Meta-trends in global value chains and development: interacting impacts with COVID-19 in Africa

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How will the COVID-19 pandemic affect prospects for foreign investment and development in Africa? In part this depends on its interaction with pre-existing meta-trends in the global economy, such as the coming Fourth Industrial Revolution (4IR). It will also depend on the nature of revisions to political settlements in Africa arising from the pandemic. This paper explores these issues through an examination of the direct and indirect economic impacts of the pandemic and their likely interaction with meta-trends in the global economy. In particular it argues that while there is still an important role for foreign investment, the crisis also creates opportunities for more domestically-focused investment and production.

Keywords: Africa, COVID-19, development, Fourth Industrial Revolution, value chains

1. Introduction

Globalization has both positive and negative impacts, which are unevenly distributed by class, gender, geography and other factors. COVID-19 has highlighted both the depth of global interconnection, and the vulnerabilities and inequalities that undergird it. Globalization would not happen, or not happen to the same extent, if levels of development and wages, for example, were the same around the world (Yeung, 2002). In a context of globalization, development strategies must be locally designed and refined to differing contexts. To achieve this requires an understanding of the changing nature and context of global value chains and how they are likely to be affected by the pandemic.

Global value chains are changing as a result of a concatenation of economic, political, social and epidemiological forces which at the moment seem to, if not militate against deepening interconnection, then display strong counter-tendencies to it. The United Nations Conference on Trade and Development estimates that

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downward pressure on foreign direct investment (FDI) could be in the order of -30 to -40 per cent in 2020 and 2021 (Zhan, 2020). How will COVID-19 impact on value chain development in the Global South and what might appropriate policy responses be? In part the answers to these questions depend on the nature of pre-existing mega or meta-trends, such as the coming Fourth Industrial Revolution (4IR) (Schwab, 2017), and how these interact with the impact of the virus. This paper explores these issues with reference to Africa to argue that the pandemic has further revealed some of the weaknesses of existing economic structures. However despite the virus' devastating impact, it also presents academics and policy makers with an opportunity to rethink past approaches and tailor policy proposals and actions to meet current and future challenges. Actualizing the potential for alternative approaches entails first understanding the evolving context of value chain development, driven by a number of meta-trends, such as the rise of China. However, before interrogating these it is important to understand some of the economic impact of COVID-19 on the continent.

2. Economic impact of COVID in Africa

Developing countries are likely to be the worst affected economically by COVID-19 in the medium and long-term. For example, the World Food Programme predicts that an additional quarter of a billion people will be hungry around the world by the end of 2020 as a result of the pandemic (Christiano, 2020). To date, Africa has been less directly affected than many other world regions (although there may be substantial under-reporting as a result of a relative lack of testing). In part this is because COVID is an "indoor disease" (Stein, 2020)[1], while the majority of the continent earn their living in agriculture[2]. Africa also has a median age of under 20, making it less affected, and parts of the continent have extensive experience dealing with epidemics, such as Ebola (OECD and UNECA, 2020). However, the indirect effects on the continent are likely to be the most severe of anywhere, for reasons elaborated below.

"Africa may lose half of its GDP [gross domestic product][increase] with growth falling from 3.2 per cent to about 2 per cent due to a number of reasons which include the disruption of global supply chains," says Ms. Vera Songwe, head of the United Nations Economic Commission for Africa (UNECA). She added that the continent's interconnectedness to affected economies of the European Union

[1] However, meat packing plants in Rwanda, for example, have been severely affected by the pandemic. In Ghana the President reported that one worker in a fish processing plant infected 533 others (CNBC, 2020).

[2] Although slums are also highly at risk given high population densities (Wilkinson, 2020). Some predominantly urban countries, such as South Africa, have also been very badly affected.

(EU), China and the United States was causing ripple effects. (Africa Renewal, 2020). The World Bank estimates that the pandemic could push up to an additional 60 million people into poverty on the continent (cited in Dahir, 2020). Partly this will result from reductions in prices for most primary commodities, which the continent is highly dependent on for exports; accounting for more than 90 per cent of its total by some estimates (UNCTAD cited in Stein, 2014).

Even though more than 85 per cent of Africa's labour force works in the informal sector, if subsistence agriculture is included (ILO, 2018), the loss of formal sector employment, in the resource sector for example, has a variety of impacts. Reduced economic growth and rising poverty on the continent will make many countries less attractive as destinations for market-seeking FDI. While Africa has hosted some of the world's fastest growing economies in recent decades, and rapidly expanding ones tend to attract the most FDI, in something known as the "endogeneity effect" (Moghalu, 2014), this will now likely be compromised. Furthermore dramatic decreases in raw material prices will reduce resource-seeking FDI, creating unemployment. Some formal sector workers, in mining for example, may support up to ten family members, with the average number being close to three in South Africa (Cox, 2013). Lower commodity prices will reduce investment in the sector and shrinking economies in natural resource export-dependent economies will further depress the service sector and market-seeking manufacturing FDI.

The indirect impacts have, potentially, even wider effects. First amongst these is a "negative multiplier". Dramatic reductions in the formal economy will have substantial knock-on effects on the informal sector, with potentially massive implications for poverty and unemployment. The United Nations Economic Commission for Africa forecasts that up to half of all formal sector jobs in Africa could be lost as a result of the pandemic, whereas McKinsey predicts 18 million formal and 100 million informal jobs could be at risk (Thomas, 2020). While the urban informal economy may be locked in an exploitative relationship with the formal one (Santos, 1979), it is nonetheless largely dependent on it for its survival. Reductions in remittances from urban areas or from relatives living overseas may affect rural areas particularly badly. In rural Western Kenya average income declines of 25 per cent were recorded from early April to the end of May 2020 as lockdown measures were introduced and then eased (Miguel, 2020)[3]. Flows of remittances to Sub-Saharan Africa are projected to decline by 23.1 per cent in 2020 (World Bank cited in African Business, 2020).

As formal sector jobs are lost, less income circulates through the economy and tax revenues are reduced. This may also have potentially severe political

[3] Other surveys recorded even sharper declines in income of between 60 and 80% in Kenya and India (Niehaus, 2020).

economy effects as "productive" social contracts (Nugent, 2019) may be further undermined, where they exist, as informalization deepens and proliferates, driving marginal productivity even further down. This may, in turn, exacerbate problems of governance and corruption in certain countries, with myriad, but generally negative economic consequences; again potentially compromising the ability to attract inward inflows of productive FDI.

Reduced tax revenues may also mean reductions in infrastructural investment and social expenditure, increased indebtedness, or most likely, both – again reducing economic growth – with the potential to generate a vicious circle. While there have been some initiatives to try to limit the impact of increased indebtedness, such as a debt moratorium by the Group of 20 (G20) for low income countries until the end of the year, the head of the International Monetary Fund (IMF) has argued that many countries will need debt restructuring, rather than just a freeze (Reuters, 2020).

As economic conditions deteriorate in many African countries they will find it increasingly difficult to source finance from international capital markets, which may reorient to service developed countries seeking to finance their budget deficits. Consequently, many have already been forced to ask the IMF for emergency assistance. However, the strict conditions attached to IMF loans have generally not been conducive, or have been actively detrimental, to development efforts on the continent (Mkandawire and Soludo, 1999). Dozens of countries on the continent are now under, or requesting, IMF financial assistance, even if that organization has also offered some debt relief (Mizner, 2020)[4]. The (enforced) return or reinforcement of economic orthodoxy on the continent will reduce policy space for developmental states, such as Ethiopia, to emerge in the future (Carmody, Kragelund and Riboredo, 2020).

Increased indebtedness, which was already a major issue for several countries on the continent pre-COVID (Carmody, 2020), may also necessitate the sale of strategic state assets, vital for development. This has been the case with Ethiopian Airlines (planned pre-COVID), for example, which has been fundamental to, and instrumental in, that country's recent successful economic development (Arkebe, 2019). According to the Organisation for Economic Cooperation and Development – (OECD) (2020a, p. 2) "we have witnessed the cascading collapse of entire production, financial and transportation systems, due to a vicious combination of supply and demand shocks". African airlines lost US$4.4 billion of revenue in the first quarter of 2020 (OECD, 2020b) and reduced air connectivity could potentially negatively affect (the relatively little) export-platform FDI on the continent, in addition to other substantial foreign exchange earners, such as

[4] The Chinese government is reported by some African governments to be demanding collateral in exchange for debt rescheduling or relief (Thomas, 2020).

tourism[5]. The price of oil in the United States remarkably turning negative at one point in 2020 as investors did not have sufficient storage capacity for their stocks (BBC, 2020), however, some rebound in commodity prices has already taken effect as pandemic lockdowns end or are eased around the world. Nonetheless the travel and tourism industries, which are large consumers of oil, are likely to remain depressed for years, which will affect oil exporters and popular destinations most directly[6]. The outlook then for commodity exporters and tourism-dependent economies is bleak in the medium term; although the crisis may offer opportunities to rethink unsustainable development models, discussed in more detail later. The impacts of COVID, however, also interact with other meta-trends affecting global value chains.

3. COVID-19 interactions with meta-trends: the rise of China, liberalization, populism and 4IR

The geography of global production has shifted massively in recent decades. At the outbreak of the SARS1 (sudden acute respiratory syndrome) epidemic in the early 2000s, China accounted for about 4 per cent of the global economy. Now it accounts for 19 per cent (Purdie, 2019). This is a reflection of the success of the development policy initiatives of the Chinese state which facilitated increases in FDI and the growth of the domestic economy. In recent years China has overtaken the United States as the world's largest economy, measured at purchasing power parity. The corollary to this rapid rise is that China's economy accounted for 60 per cent of all additional greenhouse gas emissions since the climate activist Greta Thunberg was born in 2003, according to Niall Ferguson (2020). The central role of China in global supply chains, contributed to the rapid spread of COVID-19. China for these, and other reasons, is now central to processes of economic, environmental and epidemiological globalization and restructuring, amongst other vectors of these processes.

The scale and global interconnectedness of China, which has heavily shaped or constructed the nature of the country, initially facilitated the spread of COVID-19 through dense air traffic routes with the rest of the world; initially to Europe and then it appears onwards to Africa from there. The evolution of the Chinese economy,

5 In some countries, such as Kenya and Tanzania for example, tourism is one of their largest "exports", with substantial domestic linkages and pro-poor effects (World Bank, 2017), and reductions will again have multiple impacts, including perhaps the exacerbation of foreign currency constraints on economic growth.

6 However, many non-oil exporting developing countries will benefit from lower oil prices. Paradoxically, despite their primary commodity dependence, most African countries are net natural resource importers (primarily as a result of oil).

society and polity will be central to future global development. Some have argued that as labour costs have risen in China, industrial offshoring to Africa will be a major source of growth and development (Sun, 2017: Lin and Xu, 2019). While it is important to take advantage of this possibility, there is little evidence to date of widespread "industrialization by invitation" on the continent. Rather, there is a need to build up domestic industries in resource and agro-processing and other subsectors, as well as attract FDI in an articulated industrial strategy (Lopes, 2019). However, attracting FDI will be more difficult post-COVID-19, even if China continues its ascent in the international system, suggesting the importance of developing other sources of inclusive growth.

Other meta-trends will also shape the nature, geography and impact of global investment and value chains in Africa, including global environmental change and the development of artificial intelligence (AI) and associated technologies. Recursively, the COVID-19 pandemic has also had, and will continue to have, massive economic and social impacts that will interact with, and perhaps accelerate, other trends such as the coming 4IR and informalization, among others. In order to understand the longer-term impacts of COVID-19 on international investment and development in Africa it is necessary to explore how the pandemic is likely to interact with trends such as the "globotics upheaval" (Baldwin, 2019).

For Baldwin globotics is the combination of robotics, and associated technologies such as AI, and globalization. He argues that many middle class professions in developed countries, such as accountancy, are likely to come under further strain from the combination of out-sourcing and AI, again with major political economy impact. Robotics, by reducing the labour cost component of production, also facilitates near or reshoring to advanced economies, again potentially reducing manufacturing FDI to the Global South, and making it harder for Africa to industrialize. Meanwhile, new information and communication technologies continue to facilitate offshoring for basic service functions or sectors, such as call centres, to developing countries; offering potential for Africa to attract more of this economic activity.

The spatial dynamics of liberalization[7], globalization and offshoring have generated reactionary backlashes in some developed economies, such as the United States and the United Kingdom. The rise of right-wing populism has also been associated with "anti-globalization" and protectionism in these countries (Gereffi, 2018; Kiely, 2020). Baldwin (2019) predicts that these tendencies will intensify as middle class professions are gutted by the technologies of the 4IR, generating further protectionist pressures, including for service sector jobs, and making replicating the

[7] Indeed, some argue that the under-regulation of markets generally, including the "wet" wildlife market in Wuhan, where the transfer of the virus to humans is thought to have occurred, is a major reason for the pandemic outbreak (Wallace et al., 2020).

export-oriented manufacturing success of some East Asian economies even more difficult for other latecomers. In any case, new models of industrialization should be more domestically and regionally focused and critically, greener.

COVID-19 is also likely to reinforce protectionism in advanced economies as some industries become newly considered as strategic, such as pharmaceuticals[8] and personal protective equipment (PPE), given the global scramble to source these during the pandemic. This will likely result in a spatial retraction and integration of some supply chains under the auspices of national (health) security as the pandemic has revealed the extent of global (inter)dependence on China for PPE[9] and other medical supplies and devices. European Union members now assert the imperative of "strategic health sovereignty" (French-German Initiative, 2020). Meanwhile, the ascent of China in the international system has generated friction over which countries will control the core technologies of the 4IR, as evidenced in recent international disputes around Huawei, for example. Some have argued that (dis)connectivity is the new geopolitics (Vlahutin, 2020) and this is being conducted through geoeconomic means. Yuval Hariri (2018) has argued that we are seeing the emergence of a "network of fortresses", as countries seek to buffer themselves from the negative effects of globalization, while also taking advantage of the benefits it may offer them. COVID-19 is likely to exacerbate such tendencies towards "shelterism" (Baldwin, 2019) and reshoring as transnational enterprises seek to make their supply chains more resilient (Zhan, 2020). Of course the precise content of economic policies in developed countries will depend on the nature of governments in power, which will partly hinge on upcoming and future elections in the United States and elsewhere. However, the current round of globalization appears to have passed its high-water mark as a result of trends towards protectionism, COVID-19 and the looming climate crisis, which will also generate pressures to shorten supply chains to reduce carbon emissions.

4. Implications for, and potential responses by, lower-income countries in Africa

The perils of global integration have been dramatically highlighted by the pandemic and the emphasis must now be on building more resilient, sustainable and secure economic structures through economic diversification on the continent. How should lower-income, primary commodity resource-exporting countries respond to the current conjuncture? Crises, as long as they are not overwhelming, are also

[8] Controversially, the United States bought almost the entire global supply of the drug remdesevir, which has been shown to be effective in treating COVID-19.
[9] Accounting for about a third of global supply (OECD and UNECA, 2020).

moments of opportunity to rethink and reconfigure current policies, politics and institutions that may not have been working to their intended purposes. The need for economic diversification in low-income countries is as urgent as it has ever been, as is the necessity to "future proof" their economies against current and potential shocks to their systems. It is also an opportunity to rethink current economic models on the continent; although COVID-19 will likely make it more difficult for the continent to industrialize; particularly when combined with meta-trends such as robotization, 3D printing and reshoring of manufacturing. Nonetheless, international interconnection, through trade, investment and ideas, is vital to development.

Certain types of FDI can be an important component of a successful development strategy. For example, Ireland has targeted the attraction of high-tech FDI, while China has maximized local benefit through technology transfer and joint ventures with local companies, amongst other policy mechanisms (Dicken, 2015).

Particularly as Africa's biggest single trade, and in some years, investment partner, China can play an important role in a reimagining of African economies. The country can serve as a source of inspiration for alternative development ideas, about how to harness FDI to be developmentally beneficial. However, risks remain.

The current conjuncture may also offer opportunities to increase local production of manufactures, food and other vital commodities in Africa. At independence in the 1960s Africa was a net food exporter (Bello, 2009), whereas now most countries on the continent are in food deficit, requiring imports and resulting in the accumulation of debt (OECD, 2020b). In the context of COVID the imperative of strategic and dynamic domestically-focused development and integration of African countries into the global economy rises. For Africa this means both the chance and imperative to focus more on internally-based development, with a view to productive global integration over the medium-term. For example, oxygen, vital to patient survival in extreme cases of COVID-19, is thirteen times more expensive in Kenya than in the United States, opening up possibilities for local production and import substitution (Gates, 2020). The National Agency for Science and Engineering Infrastructure has produced the first ventilators made in Nigeria (OECD and UNECA, 2020), bespeaking the potential for creative solutions to health and other problems on the continent. Africa is estimated to import 94 per cent of its pharmaceutical needs (OECD and UNECA, 2020), despite their being several countries on the continent with the capacities to produce some of these at scale.

If the pandemic highlights the need to reduce external vulnerabilities for populations, states could potentially be reconfigured to be more domestically, developmentally focused. Gross inequality presists in Africa, which will likely be exacerbated by COVID-19 (United Nations, 2020). (United Nations, 2020). However, as noted earlier, in line with systemic vulnerability theory, crises are also moments of opportunity to rethink, reimagine, rework and bring into being new, more equitable, dynamic and sustainable economic structures (Doner, Hicken and Ritchie, 2009). The key to this happening, or not, is the nature of (transnational) political settlements which are likely to emerge post-COVID (Whitfield, Therkildsen, Buur and Kjær, 2015); a key area of social and political struggle in the future.

Creativity, adaptability and ingenuity will be vital to reimagining the economies of the continent and the ways in which they are integrated in global value chains, while the international community has a responsibility to be flexible and generous in its supports through debt relief and other modalities of assistance. While the impact of the virus has been devastating at all levels, it also highlights the need to think differently and more collaboratively, if the Sustainable Development Goals are to be realized – an increasing challenge in the context of the pandemic (Di Marco et al. 2020: Sumner et al. 2020). Global institutional innovations, such as a Health Impact Fund, that reward pharmaceutical companies on the basis of their contribution to disease eradication, rather than responding to market demand alone, would help reduce health, and by extension, other inequalities (Holzer and Pogge, 2020). Health and human capital formation are key components of both economic and social development, and complements to both domestic and international investment. As such they are too important to be left to vagaries, vulnerabilities and the vicissitudes of unregulated markets.

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