TAX POLICY FOR THE FUTURE OF DEVELOPING COUNTRIES: THE SYNERGIES BETWEEN COVID-19 AND AUTOMATION

Afton Titus
Associate Professor in Commercial Law
University of Cape Town

Table of Contents

Abstract

The COVID-19 global pandemic has devastated economies around the world – an impact which is miniscule compared to the toll it has taken on human lives. Daring to see that something good may come from this tragedy, this paper argues that there are clear synergies to be drawn between the health measures required as a consequence of the global pandemic and the opportunities offered by automation and digital technologies. It is further argued that the tax policies adopted to check the impact of COVID-19 may be adapted to better harness the potential prospect of improved productivity that automation offers. The focus of this analysis is on how this may be of use to African countries, as these countries have been the hardest hit economically by the global pandemic.

1. Introduction

The COVID-19 global pandemic has had, and continues to have, a devasting impact on economies. Aside from the heartbreaking health statistics, the pandemic has brought mass unemployment at an unprecedented scale while many businesses have been forced to close. In the wake of such devastation, governments have rushed to put economic measures in place to stem the adverse impact. More recently, discussions have begun as to the long-term planning to ensure the sustainability of economies.

It may be strange to consider the notion that there might be a silver lining in all of this devastation. However, this may well be the case as, amongst other things, governments and businesses are investing in and increasingly using automation and digital

technologies.[1] Lockdowns across the world and pandemic health protocols have forced businesses online while governments are also investing more in their digital platforms.[2] The synergies that exist between the pandemic with its health and safety protocols on the one hand and automation on the other, is not a new concept and has been discussed before.[3]

The pandemic has demanded that human interaction be limited as much as possible and automation has allowed for this to be done in a relatively short period of time. Automation and digital technologies have been critical in sanitation, social distancing and allowing work from home.[4] Automation has also been critical in assisting with measures to control the pandemic through contact tracing and robots designed to sanitize hospitals.[5] As borders closed and global supply chains were suspended, the pandemic encouraged the creation of self-reliant economies and this resulted in many businesses reshoring their supply chains.[6] As this happened, the pandemic also created greater incentives to replace human workers with automation.[7] Others have viewed this development as an opportunity for high-wage countries to compete with countries offering cheaper labour.[8]

This paper seeks to build on this discussion by analyzing how the COVID-19 tax policies adopted, and to be adopted as the pandemic progresses, may be suited to propelling economies towards automation and technological development. In doing so, this paper will focus on African economies given that while the African death toll relative to other continents has been low, the economic impact has been the greatest. Moreover, there is

[1] J. Blit, *Automation and Reallocation: Will COVID-19 Usher in the Future of Work?,* 46 Canadian Public Policy S2, 192 (2020).

[2] E.D. Kirby. R. Thamma & M. Wedderburn, *The Impact of COVID-19 on Manufacturing Automation*, 2 International Research Journal of Modernization in Engineering Technology and Science 2, 481 (2020), 482; Taxing the Digital Economy: COVID-19 Heightens Need to Expand Resource Mobilization Base (26 August 2020), Concept Note, Trade Law Centre, available at: https://www.tralac.org/news/article/14870-taxing-the-digitaleconomy-covid-19-heightens-need-to-expand-resourcemobilization-base.html.

[3] N. Pasha, *Human Skills and the AI COVID Challenge* in *A New World Post COVID-19: Lessons for Business, the Finance Industry and Policy Makers* 301 (Monica Billio and Simone Varotto eds., Edizioni Ca' Foscari - Digital Publishing 2020); Kirby, Thamma & Wedderburn, *supra* n. 2; D. Bloom & K. Prettner, *The Macroeconomic Effects of Automation and the Role of COVID-19 in Reinforcing their Dynamics?* (25 June 2020), VOX, CEPR Policy Portal, available at https://voxeu.org/article/covid-19-and-macroeconomic-effects-automation.

[4] Bloom & Prettner, *supra* n. 3; Kirby, Thamma & Wedderburn, *supra* n. 2, 486.

[5] Bloom & Prettner, *supra* n. 3.

[6] Id.

[7] Id.

[8] Kirby, Thamma & Wedderburn, *supra* n. 2, 486.

currently a dearth of analysis of the tax policies implemented in African countries and this paper seeks to assist in filling this gap.

Seized with this endeavour, this paper will set out the tax policies which have been and will be implemented to curb the economic effects of COVID-19. In doing so, this paper will point out the similarities between the actual economic impact of the pandemic and the projected impact of widespread automation in business. Before the paper concludes, recommendations are provided as to how the COVID-19 tax policies may be adapted to propel African economies into the future. As many of the pandemic tax policies are geared towards maintaining the pre-COVID-19 status quo, some would need to be reshaped to allow them to meet the higher aim of preparing for a future in which automation will play a key role.

2. Could COVID-19 Tax Policies Unlock the Potential of Automation?

The COVID-19 pandemic and its dire economic consequences launched a fairly uniform and consistent response across the world. These responses correspond to the phases in which the pandemic has ravaged the economy; namely, an initial, emergency response; an intermediate solidifying position followed by an initial recovery stage before entering into the final, long-term recovery phase.[9]

In doing so, tax plays a vital role in sustaining the current economy while slowly gearing up towards sustaining a full-scale economic recovery plan.[10] Collier, Pirlot & Vella note that the initial tax policy responses implemented by governments may be grouped into the following categories:

a) measures to boost cash flow, such as reducing tax rates, defer or waive tax liabilities and more generous loss carry forward provisions;[11]
b) measures to influence behaviour, such as reducing VAT rates, introducing capital allowances and accelerated depreciation rates;[12]
c) measures to reduce the tax barriers to the procurement of medical equipment, such as the waiver of levies and duties on the import of medical equipment;[13] and

[9] See R. Collier, A. Pirlot & J. Vella, *Tax Policy and the COVID-19 Crisis*, W/P 20/01, University of Oxford Centre for Business Taxation (2020); OECD, *Tax and Fiscal Policy in Response to the Coronavirus Crisis: Strengthening Confidence and Resilience*, (2020).
[10] P. Saint-Amans, *Tax in the Time of COVID-19*, (23 March 2020) The Forum Network, OECD, available at https://www.oecd-forum.org/posts/63721-tax-in-the-time-of-covid-19.
[11] Collier, Pirlot & Vella, *supra* n. 9, at 3.
[12] Id. at 5.
[13] Id. at 6.

d) measures to create legal certainty around ambiguous key tax concepts, such as the issuing of guidance documents to assist taxpayers in unknowingly creating permanent establishments or a tax residence for companies in a foreign country as a result of lockdown provisions.[14]

At this juncture, the author notes that the above categories would be equally suited to smoothing the transition of economies towards more widespread automation. Cash flow tax policy measures, such as reducing tax rates and reducing or waiving tax liabilities, would be useful to ensure that displaced workers are given the economic space to reskill themselves so as to attain a more highly skilled job. Moreover, some businesses may need similar measures as they adjust to the transition to greater automation which may in and of itself come with some teething problems.[15]

Tax policy measures like bigger capital allowances and accelerated depreciation rates along with measures to waive levies and duties on the import of physical machinery may greatly reduce the tax barriers to encouraging more investment in automation and digital technologies. And, of course, measures to create legal certainty are always welcome, even without a global pandemic.

Consistency in government responses has proven to be key in tackling the threats of COVID-19. The OECD notes in its recent report that the OECD and G20 countries have introduced a wide, yet fairly consistent range of tax responses to the initial crisis.[16] These include measures to boost cash flow through tax deferrals, tax filing extensions, flexible repayments, faster tax refund processes and loss carry-forward provisions.[17] Many countries also introduced measures to encourage employers to retain their workers through reducing employment-related taxes (such as social security contributions) and implementing "short-term work schemes"[18] which are designed to have the state temporarily cover the cost employing employees who have had the hours reduced or who have been temporarily laid off.[19]

Similarly, the tax administration response by African countries includes the introduction of flexible payment plans; the extension of tax deadlines; temporary suspension of tax penalties and interest; accelerated tax refunds, and the general temporary

[14] Id.
[15] These may include the adaptability or otherwise of existing technologies to more flexible uses; the ready availability of machine components in the global supply chain; and the work ethic of the human operators of the machines which may vary from company to company and country to country.
[16] OECD, *supra* n. 9.
[17] Id. at 16.
[18] Id.
[19] Id.

suspension of compliance and enforcement activities.[20] From a tax policy perspective, African countries have in the main reduced their tax rates and introduced more tax allowances and deductibles.[21] Notably, Kenya lowered its corporate income tax rate and PAYE rate from 30% to 25%.[22] Egypt also reduced its withholding tax rate on dividend distributions from companies listed on its stock exchange from 10% to 5% while it also lowered its stamp tax on listed securities transactions from 0.15% to 0.05%.[23] Botswana and South Africa, on the other hand, have fast-tracked their tax refund processes.[24]

Some commentators have, however, questioned the suitability of a reduction in income taxes. Steel and Phillips argue that such reduction only serve to further enrich those who have benefitted from the pandemic.[25] They further argue that such measures would only be appropriate if the individuals benefitting from the tax cut were to share such gains with family and friends who have been adversely affected by the pandemic and who are otherwise not receiving governmental assistance.[26]

As the pandemic runs its course through the world and governments are hard-pressed to keep economies going, the focus will shift to recovery and long-term sustainability plans rather than economic emergency measures to keep the economy afloat. In making this shift, this paper argues that African leaders should bear in mind the advantages automation holds for African development and that they should introduce tax policy measures which would encourage its broader use.

Automation represents vast opportunities for Africa. These are in the form of greater access to markets, improved working conditions, and an improved standard of living. As robots have gotten cheaper, there is greater opportunity for smaller businesses to make use of them and thereby improve their productivity.[27] Also, Kenya is beginning to see great success in

---

[20] K. Megersa, *Tax Reforms After COVID-19 and Financial Crises*, Institute of Development Studies, 1 (2020) at 2-3.
[21] Id. at 4.
[22] KY: Tax Laws (Amendment) Act No. 2 of 2020.
[23] EGY: Law No. 199 of 2020.
[24] Deloitte, *Economic and Fiscal Measures Introduced in Response to COVID-19*, (4 Sept. 2020) available at https://www.taxathand.com/article/13338/Botswana/2020/Economic-and-fiscal-measures-introduced-in-response-to-COVID-19; KPMG, *South Africa: Additional VAT relief (COVID-19)*, (23 April 2020), available at https://home.kpmg/us/en/home/insights/2020/04/tnf-south-africa-additional-vat-relief-covid-19.html.
[25] I. Steel & D. Phillips, *How Tax Officials in Lower-Income Countries Can Respond to the Coronavirus Pandemic*, Overseas Development Institute, 1 (2020) 10.
[26] Id.
[27] A.P. Calitz, P. Poisat & M. Cullen, *The Future African Workplace: The Use of Collaborative Robots in Manufacturing*, 15 SA Journal of Human Resource Management 901 (2017); D. Friis, *Editorial: Cobots Expand Automation Opportunities*, International Federation of Robotics, (2016).

applying blockchain technologies to its informal sector.[28] Automation therefore offers Africans more opportunities to start and sustain their own smaller businesses.

Automation also means that the traditional sectors have the opportunity to become more productive. As productivity increases, there is greater opportunity for these sectors to continue to absorb greater numbers of people seeking employment. Studies have indicated that the manufacturing sector in Africa is growing at a pace unmatched by any other region.[29] This is even as new technology has been adapted.[30]

Automation also offers the opportunity to improve the lives of Africans. In terms of healthcare, medication is now being delivered to remote areas in Rwanda through the use of drones.[31] Liberia has used robots to clean and sanitize its hospitals.[32] 3D printers are being used to print prosthetics in Kenya and Uganda.[33] South Africa is home to the largest 3D printer on the planet.[34] Automation is also impacting the renewable energy sector in Africa. There is great potential for the cost of energy production to be reduced in Africa.[35]

---

[28] Samuel Gebre, *Blockchain Opens Up Kenya's $20 Billion Informal Economy*, (13 June 2018), Bloomberg, available at https://www.bloomberg.com/news/articles/2018-06-14/blockchain-is-opening-up-kenya-s-20-billion-informal-economy.

[29] Landry Signé, *The Potential of Manufacturing and Industrialization in Africa: Trends, Opportunities and Strategies*, The Brookings Institution Africa Growth Initiative, (2018) 4; W. Naudé, *Brilliant Technologies and Brave Entrepreneurs*, 72 Journal of International Affairs 1, 143 (2018/2019) 145.

[30] Id.

[31] K. Doherty, Remote-Control Architecture: Norman Foster's Rwandan Droneport, (28 Nov, 2016), available at https://failedarchitecture.com/remote-control-architecture-norman-fosters-rwandan-droneport/.

[32] *TRU-D SmartUVC Disinfection Robots Continue to Aid in Ebola Crisis Mission in Liberia*, (4 Sept. 2014), Cision PR Newswire, available at https://www.prnewswire.com/news-releases/tru-d-smartuvc-disinfection-robots-continue-to-aid-in-ebola-crisis-mission-in-liberia-273923551.html.

[33] F. Ngila, *Kenya: How Innovators Are Using 3D Printing to Make Medical Parts*, (25 Aug. 2020), The Daily Nation (Nairobi), available at https://allafrica.com/stories/202008270603.html; *3D printed prosthetic legs for Ugandan children*, (16 Feb. 2015), IDTechEx, available at https://www.3dprintingprogress.com/articles/7433/3d-printed-prosthetic-legs-for-ugandan-children.

[34] A. Mitchley, *World's Largest 3D Printer in South Africa Looking to go Commercial*, (28 Aug. 2019), News24, available at https://www.news24.com/news24/SouthAfrica/News/worlds-largest-3d-printer-in-sa-looking-to-go-commercial-20190827.

[35] A. Theron, *Renewable Energy Costs Less by Far, Making it the Logical Choice*, (7 Mar. 2018), ESI Africa, available at https://www.esi-africa.com/top-stories/renewable-energy-costs-less-far-making-logical-choice/; N., Friederici, S. Ojanper, & M. Graham, *The Impact of Connectivity in Africa: Grand Visions, and the Mirage of Inclusive Digital Development*, 79 Electronic Journal of Information Systems in Developing Countries 2, 1 (2016).

Notwithstanding these opportunities, some have highlighted the disruptions automation may bring to African countries. These mainly center around the following themes:

a) Fears of mass unemployment in Africa;[36]
b) Fears that Africa lacks the necessary skills to benefit from technology;[37] and
c) The threat posed by inadequate cybersecurity and data protections.[38]

In terms of the tax base, these threats sum up to a loss of earning ability which ultimately results in a loss of income tax and consumption taxes (as people have less income to spend on buying things).

It is noted that these identified fears are already being experienced as Africa grapples with the economic impact of COVID-19. In terms of mass unemployment, this paper argues that it is the same category of employees who are most at risk of losing their employment both under the pandemic and following the widespread use of automation. According to Bergamini, it is the bottom-most 25% of income-earners who most at risk of being laid off or working reduced hours during the global pandemic as these are the jobs least able to adapt to working from home.[39] Similarly, studies have indicated that it is the repetitive, low-skilled jobs that would be readily replaced first by automation as these are most adaptable to being carried out by machines.[40]

Moreover, the stated fears of mass unemployment as a result of widespread automation must surely pale in comparison to the lived reality of the economic impact of COVID-19. The emergency initial tax policy responses governments have implemented during the pandemic proves that measures can be taken, even on a massive scale, to minimize the economic impact of sudden unemployment. In comparison, the gradual pace at which automation is to displace jobs should therefore be much easier for governments to handle. Consequently, the fear of people losing their jobs should not be a deterrent to putting measures in place to encourage greater automation in businesses, generally.

This is especially as many studies suggest that it is inconclusive that there will be such large-scale unemployment

[36] Naudé, *supra* n. 29, at 149.
[37] R. Li, Is Africa Ready for the March of Robots?, (24 Feb. 2018), New African, available at https://newafricanmagazine.com/16403/; Naudé, *supra* n. 29, at 149.
[38] Naudé, *supra* n. 29, at 149.
[39] E. Bergamini, *How COVID-19 is laying bare inequality*, (2020), available at https://www.bruegel.org/ 2020/03/how-covid-19-is-laying-bare-inequality/; OECD, supra n. 9, at 33.
[40] C. Frey, M. Osborne & C. Holmes (eds.), *Technology at Work v2.0: The Future is Not What it Used to Be*, Citi GPS: Global Perspectives and Solutions, University of Oxford (2016) 125.

as a result of automation.[41] Instead, it is argued, it is more likely that history will be repeated – that is, that some jobs will be lost as others are created.[42] There are indications, however, that the net effect may be that more jobs will be lost and also that very specific types of jobs will be lost.[43] These are the so-called "dull, dangerous and dirty" jobs because machines can easily do these jobs.[44] However, the jobs that will increase are those that require innovation and creativity.[45]

All of the above impresses upon the importance, and perhaps urgency, of governments to put policies in place to transition the unemployed to become more skilled or to become entrepreneurs who are able to use technology in their business. This narrative feeds into the second disruptive fear that Africa will be left behind in the technological revolution because of a lack of skills to participate in the advancements.[46]

One of the means to fix this is through education. The idea that Africa should invest in the education of its people is not new, unfortunately.[47] What is new, however, is that the returns of such investment is beginning to materialise. A study has indicated that female representation in engineering is fairly high in Africa in comparison to other regions.[48] Then, in terms of access to technology, another study has indicated that in 2017, the digital gender gap in Africa is smaller than that in Europe.[49] Africa is working hard to give its people internet access – it was reported

[41] G. Graetz and G. Michaels, *Robots at Work*, Centre for Economic Performance, London School of Economics and Political Science (2015); J. Bessen, *AI and Jobs: The Role of Demand*, NBER Working Paper No. 24235 (2018); W. Dauth et al., *Adjusting to Robots: Worker-Level Evidence*, Working Paper, Opportunity & Inclusive Growth Institute (2018); T. Gregory, A. Salomons, U. Zierahn, *Racing With or Against the Machine? Evidence from Europe*, Working Paper No 7247, CESifo (2018).

[42] R.D. Atkinson & J. Wu, *False Alarmism: Technological Disruption and the US Labour Market*, *1850 – 2015*, Information Technology and Innovation Foundation, 1 (2017), 9; R.D. Atkinson, *The Case Against Taxing Robots,* Information Technology and Innovation Foundation, 1 (2019).

[43] Id.

[44] Frey, Osborne & Holmes, *supra* n. 40, at 125.

[45] M. Xu, J.M. David & S.H. Kim, *The Fourth Industrial Revolution: Opportunities and Challenges*, 9 International Journal of Financial Research 2, 90 (2018) 93; E, Brynjolfsson, A. McAfee & M. Spence, *New World Order: Labor, Capital, and Ideas in the Power Law Economy*, Foreign Affairs (July/Aug. 2014), available at https://www.foreignaffairs.com/articles/united-states/2014-06-04/new-world-order;

[46] Li, *supra* n. 37.

[47] W. Naudé, *Entrepreneurship, Education and the Fourth Industrial Revolution in Africa*, Discussion Paper, IZA Institute of Labour Economics (2017).

[48] S. Huyer, *Is the Gender Gap Narrowing in Science and Engineering?*, UNESCO Science Report Towards 2030, 84 (2015), 97.

[49] M.F. Badran, *Bridging the Gender Digital Divide in the Arab Region*, in *The Future of Work in the Global South,* 34 (H. Galperin & A. Alarcon eds., (International Development Research Centre, 2018), 37; Naudé, *supra* n. 29, at 150.

that the average annual growth in households with internet access has been growing faster in Africa than in any other region in the world.[50] Also, in formal training, Google and Facebook have funded a new Master's programme in Machine Intelligence at Rwanda's African Institute for Mathematical Sciences.[51] All of this indicates that Africa is moving in the right direction.

A further disruptive fear that automation poses to African countries while it is already being experienced under the pandemic, is the threat to cybersecurity and the need to protect data. The fact that the global pandemic has placed the security of health data and other business-related data at threat has been greatly documented.[52] As it is now an imperative for governments to invest in safeguards to protect the users of technology, so will it be as automation becomes more widespread in business. If companies and businesses are not confident in government's ability to protect their data, this may negatively impact productivity – and with it, the ability of governments to raise revenues to offset the negative impact of both the pandemic and the widespread use of automation.

As the costs of building and maintaining safe internet infrastructure is added to the long list of government expenditures, the question arises as to how such spending may be funded. It is argued that some synergies may be found here also between the proposals made in terms of the global pandemic and those that would be appropriate to harness the opportunities of automation.

These proposals include the introduction of new taxes such as a wealth tax; a solidarity tax; a tax on negative environmental-impacting activities; and a windfall profits tax on windfall income earned during the pandemic.

South Africa has long considered the feasibility of a wealth tax to remedy the rampant wealth and income inequality in the country.[53] There are some reports that this issue is once again on

[50] Naudé, *supra* n. 29, at 150.

[51] S. Shead, *Google, Facebook Aim To Fix AI Diversity Issue By Funding African Machine Intelligence Course*, (1 Aug. 2018), Forbes, available at https://www.forbes.com/sites/samshead/2018/08/01/google-facebook-aim-to-fix-ai-diversity-issue-by-funding-african-machine-intelligence-course/?sh=28b6e93c2fe6; Naudé, *supra* n. 29, at 152.

[52] C.M. Williams, R. Chaturvedi & K. Chakravarthy, *Cybersecurity Risks in a Pandemic*, 22 Journal of Medical Internet Research 9, 1 (2020); D.J. Borkovich & R.J. Skovira, *Working From Home: Cybersecurity in the Age of COVID-19*, 21 Issues in Information Systems 4, 234 (2020); B. Pranggono & A. Arabo, *COVID-19 Pandemic Cybersecurity Issues*, Internet Technology Letters, 1 (2020); K. Okereafor & O. Adebola, *Tackling the Cybersecurity Impacts of the Coronavirus Outbreak as a Challenge to Internet Safety*, 8 International Journal in IT & Engineering 2, 1 (2020); J. Boehm, J. Kaplan & N. Sportsman, *Cybersecurity's Dual Mission During the Coronavirus Crisis*, McKinsey & Company, 1 (Mar. 2020).

[53] Davis Tax Committee, *Report on the Feasibility of a Wealth Tax in South Africa*, (2018), available at https://www.taxcom.org.za/library.html.

the table.[54] This is not surprising considering the inability of an income tax to adequately gauge taxpayer's standing and ability to pay,[55] given that its function is to tax accretions to wealth and not wealth itself.[56] It has been argued that in order to do justice to the concept of "horizontal equity",[57] income and wealth should be taxed together.[58] Moreover, the direct taxation of wealth has been proposed as a remedy to the problem of rampant inequality.[59]

According to Moore and Prichard, a wealth tax will not negatively affect incentives to innovate or invest.[60] Moreover, a wealth tax would allow the additional burden of financing increased government welfare expenditure on those who either benefitted during the pandemic or were economically unaffected thereby.[61]

A further benefit of a wealth tax is that wealth would in essence constitute a separate tax base that would more effectively be tapped for redistribution purposes than an income tax.[62]

A similar argument is used to motivate the introduction of a solidarity tax. Some argue that a temporary tax should be levied on the income of those who have largely escaped the dire economic consequences of the pandemic so as to raise government revenues for further social welfare spending.[63] It has been argued elsewhere that the solidarity tax should rather encompass a tax on assets than on income.[64] A tax on assets would better allow the capture of sustained wealth rather than a fledgling and possibly short-lived surplus.

A solidarity tax on assets rather than income would be particularly suited to the African country context. It is well

---

[54] *New Tax Could Help with South Africa's Coronavirus Recovery*, (3 Aug. 2020) Business Tech, available at https://businesstech.co.za/news/trending/422218/new-tax-could-help-with-south-africascoronavirus-recovery/.

[55] E.N. Wolff, *Wealth Taxation in the United States*, 44 Public Sector Economics 2, 153 (2020), 173.

[56] R.S. Rudnick & R.K. Gordon, *Chapter 10: Taxation of Wealth* in *Tax Law Design & Drafting*, vol. 1 (V. Thuronyi ed., International Monetary Fund 1996), 5.

[57] "Horizontal equity" is the principle that similar taxpayers should be taxed similarly – see D. Elkins, *Horizontal Equity as a Principle of Tax Theory*, 24 Yale Law and Policy Review 1, 43 (2006).

[58] Wolff, *supra* n. 55.

[59] Id.

[60] M. Moore & W. Prichard, *How Should We Tax After the Pandemic?*, International Centre for Tax and Development (2020).

[61] Id.

[62] R. Bird, *Tax Policy and Economic Development* (Johns Hopkins University Press, 1992), 130.

[63] Id.; A. Aboobaker & I. Bassier, *Three Ways to Finance the COVID-19 Policy Response*, (9 May 2020), Mail & Guardian, available at https://mg.co.za/opinion/2020-05-09-three-ways-to-finance-the-covid-19-policy-response/.

[64] Business Tech, *supra* n. 54.

documented that often people of colour are obligated to financially assist their less financially secure relatives, a practice colloquially known as "black tax".[65] A solidarity tax on assets would allow such persons to continue to distribute their income in this way without also attracting an additional tax burden. Moreover, such a tax on assets would serve to tax those who have been able to accumulate their income towards the creation and building of greater wealth in the form of asset purchases. It has been reported that the South African treasury is currently considering a temporary solidarity tax, although it is unclear whether this will be a tax on income or assets.[66]

Environmental taxes, such as a tax on carbon emissions, has also been proposed as a means by which to raise revenues.[67] The IMF and the OECD both encourage the implementation of carbon taxes as a mechanism to limit the potential of future, more catastrophic environmental crisis.[68] South Africa introduced its carbon tax in June 2019[69] and is the first African country to have such a direct tax placed on carbon emissions.[70] Perhaps the time is opportune for a similar tax to be introduced in other African countries as well.

A further new tax that has been proposed is the tax on windfall profits made by corporations during the pandemic crisis.[71] Sometimes called an "excess profits tax", some argue that such a tax would effectively capture the profits that some digital and other companies were able to make as a result of various lockdown restrictions placed on economies.[72] Although these

[65] See N.N. Magubane, *Black Tax: The Emerging Middle Class Reality*, MBA Dissertation, University of Pretoria (2016); G. Mhlungu, *Black Tax Is Not Real*, (10 May 2015), City Press, available at https://www.news24.com/citypress/Voices/Black-tax-is-not-real-20150508.

[66] Business Tech, *supra* n. 54.

[67] Collier, Pirlot & Vella, *supra* n. 9, at 10; Moore & Prichard, *supra* n. 60.

[68] International Monetary Fund, Fiscal Affairs Department, *Greening the Recovery, Special Series on Fiscal Policies to Respond to COVID-19* (20 April 2020), available at https://www.imf.org/en/Publications/SPROLLs/covid19-special-notes; OECD, *supra* n. 9.

[69] SA: Carbon Tax Act 15 of 2019.

[70] S. Greiner et al., *Will Carbon Pricing Emerge in Africa as Well?*, International Emissions Trading Association Greenhouse Gas Market Report, 32 (2016).

[71] J. Rutterford, *Taxing Financial Winners from Coronavirus to Pay for the Crisis – Lessons from WW1*, (13 October 2020), The Conversation, available at https://theconversation.com/taxing-financial-winners-from-coronavirus-to-pay-for-the-crisis-lessons-from-ww1-147790; L. Mowat, *Companies Profiting from Coronavirus SHOULD Face Windfall tax - 'Help UK Back on its Feet'* (19 May 2020), Express, available at https://www.express.co.uk/news/uk/1284445/Coronavirus-tax-food-retailers-uk-economy-uk-lockdown-news-poll; R. Cox, *Windfall-Tax Covid-19's Sweepstakes Winners* (27 April 2020), Reuters, available at https://www.reuters.com/article/us-health-coronavirus-companies-breaking-idUSKCN22924Z.

[72] See A. Christians & T. Diniz Magalhaes, *It's Time for Pillar 3: A Global Excess Profits Tax for COVID-19 and Beyond*, Tax Notes (1 May 2020); R. Avi-Yonah, *It's Time to Revive the Excess Profits Tax*, (27 March 2020),

proposals have been subject to criticism, specifically regarding how such "excess" profits are to be calculated,[73] such criticism has been met in the proposals by proposing the use of either the "average earnings" method or the "invested capital" method.[74] Given that many countries may already have an excess profits tax or something similar – along with mechanisms by which to calculate the excess profits – in their tax legislation which had been applied during wartimes, a proposal for either a global excess profits tax or a unilateral imposition of such a tax may be feasible for many countries.

In sum, upon an evaluation of the tax policy measures adopted under COVID-19 it is noted that these are all geared towards ensuring that at some point productivity will be returned to economies. Improved productivity levels will create greater capacity to hire more individuals, reduce unemployment and if this is done through the use of automation, with the added bonus that the standard of living of people will be improved as well. As the tax policy measures under the two circumstances are designed to achieve the same objectives, it would be useful and economically prudent to consider the implementation of such policies to harness both the effects of COVID-19 and the opportunities of widespread automation in business. It for these reasons that similar tax policy measures should be implemented when encouraging automation as is used to currently deal with COVID-19.

3. Recommendations

This paper argues that African countries should consider the following recommendations when designing tax policies for the future.

In terms of government spending, African countries should consider implementing wage subsidy programmes so as to encourage businesses to hold onto employees while they are being upskilled to take on more challenging duties as increased automation takes over the routine tasks. Governments should also consider introducing temporary unemployment insurance levy and skills levy waivers so as to lower the cost of employment of those employees being upskilled.

Also, African countries should consider supporting the manufacturing sector as it continues its promising growth trajectory in Africa. This sector has the potential to absorb a large

available at https://prospect.org/coronavirus/itstime-to-revive-the-excess-profits-tax/; E. Saez & G. Zucman, *Opinion: Jobs aren't Being Destroyed This Fast Elsewhere. Why Is That?*, The New York Times (30 March 2020), available at https://www.nytimes.com/2020/03/30/opinion/coronavirus-economy-saez-zucman.html.

[73] Collier, Pirlot & Vella, *supra* n. 9, at 9.

[74] Christians & Diniz Magalhaes, *supra* n. 72; Avi-Yonah, *supra* n. 72.

number of the African working population as the youth become of age to enter the job market. This sector also has great capacity to be modernized, and once this is done, the potential for increased productivity levels could be unlocked, thereby increasing the standard of living of ordinary Africans. This is especially as it has been documented that manufacturing jobs are some of the better paid jobs in Africa.[75]

Furthermore, governments should consider educational programmes which may assist students in learning how to become entrepreneurs and sustain their own small businesses. There is great capacity for small businesses to become more productive through the use of small-scale automation. This would be particularly suited to the African context with the large informal sector that is present in most African countries. A combined educational-driven approach together with a government-sanctioned use of automation may be what is needed to help ensure the productivity and sustainability of small businesses in African countries.

In terms of raising the needed revenues to fund such initiatives, it is recommended that African countries consider implementing a temporary solidarity tax on assets. From an automation tax policy perspective, such a tax could be used as a once-off, last resort tax. This is because such a tax could deter taxpayers from using automation altogether. It is argued that a solidarity tax could be used as a once-off means to raise revenue to support businesses who are not using automation as widely as they should. The tax could be imposed on those businesses who have been successful in integrating automation into their operations.

From a broader tax policy perspective, it is suggested that such a solidarity tax be focussed on businesses rather than individuals, at least initially. Imposed in this way, a solidarity tax would not further burden individual taxpayers who financially assist their relatives and friends during the pandemic.

The introduction of a wealth tax would also meet such nuanced concerns. According to a study conducted on the economic impact of a wealth tax in the United States, Wolff observed that such a tax would fall "proportionately more on older families than younger ones; more on married couples than singles; and more on whites and Asians than blacks and Hispanics."[76] A wealth tax in an African country context therefore may assist in taxing those taxpayers who have accumulated vast wealth without the reciprocal moral obligation to financially assist relatives and friends.

While it has been noted that wealth taxes are difficult to administer and calculate, this should be weighed up against the prospect of a wealth tax raising some much needed revenues

[75] Naudé, *supra* n. 29, at 146.
[76] Wolff, *supra* n. 55, at 173.

while having no adverse effect on the drive to innovate and incorporate more automation in businesses.[77] Algeria is the only African country which currently imposes a net wealth tax, while the majority of African countries impose some kind of transfer tax.[78] African countries should therefore consider the feasibility of introducing a wealth tax.[79]

In making this recommendation, however, it is assumed that such a wealth tax is supported by other government initiatives to reduce inequality. As highlighted in a study of the feasibility of a wealth tax in South Africa, government measures – such as land reform and targeted government spending initiatives that focus on the general upliftment of society through health, education and infrastructure development – are key to reducing inequality.[80]

African countries should also consider introducing more capital allowances and deductibles to encourage the widespread use of automation in businesses. This is especially because it is already common practice in East African countries, for example, to provide for significant capital allowances to incentivize investment. In fact, all the East African Community Partner States except for Burundi and South Sudan routinely provide for initial capital allowance rates of 50%[81] while Kenya provides for a 150% capital allowance for the construction of bulk storage and handling facilities for supporting the Standard Gauge railway operations, provided that certain conditions are met.[82]

It is argued that the possible job loss effects of these incentives would be countered by the government spending initiatives discussed earlier. As such, businesses in African countries would be incentivized to modernize and update their business premises and practices. In so doing, productivity would be improved as well, ultimately translating into an increase in taxable income.

Finally, African countries should consider the feasibility of imposing an excess profits tax on windfall profits made during the pandemic. Excess profits taxes are not a new phenomenon to African countries. South Africa introduced an excess profits tax in 1917 while it was engaged in World War I[83] and again in 1940

[77] Moore & Prichard, *supra* n. 60.
[78] For example, Angola, Botswana, Cameroon, Central republic of Congo, Gambia, Ivory Coast, Mauritius, Mozambique, Namibia, South Africa, Tunisia, Uganda and Zambia.
[79] A net wealth tax is a tax imposed on the difference between the sum of all wealth and the sum of all liabilities.
[80] Davis Tax Committee, *supra* n. 53, at 14.
[81] KY: Tax Laws (Amendment) Act, 2020, Second Schedule; RW: Law Nº 006/2021 of 05/02/2021 on Investment Promotion and Facilitation, Annex item XX; TZ: Income Tax Act, 2004 as amended, Chapter 332, Third Schedule; UG: Income Tax Act, 1997, Chapter 340 of the Laws of Uganda, s 28(1).
[82] KY: Income Tax Act, 1973, Chapter 470, s 24E; *Business Laws (Amendment) Act*, 2020 (Kenya), s 11.
[83] SA: Income Tax Act 41 of 1917.

when it was involved in World War 2.[84] Moreover, the Democratic Republic of Congo currently has a super-profits tax of 50% on mining company profits in place.[85] This tax is triggered when the commodity prices rise by 25% of the estimated price contained in the mining company's feasibility report, which has to be filed when applying for a mining permit. The concept that an added tax should be placed on the additional profits made by those who benefit from circumstances which cause others monumental suffering is therefore not a new concept to African countries.[86]

4. Conclusion

Many of the tax policy responses across the globe have done well to attempt to minimize the immediate economic impact of the pandemic. As the economic impact of the pandemic continues to be felt, discussions have begun as the long-term tax policy decisions that should be made to assist the recovery and sustainability of the fiscal system that has strained to meet the required pandemic social spending demands.

This paper argues that these tax policies are often backward-looking and designed to reinstate the economy as it was before the pandemic. While this may be useful, it would be more useful for tax policies to be forward-looking so as to propel the economy into a better position in the future. It is in this vein that this paper draws synergies between the tax policies designed to meet the long-term impact of the pandemic and the policies which should be put into place to harness the potential of widespread automation in business.

In order to do this, this paper recommends that African countries consider focusing their government spending on providing wage subsidies for employees who must be upskilled as automation takes over their former jobs; modernizing the manufacturing sector which has the best capacity to absorb new entrants to the African job market; and adopting educational programmes which enable entrepreneurs to create and sustain their own small businesses through the use of automation. From a revenue raising perspective, this paper argues that African governments should consider the spread of long-term COVID-19 tax policy proposals made and undertake feasibility studies to determine which would be best suited for its context. These proposals include a wealth tax, solidarity tax on assets, excess

[84] SA: Income Tax Act 25 of 1940.
[85] DRC: Act No. 007/2002 of 11 July 2002 establishing the Mining Code, as amended by Act No. 18-001 of 9 March 2018.
[86] B.Y. Yamey, *The Excess Profits Duty in South Africa*, 10 SA Journal of Economics 263 (1942). For more on this see A. Titus, *May An Investment in Interest-bearing Securities Constitute a Trade for the purposes of the Income Tax Act?*, 133 South African Law Journal 3, 475 (2016) 508.

profits tax and more capital allowances to encourage investment. In so doing, these possible avenues for revenue raising create opportunities for further research in determining their feasibility in a particular African country context.

It is an old adage that "a good crisis should not go to waste". The same should be said of the global pandemic that COVID-19 has created. The synergies created between the tax policies to meet the pandemic and the policies designed to encourage automation is a unique set of circumstances that if properly aligned, could represent a great opportunity for African countries to propel their economies forward.