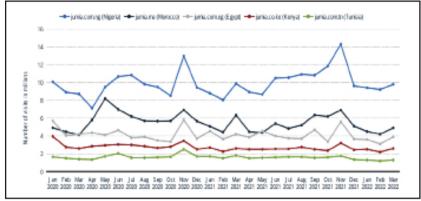
Source: Statista.

According to Monti,¹² contestability objectives would enhance digital platforms in Africa to achieve three outcomes: (i) allow the emergence of competitors to challenge the position of dominant platforms; (ii) achievement of platform disintermediation, thereby empowering digital platform users to opt to use some of the platform's services but may also in parallel utilise some of the services of other rivalry platforms; for example, a consumer may use a dominant Takealot e-commerce website but then interoperate easily to any of the Jumia domains, or businesses might sell via the Jumia e-commerce platform but see to receive payment using a service provided by another digital bank not provided on Jumia website; (iii) forbidding digital platforms from extending their market powers into adjacent markets and across a range of similar services stifle the emergence of competitors. Both Figure 8 and Figure 9, respectively, present the monthly number of visits to selected Jumia domains and takealot.com from January 2020 to March 2022.

12 G Monti 'Taming digital monopolies: A comparative account of the evolution of antitrust and regulation in the European Union and the United States' (2022) 67 *The Antitrust Bulletin* 40.

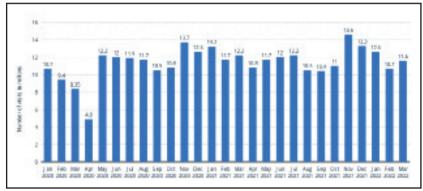
12 Chapter 1

Figure 8: Monthly number of visits on Jumia on selected domains in Africa from January 2020 to March 2022, in millions



Source: SimilarWeb.

Figure 9: Monthly number of visits on Takealot.com from January 2020 to March 2022, in millions

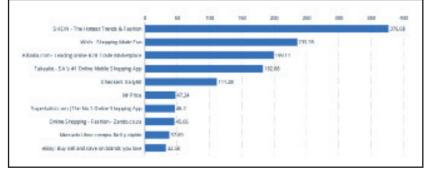


Source: SimilarWeb.

Despite being one of the largest, relatively tech-developed and infrastructure-robust characteristics, thereby boasting of a fair share of digital platforms compared to other countries in sub-Saharan Africa, South Africa still exhibits a highly unproductive government expenditure space, which has one of the worst income distributions in the world. In redressing this economic anomaly, the South African government manages an extensive social grant system where more than 40 per cent of the population receives social grants from the government, and 44 per cent of the government budget is spent on social development, thereby improving income distribution, but at an unsustainable approach.¹³

Theoretically and practically, digital platforms comprise two sides that need consumers on one side and business users on the other to function. Jumia Africa operates national office platforms in 13 African countries. Jumia Africa provides convenience for consumers through shorter shipping times, tailored payment options, local language interfaces, linkages with local industries and suppliers, and export promotions. Jumia Foods is the food delivery sub-enterprise of Jumia Africa. Furthermore, Jumia Foods, as e-commerce continues to attract venture capital funding, online grocers tap into cost-saving solutions for consumers as grocery prices skyrocket; meal kits regain popularity as consumers look for new and novel ways to prepare meals at home. In addition, increased venture capital activity, tech innovation, and environmental considerations have pushed food tech firms to grow at an unprecedented rate, where the ten largest industry deals of the decade are in food tech, thereby underscoring the need to examine Africa's food e-commerce drivers behind food tech's evolution, including the proliferation of app-based delivery platforms, consumer preferences, and venture capital funding. Figure 10, Figure 11, Figure 12 and Figure 13 present the most popular apps in Google Pay Store in the shopping categories in South Africa, Kenya, Egypt and Nigeria.

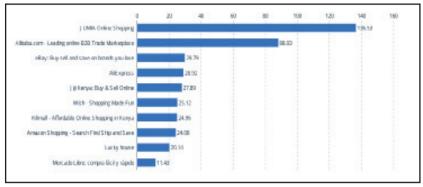
Figure 10: Most popular apps in Google Play Store in the shopping category in South Africa on July 2021, by number of downloads in thousands



Source: Airnow.

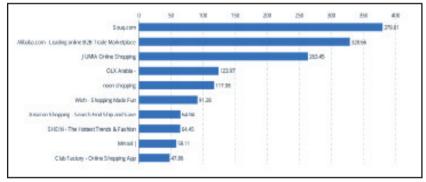
13 S Francois and others 'A fiscus for better economic and social development in South Africa' (2022), GTAP Resources: Resource Display: A fiscus for better economic and social development. (purdue.edu). 14 Chapter 1

Figure 11: Most popular apps in Google Play Store in the shopping category in Kenya on July 2021, by number of downloads in thousands



Source: Airnow.

Figure 12: Most popular apps in Google Play Store in the shopping category in Egypt on July 2021, by number of downloads in thousands



Source: Airnow.

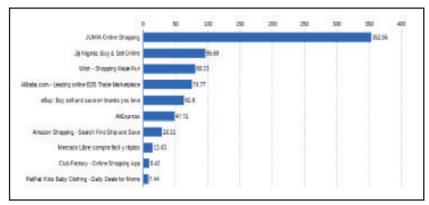


Figure 13: Most popular apps in Google Play Store in the shopping category in Nigeria on July 2021, by number of downloads in thousands

Source: Airnow.

Jumia Foods operate a two-sided digital platform in which well-defined tasks are remunerated with a fixed rate payment such that deliveries are paid not by the hour but on an agreed sum for the food delivery. This creates inequality from the perspective that the tasks performed are sufficiently well defined that a virtually complete contract is possible, and the only way that workers can be employed is through the platforms owned by a few firms. This means that the food delivery bikers have no real bargaining power. Furthermore, if a Jumia Foods worker objects to the terms, there will always be another worker to do the job. The worker who refuses the job will unlikely find better gigs on the Jumia Foods platform. One of the payoffs is pooling workers with free time, required skills, and other relevant equipment – with those willing to pay for completed service.

Nevertheless, a few platforms and many workers result in minimal pay for often onerous work. Further, workers face great economic insecurity and are not guaranteed a fixed schedule of hours and pay, nor do they receive health insurance benefits, maternity leave, holiday pay or pension contributions. If regular employment relations between employers and workers are characterised by incomplete contracts¹⁴ such that profit maximization drives employers to choose a merely acceptable contract that often does not bother to mention that a worker should work hard and well, talk less of a digital platform in which an employment contract does not bind a team member, thus subjecting the relations to increasing numbers of legal battles. This analogy defines the concept of reservation

¹⁴ Read Chapter five of this book for more information on 'incomplete contract' from digital trade perspectives.

wage, in which digital platforms pay limited wages because the workers do not need to be motivated by the workers to do the job - if it is not done, the worker will not be paid.

The transformation of the Nigerian fiscal space occurred with the enactment of the Finance Act 2021 (Finance Act or Act), which introduced an excise duty of N10 per litre on non-alcoholic, carbonated and sweetened beverages, fine-tuned tax law provisions about the taxation of the digital economy and increased the Tertiary Education Tax rate from 2 per cent to 2,5 per cent. However, some of the challenges in Africa's digital markets also include digital taxation distortions, as well as the need for national competition authorities to issue guidelines or new regulations to prohibit anti-competitive behaviour by leading platforms in online intermediation platforms, which aligns with the need for computational competition.

Digital platform inequity occurs when online platforms hinder competition among themselves, practice discriminatory and exploitative tendencies, and digital market action that may adversely impact the participation of MSMEs and historically disadvantaged persons-owned businesses. Given this, one of Africa's dilemmas is that digital platforms have generated fewer opportunities for the teaming unemployed youth in Africa.

After a very long wait and several failed attempts at the Nigerian national level to develop its very first competition law, the Federal Competition and Consumer Protection (FCCPC) Act was enacted by the National Assembly in December 2018 and subsequently signed into law in January 2019 to eliminate market distortions across all sectors. Notably, the FCCPC Act repealed the Consumer Protection Council Act, which dissolved the Consumer Protection Council. The FCCPC Act prohibits the abuse of a dominant position in any industry by any business undertaking, especially in this digital age.¹⁵ A good understanding of the antecedents of the Nigerian FCCPC as a legal framework governing competition issue in the country is crucial to the successful implementation and energising the enforcement of competition law on digital platforms.¹⁶

¹⁵ KPMG 'The Nigerian Government Federal Competition and Consumer Protection Act' (2022), https://assets.kpmg/content/dam/kpmg/ng/pdf/tax/ng-Federal-Competition-and-Consumer-Protection-Act.pdf.

¹⁶ F Ukwueze and others 'Connecting the dots in the legal framework for competition regulation in Nigeria' (2021) 47 *Commonwealth Law Bulletin* 231-250.

Digitalisation, e-trade, e-commerce, trade tech and digital technologies have broadened and deepened the scope and capacities of domestic, national, regional, continental, and global markets, and Africa is not left out. Consequently, regional laws such as Common Market for Eastern and Southern Africa (COMESA) Competition Regulations are strategically relevant to addressing cross-border markets-related challenges such as restrictive business practices, merger control, consumer protection, settlements and penalties. According to COMESA, nearly 5 per cent of Zambian businesses have permanently closed due to COVID-19 since early 2020, while more than 70 per cent of Zambian firms have been experiencing depressed demand for their products compared to the prepandemic period. About 70 per cent of firms experience disrupted inputs and outputs supply chains due to the pandemic.

The Treaty Establishing the Common Market for Eastern and Southern Africa (COMESA) recognises the need for competition law if the common market trade will be free and liberalised, culminating in the COMESA Competition's promulgation Regulations 2004 and the establishment of the COMESA Competition Commission. Fifty-four countries are currently signatories to the Africa Continental Free Trade Area (AfCFTA), and 41 of these countries have ratified the agreement. 16 of the 41 countries are COMESA member states guided by the Tripartite Agreement 1 competition Protocol. The AfCFTA agreement provides a competition protocol for attaining free and liberalised trade in Africa.

5 Trade malpractices in digital markets and COVID-19-related anti-competition cases

An increasing number of tech enterprises dominate different digital markets in Africa. Thus, the advantages of big data evolve towards vertically integrating firms that own digital platforms and compete with other sellers on that platform. Consequently, online digital platform owners access other sellers' information that they could use to their advantage, making vertically integrated firms incentivise self-preferencing by giving preferential treatment to their digital platform services over the services of other companies, thereby resulting in market dominance. While it is pertinent to note that competition cases in digital platforms sometimes struggle to compellingly demonstrate a distortion or absence of competition to establish concrete harm to consumers, some of the predominant narratives that have emerged in the African anti-competitive landscape are discussed below.

5.1 COVID-19 and health-related cases

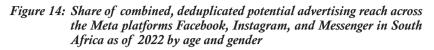
- In the case of price gouging by Tsutsumani Business Enterprises (TBS), which occurred during the COVID-19 lockdown, the Competition Tribunal of South Africa found TBS guilty of price gouging when it supplied 9 million face masks to the South African Police Service (SAPS) at the rate of R32,50 per mask, rather than R17,35 per mask.
- Second, the Competition Commission of South Africa (CCSA) investigated three labs Ampath, Pathcare and Lancet for charging exorbitant prices for COVID-19 and rapid antigen tests, and the labs agreed to reduce PCR tests prices from about R850 to no more than R500. In contrast, antigen test prices were reduced from R350 to R150.
- Roche Holding AG and its subsidiaries imposed excessive prices for Trastuzumab, a breast cancer drug, which resulted in about 10 000 breast cancer patients being unable to afford the drug between 2011 and 2019. Most of these patients are poor women, and thus the CCSA referred Roche Holding AG's matter to the Competition Tribunal of South Africa, which led to a 10 per cent fine on Roche and its subsidiaries' annual turnover in South Africa.

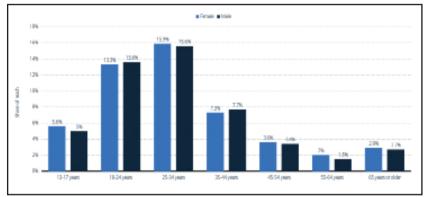
5.2 Trade facilitation-related anti-competition and coded biases cases

Predatory behaviour in digital lending space: The Competition • Authority of Kenya (CAK) conducted a study and found that only 27 per cent of digital borrowers were aware of the fees and costs of other digital loan providers, and more than 70 per cent failed to pay their loans as scheduled. Consequently, CAK mandated disclosure of loan terms and compelled mobile digital lenders to disclose their terms before disbursing loans to borrowers, thereby making the digital lending space more transparent and accountable. Similarly, the Federal Competition and Consumer Protection Commission (FCCPC) developed a regulatory and registration framework and guidelines to guide digital payment platforms and the comprehensive processes for publishing new digital money lending apps on app stores. FCCPC's aim of suspending harmful businesses from using the payment gateway services, freezing bank accounts and payment platforms of digital money lenders, and ordering app stores to draw down specific applications will contribute to eliminating unethical money lending businesses.

- The Competition Commission of South Africa (CCSA) has restricted the abuse of buyer power to a few sectors, namely, grocery wholesale, agro-processing, retail, e-commerce, and online services. CCSA establishes that a player is dominant if it controls more than 45 per cent of the market.
- The Competition Commission for the Common Market for Eastern and Southern Africa (COMESA) – (CCC) launched an inquiry into the joint Safaricom's interest in Ethiopia to assess whether the joint venture will substantially prevent or lessen competition in the regional market. Subsequently, Safaricom Ethiopia joint venture paid the International Finance Corporation (IFC) a transaction fee of US \$4 million for new market entry services. Thus, the venture is set to launch operations in August 2022 in the city of Dire Dawa and accelerate to 24 other cities, including Addis Ababa.
- South Africa's online platform GovChat comprising about 9,2 million active users and approximately 630 million messages, accused WhatsApp of dominating and anti-competitive practices. Figure 14 shows the demographics of advertising reach across the Meta platforms in South Africa. In March 2022, CCSA referred the Tribunal to prosecute Meta and its subsidiaries (WhatsApp and Facebook) for abusing their dominance through a threatened offboarding to GovChat.¹⁷ There is palpable unfairness in online access among dominant global players – WhatsApp, Telegram, and so forth. For instance, Google's Play Store excludes new, innovative, and rival search engine apps like in the case of Chooya, a Nigerian start-up that intends to provide search services to off-internet people, especially in rural and remote geographies in Africa.

¹⁷ In November 2020, and an exclusionary act as prohibited under South African competition law, GovChat complained to CCSA that WhatsApp abused its dominance by threatening to off-board GovChat ... the CCSA also found that the terms and conditions ... are designed to shield and insulate Facebook from the potential competition, such as the potential competition presented by.... GovChat..'





Sources: Hootsuite; We Are Social; DataReportal; Meta Platforms.

- The Federal Competition and Consumer Protection Commission (FCCPC) concluded pieces of evidence on the anti-competitive and distorting practices of cartel oligopolies in Nigeria's shipping and freight forwarding industry.
- Based on financial, technology, expertise and intelligence resources at their disposal, conglomerates collude dominantly across markets by imposing 'harmfully' political power on markets to the detriment of (i) consumers and (ii) small and medium-sized players. Looking at the anti-competitive roles of national and regional conglomerates within the AfCFTA, SADC, COMESA, and ECOWAS contexts is crucial. Take, for example, the distorting behaviour of South African conglomerates in Southern and Eastern African energy, aviation, telecoms, digital platforms, and financial markets, as well as the possible anti-competitive behaviour of Nigerian conglomerates in the West African regional economy. The Dangote Group remains a dominant conglomerate in Nigeria and West Africa's pasta, gas, sugar, flour, cement, steel, salt, and oil sectors.
- Come October 2022, Africans and the world await the outcome of the Online Intermediation Platform Market Inquiry being conducted by the SACC on (i) the protection of journalism and its funding in South Africa; and (ii) platforms such as Google and Meta should compensate publishers fairly for journalistic efforts. This may result in developing a South African law that would force technology giants to pay for the news that appears on their feeds. In the case of media, content creation or generation, and journalism, all media and creative

enterprises in Africa need Facebook, Google, YouTube and Netflix, among other platforms, because these big techs have intermediated themselves between African journalists and their African clients to the financial advantage of the big techs, and the demise of local creative and media enterprises. This represents a classic case of market failure in that local journalism represents a community and justifies it as a public good from which we all benefit.

6 'Media Code' lessons and forward-looking remedies: Computational competition

As Africa's digital economy evolves, more African countries such as South Africa, Egypt, Kenya, Nigeria, Mauritius and Tanzania are sharpening their competition laws and authorities to prepare for the future of digital markets, for instance, South Africa's Competition Act 89 of 1998, Egypt's Law on the Protection of Competition and the Prohibition of Monopolistic Prices, Law 3 of 2005, and Nigeria's enactment of the Federal Competition and Consumer Protection Act of 2019 (FCCPA). However, more harmonisation efforts are needed as Africa implements its AfCFTA and TFTA, thereby avoiding duplicity of interventions in the face of meagre resources. About 14 African countries do not have a competition law, and a further nine have rules that are yet to be operationalised and not enforced. One of Africa's active regional competition authorities is the COMESA Competition Commission (CCC). However, its capacities need to be enhanced to meet its mandates, especially in comparison with the more advanced South Africa Competition Commission. In a famous example of the 2017 Bayer-Monsanto merger in the seeds and fertilisers markets, the CCC's decision was barely two pages long, the competition analysis was two single-sentence paragraphs, while the Competition Commission of South Africa articulated significant anti-competitive reasons and ordered divestments to protect relevant markets.¹⁸

According to Dunne, traditional competition law tools will be insufficient to address the identified competition behaviour of digital platforms.¹⁹ There is an increasing need for more out-of-the-box regulations, enforcement of competition in online markets, and data protection law facilitation. Africa's competition authorities should sharpen their continental collaborative strategies to focus on the impact of algorithms while enhancing the transparency of digital platform activities and how these platforms protect consumers and businesses from potential harm. Furthermore, Africa's competition authorities should re-calibrate

¹⁸ E Fox & M Bakhoum Making markets work for Africa (2019) 136-139.

¹⁹ Dunne (n 7).

their operations based on seven thematic areas: organisational, regulatory capacity, data protection, regulatory coherence and enforcement priorities, advisory policy role, entrenching the culture of enterprise risk management (ERM), business continuity management (BCM) and, finally, collaboration with regional competition agencies.20

Thus, a more strategic approach is needed by the African Union (AU) Commission, the AfCFTA, the African Competition Forum (ACF), the Economic Community of West African States (ECOWAS) Regional Competition Authority (ERCPF), the East African Community Competition Act (EAC Competition), and COMESA-CC (CCC) leadership towards regulating online platforms and computational competition may be a way forward. Africa should improve its competition law articulation and enforcement, especially in clipping the anti-competitive wings of technology-related firms and businesses. More importantly, AfCFTA aims to foster MSME expansion due to their current contrition of 80 per cent of Africa's employment and 50 per cent of Africa's GDP. CCC and AfCFTA should create a level playing field for all businesses, especially MSMEs and MSMEs owned by historically disadvantaged people (HDPs). Thus, more nuanced and sophisticated approaches should be deployed to prepare Africa for the future of digital trade platforms.

According to the CCSA, digital platforms require a differently unique approach and mind set as a result of some innovations such as first-mover advantage, data accumulation, network effects, data privacy concerns, and rapid expansion of one large dominant global platform that transcends Africa's digital economy and its national borders. Since competition and data protection issues overlap in digital platforms, national and regional cartels forensic and bid-rigging detection labs should be established to develop appropriate tools for detecting digital cartels, assess the effects of cartels, investigate both small-scale, domestic and global acquisitions, including investments in start-ups, and analyse cases of digital collisions that may undermine Africa's economy. Thus, competition policy will have to play a more dynamic role in the context of leveraging digital platforms' network effects and their implications for creating and capturing value in African economies.²¹

²⁰ VK Kigwiru 'The cooperation on competition policy under the African Continental Free Trade Area' (2020) 17 Manchester Journal of International Economic Law 98-121, https://www.electronicpublications.org/stuff/777, SSRN: https://ssrn.com/ abstract=3591015 or http://dx.doi.org/10.2139/ssrn.3591015.

²¹ UNCTAD 'Digital economy report, 2019: Value creation and capture: Implications for developing countries: Digital Economy Report 2019' (2020), https://unctad.org/ system/files/official-document/der2019_en.pdf.

Rather than adopting a command-and-control approach, ACF competition enforcement and regulatory leadership should learn from the Australian Competition and Consumer Commission (ACCC)'s investigation, which resulted in the News Media and Digital Platforms Mandatory Bargaining Code (Media Code) that was formally approved on 2 March 2021, and legislated that tech platforms to negotiate prices to pay news publishers for their contents. Similar competition interventions are being considered in Canada, the United Kingdom and the European Union (EU), where copyright protections are extended for news publishers requiring tech platforms to pay for displaying news feeds beyond a primary Uniform Resource Locator (URL).

Regarding country specificities, furthermore, the workable practicality of competition law in Nigeria requires the appreciation of the two distinct areas of the law – competition, on the one hand, and consumer protection, on the other.²² In addition, Nigeria should take lessons from the South Africa Competition Act 89 of 1998 and the Consumer Protection Act 68 of 2008, where regulation and enforcement remain separated while emphasising the welfarist competition legislation approach in enhancing equity without necessarily admitting 'efficiency' considerations.²³

Although the COVID-19 pandemic affected the timely responses of legal obligations under different competition regulations, part of the responsiveness of the regulation with numerous requests from parties should extend the timelines for submitting merger filings occasioned by information collection and collation delays. In a similar vein, competition authorities in South Africa, Egypt, Mauritius, Kenya and Nigeria cooperate on competition policy enforcement, together with the African Competition Forum's support through cross-country study into the competitive dynamics of various African economic sectors. The aim is to gravitate towards a converging continental approach to competition laws, policies and principles.

The fact remains that mere regulatory responsiveness via competition law alone is grossly insufficient to rein in the powers of digital platforms because of the expensive and time-consuming enforcement nature it requires of competition agencies to prove the likely consumer welfare losses effects of Google, Amazon, Facebook, Apple and Microsoft

²² E Okiche & A Okiche 'The balance between equity and efficiency: Reflections on the goals of the new Nigerian competition law' (2020) 46 *Commonwealth Law Bulletin* 331.

²³ S Tavuyanago 'The interface between competition law and consumer protection law: An analysis of the institutional framework in the Nigerian Federal Competition and Consumer Protection Act of 2019' (2020) 27 South African Journal of International Affairs 391.

(GAFAM)'s conduct.²⁴ For instance, it took the European Commission six and a half years to investigate Google's practice of favouring its own shopping services by positioning and displaying search results from its own service in a more eye-catching manner in the Google shopping saga.²⁵²⁶ Computational competition methodologies²⁷ have great relevance for the operationalities of digital platforms and the application of competition laws in regulating mergers in the increasingly digitalised African economy.²⁸ The interpretation and application of the COMESA Competition Regulations and the COMESA GAFAM Competition Rules should be revisited and revised as the ecosystem within which it operates evolves. For instance, the Competition Law Protocols for the AfCFTA, and the Tripartite Free Trade Area, dovetail into the practice and workability of economic regulation principles, regional competition dynamics, and enforcement in light of the AfCFTA. In this regard, balancing market efficiency with equity is key to operationalising this balance in the evolution of COMESA's competition law while taking only strategically adaptable lessons from the European Union.

In February 2022, South African, Egyptian, Mauritius, Kenyan and Nigerian competition authorities discussed a unified and collaborative approach to enhance their readiness, conduct rigorous research, and share investigations intelligence for overcoming the anti-competitive tendencies of the continental digital economy, significantly as Meta, Google, Apple, Amazon, and so forth, evolve, thereby speaking with one voice for the continent and in the interest of AfCFTA. From a more optimal intervention perspective, commission authorities' regulations will be most effective in addressing trade injustices if they are more targeted at the different models adopted by digital platforms and GAFAMs. In other words, the episodic regulatory dialogue approach to taming digital platforms and data portability and interoperability methods is more effective than the current deterrence-based approach, which most competition authorities currently adopt.²⁹ In other words, regulatory remedies should be digital platform

- AC Witt 'Taming tech giants' (2022) 67 The Antitrust Bulletin 187.
- 25 AC Witt 'Who's Afraid of Conglomerate Mergers?' (2022) 67 *The Antitrust Bulletin* 208-236.
- 26 Case T-612/17Google and Alphabet vs. Commission (Google Shopping), ECLI: EU:T:2021:763.
- 27 Computational Antitrust is an initiative of the Stanford Computational Antitrust. It is based on the analogy that legal informatics and computational law can foster the automation of antitrust procedures and improve antitrust analysis more generally.
- 28 T Schrepel & T Groza 'The adoption of computational antitrust by agencies: 2021 Report' 2 Stanford Computational Antitrust, 78 (2022), VU University Amsterdam Legal Studies Paper Series, https://ssrn.com/abstract=4142225.
- 29 G Monti 'Taming digital monopolies: A comparative account of the evolution of

specific because digital platforms often operate hybrid business models due to their vertical and diagonal integration characteristics and expand into the neighbouring marketplace by providing upstream, downstream, or complementary services.³⁰ In other words, Africa's competition regulation responsiveness should challenge conventional wisdom where false positives of competition law enforcement are more costly than false negatives based on an error-cost framework recalibration that perceives that digital markets' anti-competitive harm probability and magnitude may be greater than usually assumed by conventional competition law literature.³¹ For example, although pro-competition is the desired outcome, the overt pro-competition regime is neither the only nor necessarily the best regulatory instrument to foster competition in digital markets.³²

7 The book's roadmap: Futurity, Africa's postpandemic preparedness and trade facilitation innovation

Drawing on a diverse set of empirical contexts as Africa's trade landscape and digital economy is increasingly fraught with rising inequality, stagnant productivity, socio-economic fragility, and environmental extremes, every chapter in this book provides in-depth, cutting-edge and strategic bits of advice for understanding the future of trade innovation, including one health, diversification of economies, jobs, resilient food systems, sustainable platforms, linking farmers to markets, digital financial innovation, leveraging the private sector and post-COVID-19 recovery.³³ Moreover, ethnic conflicts, cross-border relations mistrust, trade disputes among vulnerable populations, and unsustainable commercial ties still persists among African businesses. The combination of regional trade dynamics, digitalisation, interdisciplinary scope and legislative parameters are the main strengths of this book. Compared to earlier research, this publication frames Africa's trade facilitation policy within a global context. While Africa's perspective is the most predominant, case studies

antitrust and regulation in the European Union and the United States' (2022) 67 *The Antitrust Bulletin* 40.

30 SP Anderson & Ö Bedre-Defolie 'Hybrid platform model' CEPR Discussion Paper DP16243 (2021), https://papers.srn.com/sol3/papers.cfm?abstract_id=3886686.

- 31 Deutscher (n 3).
- 32 Dunne (n 7); M Lao 'No-fault digital platform monopolization' (2020) 61 *William and Mary Law Review* 755.
- 33 JC Basques de Oliveira 'COVID-19 immunisations and health services and systems: The way forward' *Collateral Global* 30 June 2021, https://collateralglobal.org/article/ covid-19-immunisations-and-health-services-systems-the-way-forward; 'Interruption of childhood vaccinations in Mozambique' *Collateral Global* July 2021, https:// collateralglobal.org/article/interruption-of-childhood-vaccinations-in-mozambique.

are presented from East, West, Southern, Central, North Africa, and so forth. This subsection summarises the chapters discussed in this book based on this background.

The book explores the legal perspective and trade facilitation dimensions of the current trade relations and issues within Africa. It also assesses how proactive, legal, fair, digital, and sustainable trade strategies could boost post-COVID-19 business and investment volumes. direction and composition in this decade. Of great relevance is the need to understand how communication technology, physical infrastructure and information remain critical components of sustainable trade policies towards reaching across legal borders, enhancing tradability among consumer markets, fostering cooperative agribusinesses among small and medium-scale producers, and facilitating socio-economic recovery as well as trade trajectory in Africa, especially within the AfCFTA framework. In other words, this research will analyse the socio-economic impact of COVID-19 on trade, investment, and business relations. This situation also includes implications for how we should be better prepared for future socio-economic shocks, trade facilitation innovation, and geopolitical repercussions for African governments.

The research methodologies adopted by the different chapters of this book include socio-scientific approaches, including media content analysis, in-depth stakeholder interviews, deliberative workshops, comparative interpretive methods, epistemological studies, and other social science methods, which were adopted to investigate the emerging scientific study on deploying legal instruments and trade facilitation innovations for Africa's preparedness for post-pandemic socio-economic recovery. The simulation and systems science intervention approach supports investigative and collaborative research focusing on understanding and addressing the implication of AfCFTA on the minority and vulnerable traders and trading associations. It also engages critical actors to provide an assessment of findings and deliberate on inclusive AfCFTA. Overall, this book project contributes to the theory and practice of responsible research, innovation, and scholarship in technoscientific studies on the governance of trade-related aspects of generative artificial intelligence (AI), competition policy, and trade facilitation innovation in Africa.

Although competition law themes emerged in classical economics, digital markets are bringing to the fore older research and making them refreshingly relevant. The first chapter of this book delivers a revelatory examination into the largely elusive category of digital platforms, trade malpractices and regulatory responsiveness in Africa. It investigates the essential and recent research developments related to Africa's competition authorities' preparedness for the future of trade facilitation innovation in the digital age. It also highlights forward-looking remedies to enhance Africa's capacities to maximise gains from digital trade platforms despite the current anti-competitive practices characterising selected globally large digital platforms.

Chapter 2 discusses hidden asymmetries and how traceability, crypto-labelling and ethical property rights could enhance trade. This chapter examines the implications of information asymmetry on trade facilitation in Africa and how a better understanding of adverse selection, moral hazard, and principal-agent problems can resolve it. We proposed explaining how and why crypto-labelling will help advance traceability and trade facilitation in Africa under an appropriate intellectual property rights (IPR) regime. Furthermore, this paper presents a conceptual framework that provides a theoretical framework on how the prisoners' dilemma (tit-4-tat, indefinite game, repeated game), opacity in trade, creation of incentives, cross-border services, and a pandemic such as a COVID-19 – face masks and vaccines, creates fragility in regional and global trade. We posit that the legal trade framework is not necessarily ethical based on our inductive and deductive reasoning, and policymakers should be cognisant of this challenge.

The third chapter utilises Kenyan, Tanzanian and Ugandan data to assess the role of human resource management (HRM) practices in firm innovation and product competitiveness and its implications for intraregional trade in East Africa. This chapter provides insights into the link between HRM and firm innovation as a strategic response to foster product competitiveness for three East African countries, namely, Kenya, Uganda and Tanzania. The chapter utilises a detailed firm survey dataset conducted by the World Bank through their enterprise surveys programme during 2013-2014 in three EAC countries – Uganda, Tanzania and Kenya. The preliminary findings from the paper highlight the facilitative role of HRM practices on firm innovation in products and processes. Finally, enhanced product competitiveness attributed to innovative firms fosters increased intra-regional trade. The facilitative role of HRM reinforces the relative importance of skill development policies that support firms in their innovation path.

In today's global, congested marketplace, the concept of geographical indication (GI) is one instrument to achieve gender equality, inclusivity, and equity form of globalisation that expands trade capacity, especially for women and youth. The concept of 'geographical indication' refers to an intellectual property right recognised by the legal bodies of various countries and international organisations. It identifies and protects products in a specific geographical area of which the characteristics and reputation are essentially linked to their territorial origin. Based on this background, this chapter presents a detailed understanding of the role of GIs in gendered trade capacity by critically examining the concept of GIs in gendered trade capacity in Africa, including the GI conceptual framework, GI international protocols and implications for Africa, Africa continental GI strategy analysis, Africa's continental GI strategy, and other thematic areas.

As the world becomes increasingly driven by cross-border data flows and technology, this requires market regulations, enhancing safety, fostering well-being, and adaptation to socio-economic and technological transformations. In addition, it compels us to anticipate unforeseen risks, leverage data and evidence in decision making, align with digital trade regulations, and protection of privacy; with connected technologies requiring the ability to share news and information in an instant, people are more aware of the regulatory policies that touch their lives. Consequently, this fifth chapter focuses on Africa's new and post-pandemic perspectives and preparedness for digital trade regulation. It also discusses intelligent strategies for overcoming the 'negative bleeding trade' phenomenon currently embedded in Africa's trade agreements, deals, outputs and outcomes. This chapter attempts to answer some of these questions: (i) What are some of the regulatory and implementation challenges in an increasingly fragile Africa's continentally free trade space? (ii) What is the role of technology and data in setting new rules for the AfCFTA? (iii) How should national and community businesses collaborate to overcome complex, interconnected cross-border risks.

There is conceivable innate potential for trade in services in West Africa, especially with the advent of the Continental Free Trade Area (AfCFTA). This free trade agreement in Africa would expand intellectual property (IP) rights. Better IP rights engagement would improve trade in service activities while facilitating regional trade. The fluidity of our world necessitates that rules are made and imposed to strengthen procedures for organised outputs, which is much required for developing areas, essentially West Africa, where remarkable change is much desired economically. Trade-in services stimulate improved performance and activities in the agricultural and manufacturing sectors. Quite a several services are essential resources, and this is because they act as an intermediary, hence providing for other sectors of the economy. To a large extent, benefits have become an essential feature in economic activity and play a critical part in infrastructural development, improved level of competition and, consequently, trade facilitation. The sixth chapter leverages this background to analyse the intellectual property right and trade facilitation perspective of trade in services in West Africa.

Women's digital empowerment is critical to unlocking the African Continental Free Trade Area (AfCFTA) and mitigating the potential threats. This study aimed to identify opportunities for women in the AfCFTA. The study further analysed challenges for women in harnessing the prospects of the AfCFTA and the potential ways of tackling these challenges. The study argues that for women to be competitive and maximise the potential benefits of AfCFTA, barriers to trade that disproportionately affect women need to be tackled. The topmost among these barriers is the persistent digital-gender divide in Africa. Based on this analysis, chapter 7 discusses strategies and a new equation model for promoting women's participation in AfCFTA through digitalisation and digital entrepreneurship. It is also pertinent to note that rurallocated, remote, and residential-based MSMEs, women, and youth are of critical trade policy implications and relevance because of the impacts in helping households, businesses, and economies to build back better through innovative trade agreements. Evidence-based and innovative trade facilitation policies will enhance gendered entrepreneurship towards fostering a more resilient and inclusive Africa.

In sub-Saharan Africa (SSA), high trade costs stifle trade flows and the region's economic potential. To reduce these costs and increase trade worldwide, the WTO initiated the Trade Facilitation Agreement (TFA) to enhance trade facilitation (TF) – standardisation and harmonisation of trade processes – in all member states. Using inductive reasoning, direct and participant observations, interviews, spatial and location analysis, content analysis and secondary data analysis, this chapter presents a political-economic analysis of TF and NTBs in SSA. This eighth chapter presents a simple economic trade facilitation model that posits that TF is an excellent public problem with a shared cost. Furthermore, the chapter concludes that the implementation of TF is usually affected by the principal-agent problem. Based on our assessment of TF in SSA, we have the impression that the success of TF requires continuous policy reform, improvements in border management, and infrastructural development.

As emerging technology advances digital trade facilitation platforms, there is an increasing need to efficiently integrate digital trust tools and frameworks into trade, entertainment, education, health, and food systems, drawing on data science experiences to create a programmatic approach to overcoming inequity. Based on research reports and epidemiological models, Green (2022) argues that the COVID Consensus aimed to quarantine and lock down large population segments that had caused more harm than good.³⁴ The last chapter of this book distils the key lessons and strategically emerging regional trade policy directions, focusing on sustainable competitive advantage, investment deals, and digitisation, especially among women enterprises in the post-COVID-19 era. These policy recommendations will enhance Africa's business ecosystems and ensure optimal allocation of the continent's abundant human and natural resources, transforming high-potential enterprises into maturely productive and profitably reliable businesses.

The digital revolution in the fourth industrial age requires more nuanced innovations in Africa's legal instruments and ethical frameworks. This book explores Africa's trade dynamics and the legal or regulatory frameworks at national and continental levels and from interdisciplinary perspectives to overcome its trade facilitation challenges. This book explores the conceptualisation of international trade relations, partnerships, rivalries, differences, and commonalities of trade facilitation tools and agreements that could foster sustainably practical trade solutions in Africa to highlight the role of trade facilitation innovation in preparing Africa for the future of post-pandemic trade. The authors and editors look forward to translating these trade facilitation recommendations into implementable programmes toward accelerating the realisation of the AfCFTA vision and mission.

³⁴ T Green The COVID consensus: The new politics of global inequality (2022); T Green 'Medical colonialism: Pandemic impacts and vaccine delivery' African Arguments 17 December 2021, https://africanarguments.org/2021/12/medical-colonialismpandemic-impacts-and-vaccine-delivery.

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