



Challenges to debt sustainability and financial market development posed by COVID-19 and the war in Ukraine

A comparative case-study of Ethiopia, Ghana, Kenya, Nigeria, and South Africa

SEPTEMBER 2022

A hand holding a stack of Kenyan 1000 Shilling banknotes. The background is a solid teal color. The banknotes are white with green and blue accents. The number '1000' is visible on several notes. The hand is positioned on the right side of the frame, holding the stack of notes.

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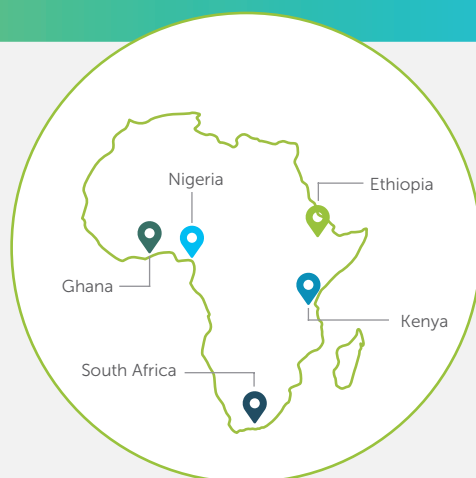
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List of Abbreviations

| | |
|----------|---|
| CPI | Consumer Price Index |
| CPIA | Country Policy and Institutional Assessment |
| COVID-19 | SARS-CoV-2 Coronavirus |
| DSA | Debt Sustainability Analysis |
| ECOWAS | Economic Community of West African States |
| FX | Foreign Exchange Rate |
| GDP | Gross Domestic Product |
| IMF | International Monetary Fund |
| IFRS | International Financial Reporting Standards |
| MSME | Micro, Small and Medium Enterprises |
| PPP | Public-Private Partnership |
| SSA | Sub-Saharan Africa |
| WB | World Bank |
| WEO | World Economic Outlook |

Executive summary

This study seeks to understand the challenges to debt sustainability and financial market development in five case-study countries – Ethiopia, Ghana, Kenya, Nigeria, and South Africa – posed by two recent shocks: the Covid-19 pandemic and the war in Ukraine.



While chronic fiscal and current account imbalances that arose well before the Covid-19 pandemic placed limits on the ability of country authorities to respond to unexpected shocks, this did not prevent authorities in four of the focus countries – Ethiopia, Ghana, Kenya, and South Africa – from adopting counter-cyclical fiscal measures that led to the accumulation of high levels of public debt.

This study shows that while all countries are exposed to liquidity and solvency risks, the most important risk to be monitored is the risk of an external debt distress. Ethiopia, Ghana, Kenya, and Nigeria face high levels of liquidity risk associated with their external indebtedness, and the risk of debt distress during the next decade in Ethiopia, Ghana, and Kenya is considered high. The availability of foreign exchange required to fund the current account deficit and external debt service is constrained by low public revenues (Ethiopia, Ghana, and Nigeria) and large trade deficits (Ethiopia, Kenya). At the same time, prospects for alleviating liquidity pressures in the short to medium term are limited, as they depend on structural changes aimed at reducing current account deficits. Indeed, it is anticipated that these pressures will become even more acute in 2022/2023 due to a combination of three factors – historically high levels of public debt, rising market interest rates and downward pressure on many emerging market currencies – which have caused the cost of external borrowing on commercial terms to become prohibitive.

Prior to the pandemic, given the limited depth of their financial systems, Ethiopia, Ghana, and Kenya had already accumulated unsustainable levels of public debt. Computational simulations

show that over the coming decade the level of public debt to GDP in Ghana, Kenya, Nigeria, and South Africa will stabilise, although in Ghana, Kenya, and South Africa this will happen at historically high levels, resulting in high debt service burdens and constraining fiscal space for new public investments. An important lesson highlighted by Covid-19 and the Ukraine war is the extent to which debt vulnerability derives from exposure to external creditors both in terms of the ability of sovereign borrowers to honor their external debt service obligations, and in terms of high debt service obligations which can lower economic growth prospects in the medium to longer term.

A comparative analysis shows that Nigeria and South Africa, Sub-Saharan Africa's two largest economies, are in a less precarious situation than the other three countries. Nigeria entered the Covid-19 crisis with a lower level of public debt while South Africa's deep domestic financial market makes it possible to absorb higher levels of public debt.

However, Nigeria and South Africa need to address specific risk exposures. Due to low fiscal revenue mobilisation, Nigeria's total debt service absorbs a high share of government revenues, thus exposing the government to liquidity risk. Even with its more developed taxation system, South Africa is also exposed to liquidity risk because the ratio of total debt service to revenues is high. While foreign investors impose discipline on macroeconomic management, which should ultimately benefit the South African economy, reliance on foreign portfolio investment in domestic government debt exposes South Africa to risk, due to the 'vagaries' of foreign portfolio investors.

Table 1 below gives an overview of the gravity of the liquidity and solvency risks facing the five countries assessed in this paper.

Table 1: Summary of risk indicators¹

| Risk indicator | Ethiopia | Ghana | Kenya | Nigeria | South Africa |
|----------------------------------|-------------|-------------|-------------|-------------|--------------|
| Solvency Risk | | | | | |
| Total debt % GDP | Low risk | Medium risk | Medium risk | Low risk | Medium risk |
| External debt % GDP | Medium risk | Medium risk | Medium risk | Low risk | Low risk |
| Domestic debt % GDP | Low risk | Medium risk | Medium risk | Low risk | Medium risk |
| External debt % exports | High risk | Medium risk | High risk | Medium risk | Medium risk |
| Liquidity risk | | | | | |
| Total debt service % GDP | Low risk | Medium risk | Medium risk | Low risk | Medium risk |
| External debt service % GDP | Low risk | Low risk | Low risk | Low risk | Low risk |
| Domestic debt service % GDP | Low risk | Medium risk | Medium risk | Low risk | Low risk |
| Total debt service % revenues | High risk | High risk | High risk | High risk | Medium risk |
| External debt service % revenues | High risk | High risk | High risk | High risk | Low risk |
| Domestic debt service % revenues | High risk | High risk | High risk | High risk | High risk |
| External debt service % exports | High risk | Medium risk | High risk | Low risk | Low risk |

● High risk ● Medium risk ● Low risk

Since it is very unlikely that governments will implement required fiscal consolidation measures in the near term, it is to be expected they will resort to increased domestic borrowing. Under current macroeconomic circumstances in the five case-study countries, increased reliance on government debt issuance is likely to put upward pressure on the yield of government securities, thereby crowding out the supply of credit to the private sector.

Further constraining the options available to sovereign borrowers is the cost of refinancing their external borrowing, at least in the short to medium term. In recent years case-study countries other than South Africa have placed increasing reliance on borrowing on the International Capital Markets, where countries issue sovereign bonds usually denominated in a foreign currency such as the US Dollar or in Euros. Sovereign borrowers' access to external financing is constrained in the wake of the Covid-19 and Ukraine crises resulting in increased exposure to liquidity risk on external borrowing. With the tightening of credit markets worldwide caused by the rapid rise in inflation in 2021 and 2022, combined with enhanced risk premiums on emerging market debt, Ghana, Kenya and Ethiopia are particularly exposed, as they face sizeable refinancing risks on their Euro-borrowing with yields at historically high levels.

In responding to the Covid-19 pandemic, authorities in case-study countries adopted a combination of policy responses to mitigate the negative impact of increased government borrowing: (a) reducing policy interest rates, (b) central bank purchases of long-term government bonds and sale of short-term securities

(quantitative easing) in Ghana and South Africa, (c) drawing on central bank overdraft facilities or financing government expenses by issuing securities directly to the central bank (debt monetisation) in Ethiopia, Nigeria and Ghana; and (d) relying on financial repression measures, such as foreign exchange controls, payment of negative real interest rates on government securities, and the imposition of investment requirements on banks and institutional investors in Ethiopia and Nigeria.

Domestic financial market development deserves greater attention post-Covid-19. Given greater reliance on domestic debt issuance to meet government funding needs, policies designed to increase the absorptive capacity of domestic securities markets have an important role to play. Debt managers can contribute to this process by ensuring that debt instruments are best tailored to the needs of the domestic and external investor base. Equally important is that domestic money and primary markets where debt is issued by the government have sufficient depth to absorb liquidity shocks as well as issuance of large volumes of government securities. The more that debt issuance by the government is tailored to meeting the needs of a diversified institutional investor base – both the needs of domestic and foreign portfolio investors buying domestic securities, and the needs of foreign investors buying securities issued by the Government externally (on the Euro-market) – the more government debt financing costs will be shielded from sudden changes in market sentiment.

¹ In the context of public debt management, solvency risk reflects uncertainty as to whether future surpluses on current account will be sufficient to cover sovereign debt service obligations: payment of interest and repayment of principal. Liquidity risk refers to uncertainty about the ability of short-term assets to meet short-term obligations. Liquidity risks can arise in various circumstances such as: a) high risk premia (higher cost) associated with exiting positions due to lack of depth of particular markets, and b) the fall in the value of liquid asset prices/revenues leading to a short-fall in meeting short-term in resources required to meeting current obligations.

Thus, public debt management strategies can contribute to domestic market development and will be instrumental in managing vulnerabilities arising from high public indebtedness, not only in reducing reliance on foreign borrowing, but also in laying the foundation for more efficient intermediation of scarce domestic savings. The deeper and more liquid are domestic markets, the higher their capacity to absorb greater recourse to domestic debt issuance, and the lower the risks (in terms of the impact on funding costs) associated with increased domestic debt refinancing.

Nonetheless, deepening of domestic financial markets presents risks and challenges. Not only will the authorities need to demonstrate their commitment to market-conform policies – aborting policies such as financial repression and excessive monetary financing – but they will also need to prioritise management of public debt with a view to fostering market development and minimising the crowding out that reduces the availability and raises the cost of private sector credit. While deeper markets increase absorptive capacity, greater reliance on issuance of domestic debt can both be a catalyst to the deepening of local financial markets and a threat to their development. There is evidence that, in the short-term, the shift of the supply of government securities tends to put upward pressure on the sovereign yield curve, thereby raising the cost of borrowing both to the government and the private sector. Changes in the sovereign credit risk premium also tend to raise the cost of capital for private issuers.

In this context it will be important to cease central bank financing of government deficits both with a view to lessening inflationary pressures and to re-confirming commitment to the primary mandate of central banks in controlling inflation. Countries such as Ethiopia and Nigeria will need to reduce their reliance on direct financing provided by the central bank. From a macroeconomic point of view, debt monetisation unleashes inflationary pressures and raises uncertainty as regards macroeconomic management. Over an extended period, recurrent debt monetisation raises doubts about the government's ability and willingness to implement sound and effective macroeconomic policies and will negatively affect the volume of private domestic investment and foreign direct investment. Debt monetisation practices are not market friendly, as they usually give rise to higher and more volatile rates of inflation, resulting in greater uncertainty as to ex-post real interest rates. To compensate for such uncertainty, investors will require an inflation risk premium, which while providing some protection against inflation uncertainty, raises the cost of borrowing for both the government and the private sector. Thus, it is important that debt monetisation be discontinued, both from the perspective of bringing inflation under control, and to confirm the autonomy of central banks, whose primary mandate is ensuring price stability.

While financial repression policies may reduce the government's immediate cost of debt service, they invariably distort financial markets, discourage savings, and inhibit financial deepening. Rather than suffer the market dislocation caused by excessive fiscal deficits, countries such as Nigeria and Ethiopia have resorted to various types of financial repression. Financial repression occurs when the authorities interfere with decisions of lenders

in allocating credit or seek to control (i.e., reduce) the interest rates they charge. Similarly, foreign exchange controls adopted by Ethiopia and Nigeria seek to manipulate the market price for foreign exchange and result in artificial foreign exchange scarcity, impair price discovery by decoupling the exchange rate from market signals, distort relative prices and the uses of resources, and foster the development of parallel or illegal foreign exchange markets

Excessively easy monetary policies that result in negative real interest rates have also been prevalent in Ethiopia and Nigeria. While such policies curb the growth of public debt in the short term, they discourage the formation of savings, and encourage financial disintermediation in the medium term. By lessening market responses or introducing market distortions, repressive financial policies reduce immediate responses to shocks in terms of market signals, but at the cost of reducing confidence in market-based finance. Over time such distortions undermine the role of financial markets in allocating scarce resources to their optimal uses and may be difficult to unravel, as they are associated with opportunities for rent-seeking

In making these recommendations, it is important to recognise that adoption of policies designed to support market development will give rise to tradeoffs. In the short-term there are tensions between the gains associated with market development and fiscal costs and risks. Policies such as discontinuing financial repression and refraining from monetary financing, while supportive of financial market development, will oblige the governments to find alternative funding sources. Such short-term costs may hamper the authorities' willingness to implement policy reforms, even when the benefits associated with fostering financial market development, particularly in terms of enhancing the sustainability of the government's debt, substantially outweigh the costs in the medium to longer term. In addition, authorities may be hesitant to undertake the transition towards more market-conform financing of their fiscal deficits, as the transition will inevitably raise awareness, transparency, and accountability regarding their funding.

Going forward, implementing the conditionalities associated with debt relief negotiations more effectively than in the past will be important in avoiding a situation where the benefits of debt relief once again only remain temporary. Anticipated external debt levels pose a threat to debt sustainability in four case-study countries, and in the case of South Africa foreign portfolio investment poses a risk to macroeconomic stability. Previous attempts to ease the adjustment process and at the same time provide the opportunity for market development have involved debt relief and increased access to external concessional financing. Such debt relief efforts have been accompanied by conditionalities designed to put countries onto a path of fiscal consolidation and stabilisation of their external debt positions aimed at ensuring debt sustainability in the future. However, as documented in this paper, the outcomes of efforts to avoid future debt accumulation and the dangers to debt sustainability were short-lived. While well-intentioned, these efforts failed to resolve macroeconomic imbalances, and countries were ill-prepared to meet recent shocks.

Table 2 provides an assessment of the severity of the policy-challenges faced by the five case-study countries in addressing fiscal imbalances and supporting financial market development.

Table 2: Severity of policy challenges faced by case-country countries

| | Ethiopia | Ghana | Kenya | Nigeria | South Africa |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|
| Addressing fiscal imbalances | | | | | |
| Align tax burden with SSA average | Urgent | Urgent | Relatively urgent | Urgent | Relatively urgent |
| Reverse upward trajectory of public debt | Very urgent | Very urgent | Very urgent | Relatively urgent | Urgent |
| Reduce external borrowing | Very urgent | Very urgent | Very urgent | Urgent | Relatively urgent |
| Strengthen public debt management | Relatively urgent | Relatively urgent | Relatively urgent | Relatively urgent | Relatively urgent |
| Measure & mitigate contingent fiscal risks | Urgent | Urgent | Urgent | Urgent | Urgent |
| Addressing market development issues | | | | | |
| Cease debt monetisation | Urgent | Relatively urgent | Relatively urgent | Very urgent | Relatively urgent |
| Unwind financial repression measures | Very urgent | Relatively urgent | Relatively urgent | Very urgent | Relatively urgent |
| Strengthen public debt management | Urgent | Relatively urgent | Relatively urgent | Relatively urgent | Relatively urgent |

● Very urgent ● Urgent ● Relatively urgent



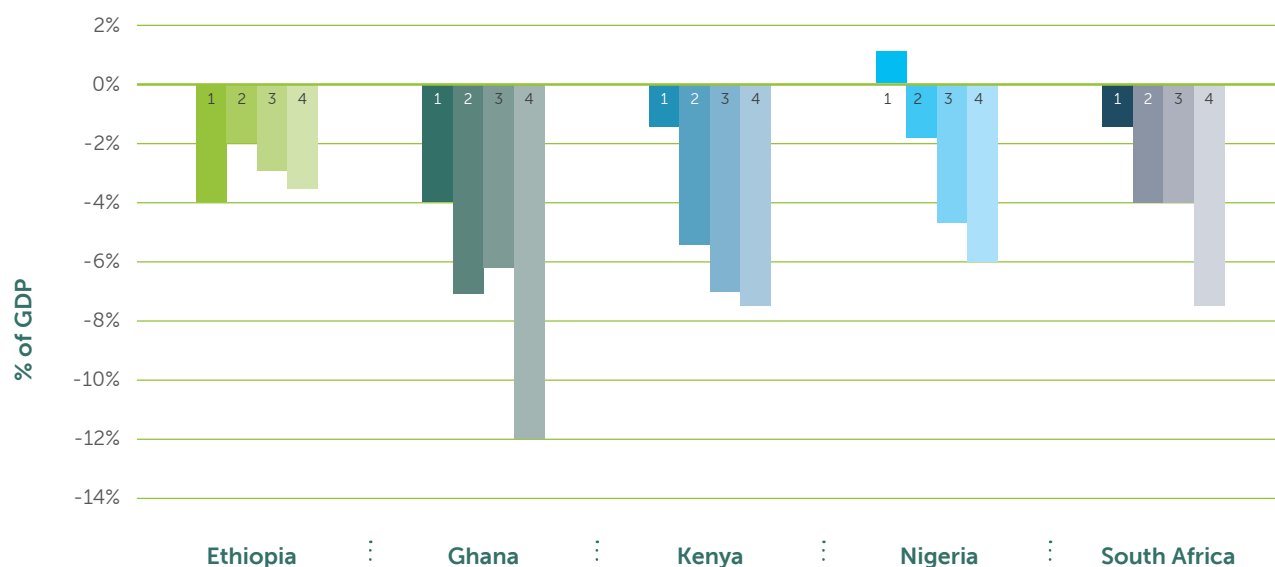
1. Developments in the macroeconomic environment

This paper explores the consequences of the Covid-19 pandemic and the war in Ukraine on debt sustainability and financial market development in five case-study countries in Sub-Saharan Africa: Ethiopia, Ghana, Kenya, Nigeria, and South Africa. Together, the Covid-19 crisis and the war in Ukraine exacerbated already existing macroeconomic imbalances and resulted in greater uncertainty for policymakers at a time when policy options were already constrained. Chronic fiscal and current account imbalances arising well before 2020 raised their borrowing needs, strained the absorptive capacity of local financial markets, left case-study countries with insufficient buffers to cope with the adverse effects of recent shocks, and exposed them to higher risk of external debt distress. The pandemic and post-Covid-19 inflationary pressures also left social scars, such as an increase in the number of people living in extreme poverty, and threatened long-term productivity due to prolonged school closures.

Sharply deteriorating fiscal imbalances

Since commodity prices weakened in the period following 2010², fiscal balances have deteriorated – a development exacerbated in 2020 by authorities' response to the Covid-19 pandemic (Figure 1). In the long-term, Government's fiscal deficits can be mainly explained by low revenue mobilisation (Ethiopia, Ghana, Nigeria), by the public investment gap (between public savings and public investments) and by the organic growth of recurrent expenditures (Ghana, Kenya, and South Africa). In 2020 and 2021, social and health care expenditures linked to the Covid-19 pandemic as well as temporary tax relief measures contributed to further expanding fiscal imbalances.

Figure 1: Fiscal imbalances (averages for selected periods)



(1) 2000-2010 (2) 2011-2015 (3) 2016-2019 (4) 2020-2022

Source: World Economic Outlook 2022 - Forecast

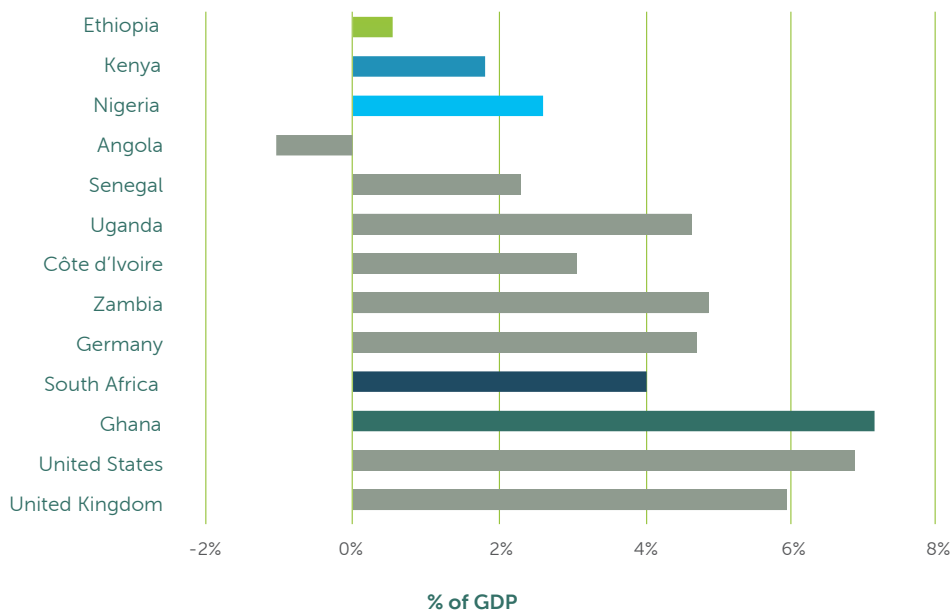
Ghana and South Africa were more proactive in adopting counter-cyclical fiscal measures than the other three countries, as reflected in the large fiscal policy impulse in these countries in 2020 and 2021, Figure 2^{3,4}. Significant easing of fiscal policy in Ghana can partly be attributed to the political cycle with elections held towards the end of 2020. While the fiscal impulse in South Africa was smaller than in Ghana, with its more developed local capital market South Africa had better capacity to absorb the relatively sizeable Covid-related fiscal impulse.

² 2010 is referred to as the end of the commodity cycle. Prices weakened until the recent scarcities created by the war in Ukraine, see further discussion below.

³ Debt-to-GDP ratios in Ghana and Kenya were similar in 2019: 62.8 percent of GDP and 62.1 percent of GDP, respectively. Fiscal deficits were also alike: 7.3 percent of GDP and 7.7 percent of GDP, respectively. However, while Kenya only increased its fiscal deficit from 7.7 percent of GDP in 2019 to 8.4 percent of GDP in 2020, Ghana's deficit increased from 7.3 percent of GDP in 2019 to 16.4 percent of GDP in 2020.

⁴ According to Ghana (2021b) the increase in public debt was caused both by the impact of the pandemic and the crystallisation of energy sector "take or pay" contracts as well as the financial sector bailout.

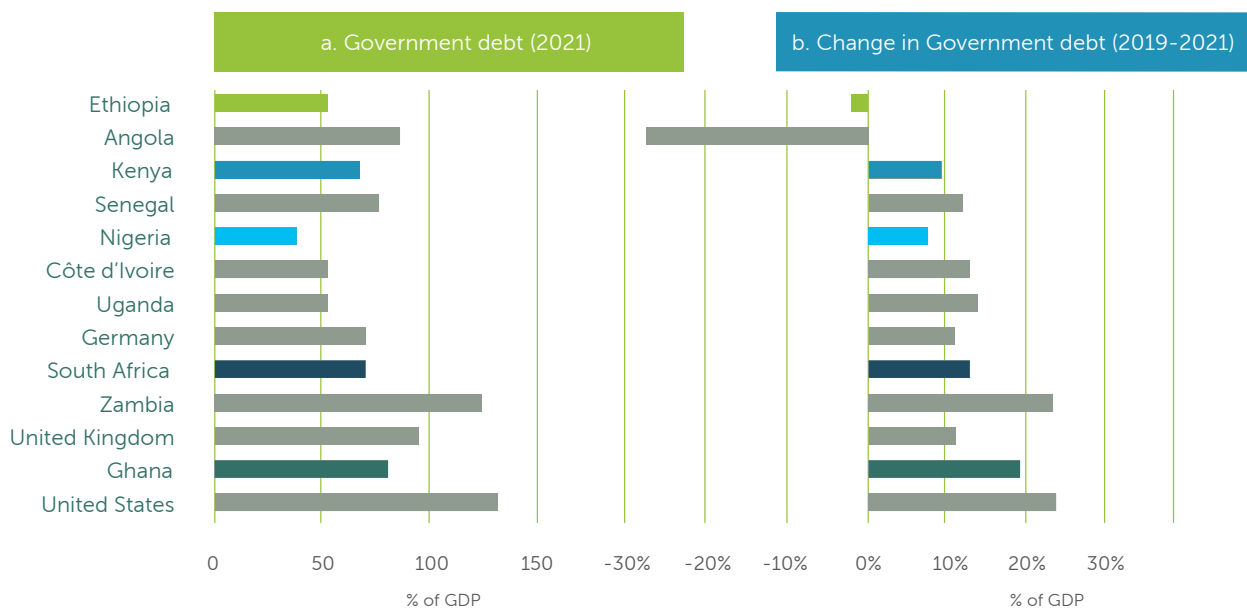
Figure 2: International comparison of fiscal impulse in 2020 and 2021⁵



Source: World Economic Outlook

The large fiscal stimulus implemented by Ghana and South Africa resulted in correspondingly large increases in government indebtedness (Figure 3). While the size of their government indebtedness was initially similar, because they adopted a more aggressive fiscal response, South Africa and especially Ghana now face larger adjustment challenges than Kenya. While Ethiopia ran fiscal deficits in 2020 and 2021, relatively high inflation rates (with a GDP deflator rate of 18.2 percent in 2021) led to a reduction in its debt-to-GDP ratio between 2019 and 2021.

Figure 3: Level of government debt to GDP in 2021

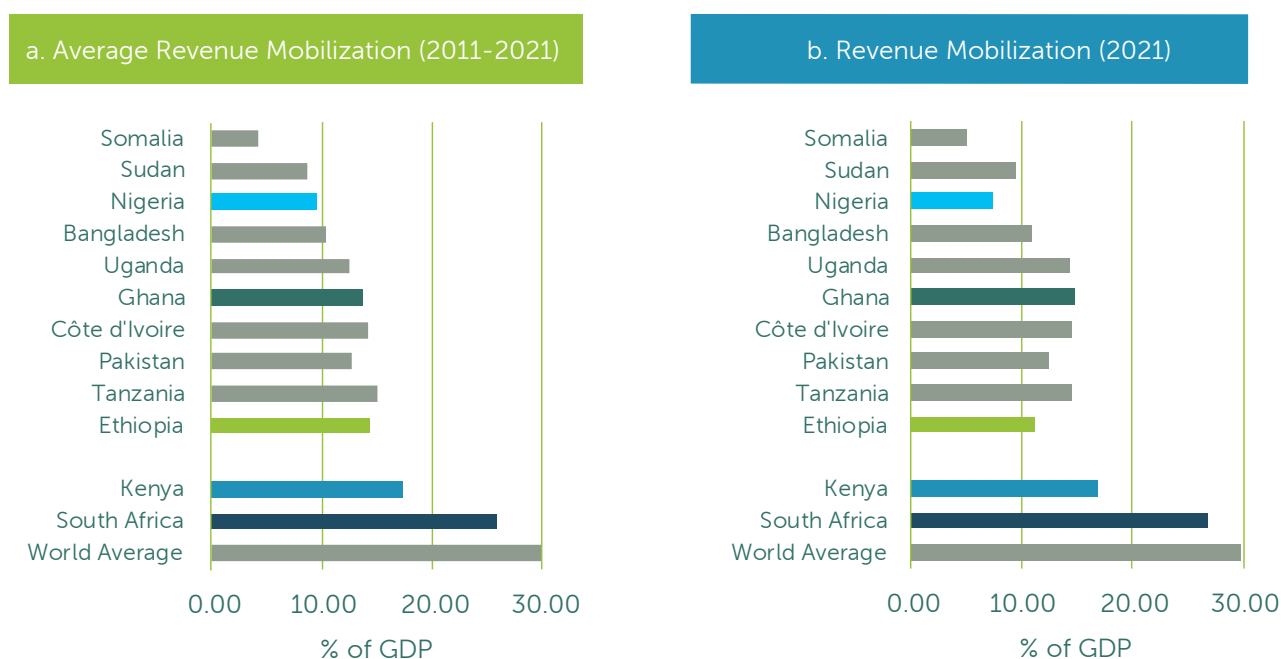


Source: World Economic Outlook

An important factor defining fiscal space is the ability of case-study countries to mobilise revenues. Three case study countries – Nigeria, Ghana, and Ethiopia – are globally among those countries collecting least tax, Figure 4. Additionally, revenue mobilisation in 2021 in Nigeria and Ethiopia was lower than average revenue mobilisation in these same countries during the last ten years. Although the burden of taxation is closer to the world average in South Africa than in other case-study countries, efforts are nonetheless needed to improve tax administration and to review tax legislation to limit base erosion and profit shifting opportunities, reduce tax expenditures, and rebalance revenue mobilisation to rely more on the recently introduced carbon tax⁶

5 Here fiscal impulse is measured by the difference between the average fiscal deficit in 2020 and 2021 and the average fiscal deficit between 2011 and 2019.
6 IMF (2019a).

Figure 4: Average Revenue Mobilization.⁷



Source: World Economic Outlook – April 2022

Due to positive changes in the terms of trade and higher oil-linked public revenues, the war in Ukraine may reduce fiscal imbalances of oil producing countries, such as Ghana and Nigeria, thereby at least partly compensating for rising public expenditures on commodities with a high import content, such as food and fertilisers. For Ethiopia, Kenya, and South Africa, due to efforts to mitigate the effects of the supply shocks caused by the war, adverse changes in the terms of trade are expected to put further pressure on public expenditures.

Exposure to chronic external imbalances

Persistent current account deficits may also result in higher public debt levels. A deficit on the current account is equivalent to the gap between domestic savings and investments and is representative of a country's external funding needs. Persistent current account deficits will put pressure on monetary policy and may cause a drain on foreign exchange reserves. Where country authorities are reluctant to raise domestic interest rates, persistent current account deficits are therefore likely to be associated with currency devaluations that result in higher external debt and a higher cost of external debt service.

Reliance on commodity exports represents a risk for case-study countries. While they benefited from stronger terms of trade during the prolonged global commodities cycle from 2000 to 2010 (Figure 5.g), from 2011 to 2019 commodity prices fell and only started to recover again in 2020. Nigeria was especially

affected by the fall in commodity export prices after 2014: by 2020, export prices had lost almost sixty percent of their value⁸.

The Covid-19 pandemic exacerbated pre-existing external imbalances due to several coincidental factors: a sharp decline in trade, a decrease in service exports, including tourism and travel (Kenya and South Africa), a collapse in the demand for oil in the first half of 2020 (Ghana and Nigeria), a surge in the demand for imported medical products, a shift in household consumption from services towards consumer goods, a temporary fall in remittances, and a disruption in global supply chains that negatively impacted industrial production (mainly in Nigeria and South Africa).

In 2021 external imbalances improved somewhat in all five case-study countries, although there were considerable differences across products and sectors. Terms of trade improved in the second half of 2020 and 2021 favoring exports, Figure 5.g. In general, services recovered though at a slower rate than trade in goods, and there were differences among service sectors. Travel and tourism took more time to recover than telecommunication and information technology services.

The recovery of the current account can be explained both by external and domestic factors. From an external perspective, economic stimulus packages in developed economies in 2020/2021 contributed to expanding aggregate demand. The unwinding of backlogs in international supply chains, greater demand for goods, and the release of pent-up demand from 2020 all contributed to the recovery. From a domestic perspective, stimulus packages resulted in increased demand as did the normalisation of domestic supply chains. However, uncertainty linked to the post Covid-19 economic recovery continued to affect external balances. Lockdowns in more advanced economies, such as China, impacted key

⁷ Global scoring of those countries collecting the least tax with the addition of Kenya and South Africa.

⁸ The reference year in Figure 5.g is 2012 when the indices for all countries stood at 100.

manufacturing hubs and caused bottlenecks in global supply chains, thereby putting a damper on aggregate demand. Delays in vaccination, both domestically and as made available to the population of relevant trade partners, could also partially stall the revival of international trade.

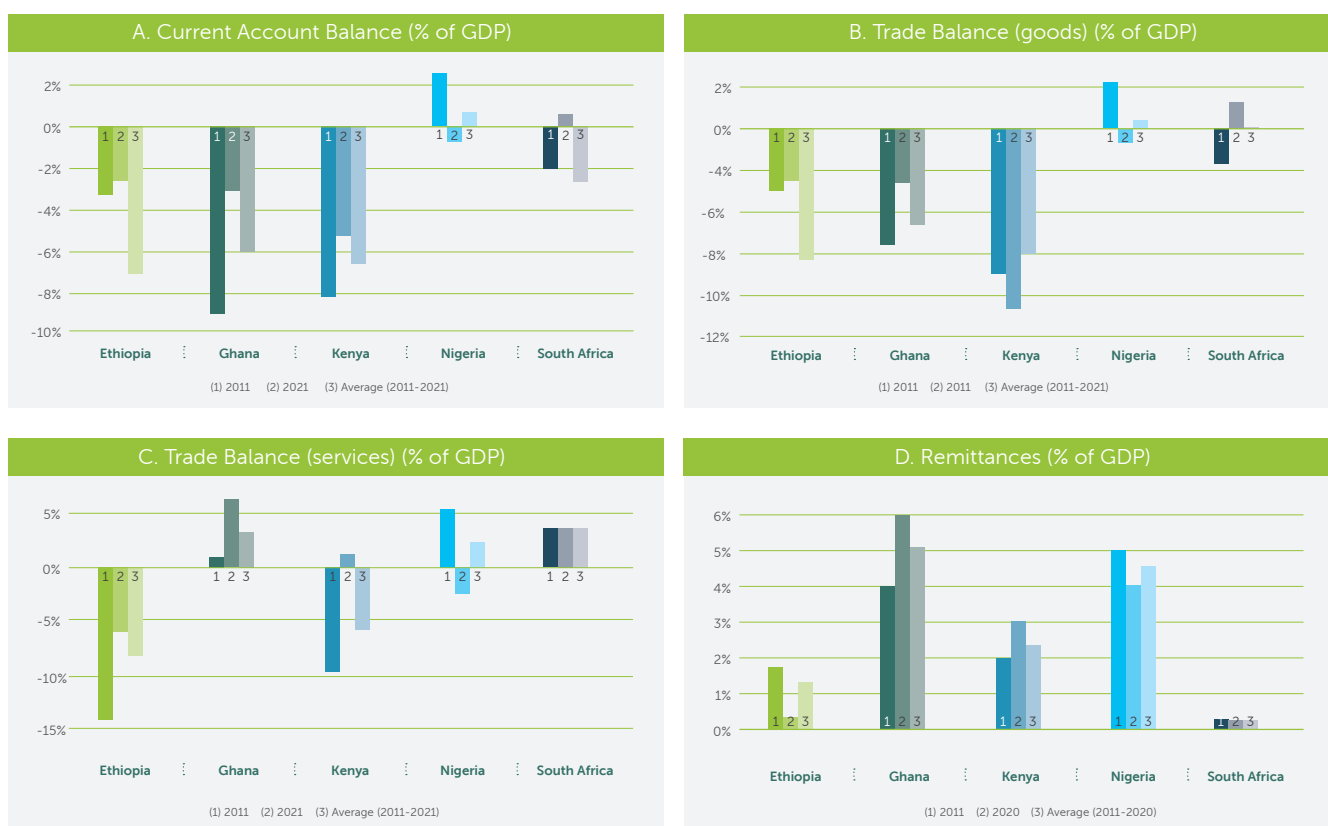
Since early 2022, the impact of external sector imbalances has increased due to Russia’s invasion of Ukraine. First, higher oil, fertiliser, and food prices have put pressure on the balance of payments and international reserves. Second, efforts to lessen reliance on consumption of Russian energy has reduced aggregate demand in advanced countries thereby possibly reducing international demand for commodities produced by the five case-study countries. Third, capital outflows from emerging markets to developed countries increased markedly following the initiation of the war in Ukraine, resulting in the tightening of financial conditions for vulnerable borrowers, particularly for net importers of commodities, such as Kenya and Ethiopia, thus putting downward pressure on their exchange rates and

increasing their external debt burdens⁹

Historically high oil prices benefit countries such as Nigeria and Ghana, although excessive reliance on oil exports exposes the countries to risk. In the short-term, volatile oil prices impact overall economic activity and government incomes, both heavily reliant on oil revenues. In the long-term, volatile oil prices may also lead to pressure on the exchange rate and result in “Dutch Disease”¹⁰, which undermines the prospects for diversification of the economy’s export base.

Other than South Africa, all case-study countries ran deficits on their trade balance in 2021 (Figure 5.b). Ethiopia and Kenya also ran deficits on their trade in services, mostly accounted for by travel, transport, and other business expenditures, Figure 5.c. Remittances from abroad were an important source of income, particularly for Ghana and Nigeria (Figure 5.d), while net foreign portfolio and direct investments were particularly important to Nigeria and South Africa, Figures 5.e and 5.f.

Figure 5: External Sector



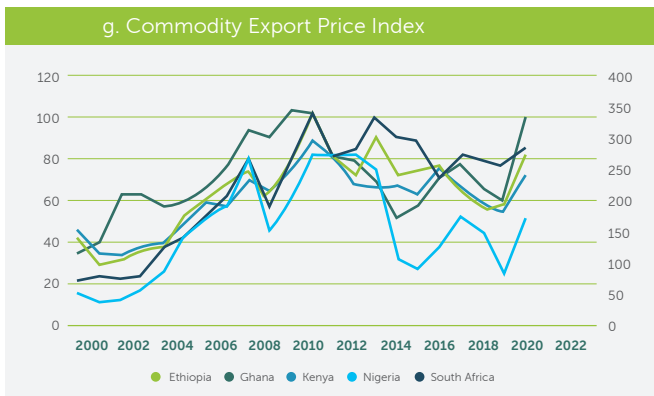
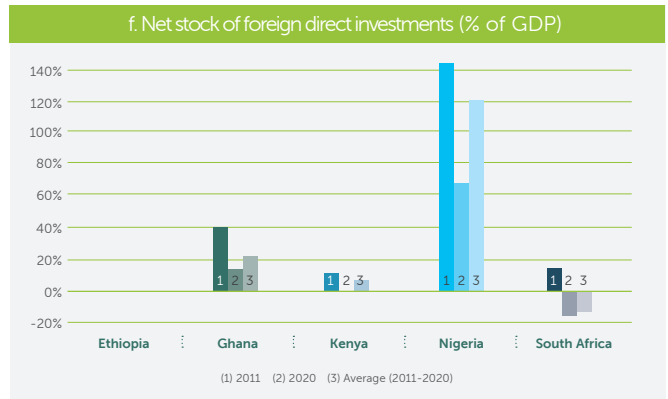
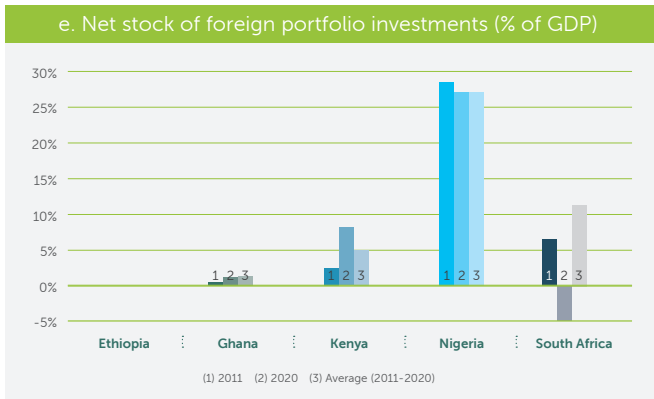
9 World Economic Outlook, April 2022.

10 Dutch disease refers to a macroeconomic problem, very common in oil and mineral commodity exporters, whereby although the oil/mineral industry contributes to output growth, reliance on oil/mineral exports lead to currency appreciation. As a consequence other industries become less competitive. In the long-term, broad segments of the economy become less competitive than they otherwise would be.

11 According to IMF(2021a), of Nigeria’s deficit in services of USD 33.8 billion in 2019, transport accounted for USD 4.9 billion, travel for USD 12.1 billion and other business services for 15.9 billion.

12 Stock data. Data for Ethiopia are not available.

13 Ibid.



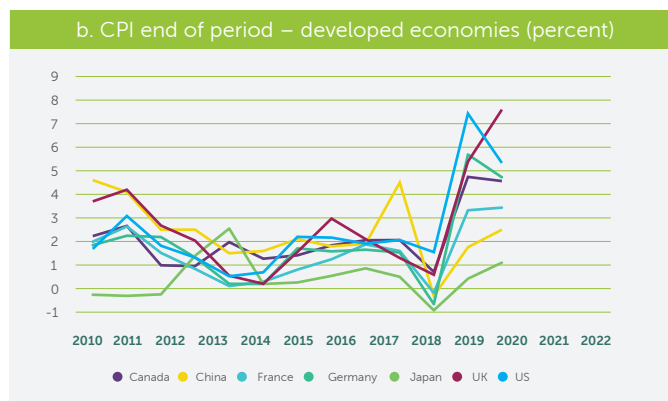
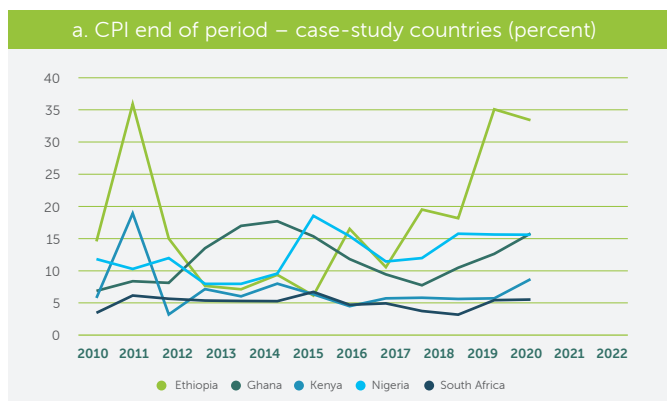
Sources: Balance of Payments and International Investment Position Statistics – IMF (Figures 5. a, to 5.f). Commodity Terms of Trade – IMF (Figure 5.g).

Pressures on inflation and interest rates

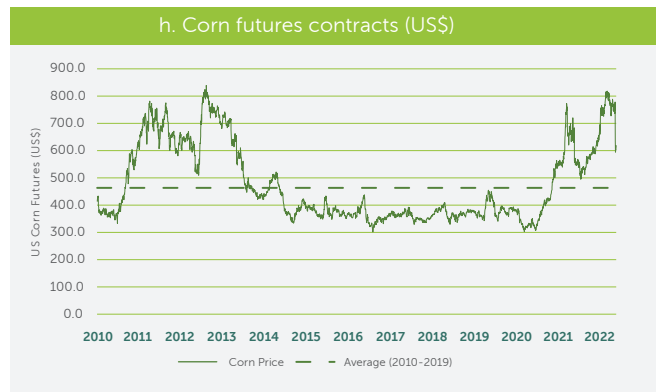
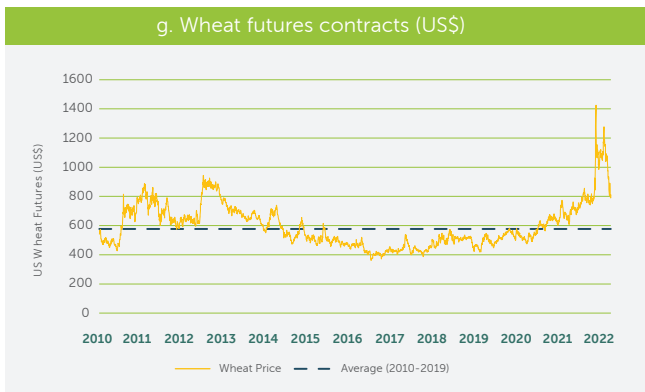
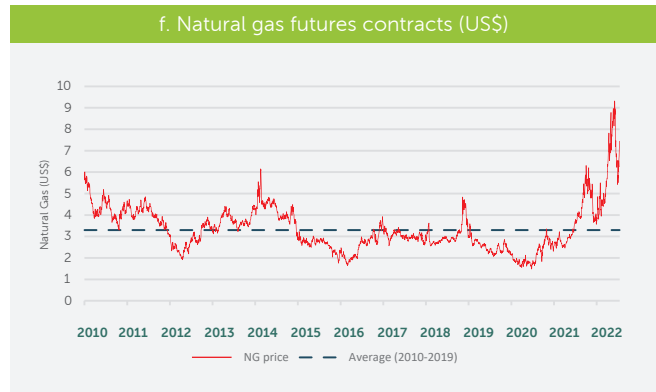
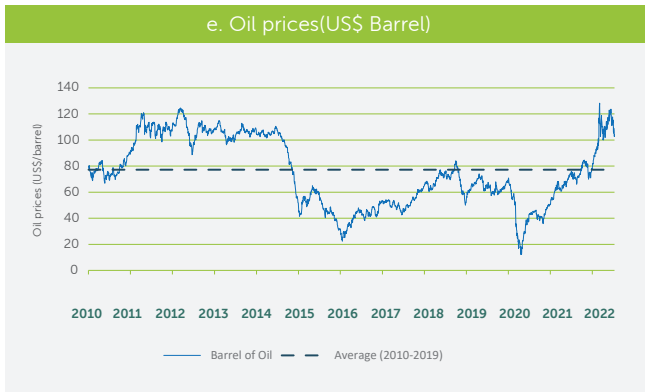
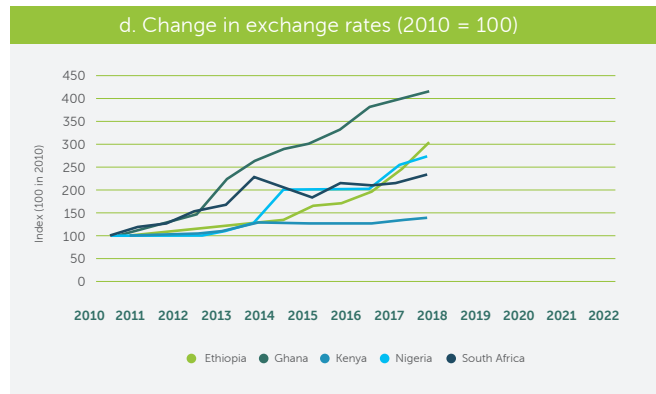
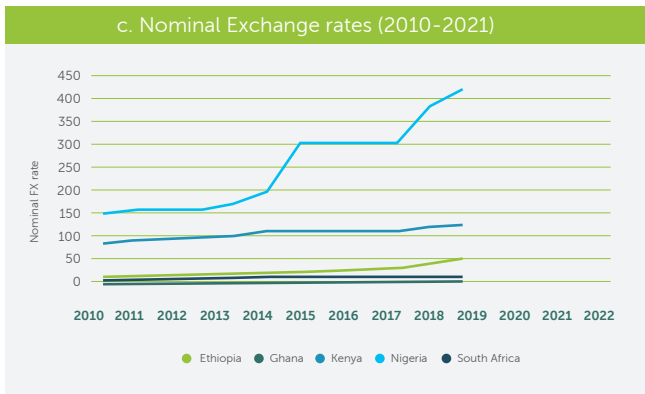
In recent years, overly accommodative monetary policy and recurrent current account and fiscal deficits resulted in higher levels of inflation in Ethiopia, Ghana, and Nigeria. Kenya and South Africa adopted a sounder monetary policy regime and were able to better anchor inflation expectations, Figure 6.a. Gradual exchange rate depreciation, Figures 6.c and 6.d, contributed to raising the domestic prices of tradable goods and commodities, such as oil and gas¹⁴.

The Covid-19 crisis combined with the war in Ukraine increased inflationary pressures across the globe, Figure 6.b. These pressures were a result of fiscal measures implemented by developed countries in response to Covid-19¹⁵ combined with constraints on the supply of goods and the hike in oil and gas prices associated with the war in Ukraine. The impact of expansion of international aggregate demand on inflation first manifested itself in pressure on energy prices in late 2021. Inflationary pressures increased further after the invasion of Ukraine in February 2022. International prices of commodities such as oil, liquefied natural gas, fertilisers, wheat, and corn rose strongly, adding to demand pressures resulting from fiscal responses to the Covid-19 crisis, Figures 6.e, to 6.g.

Figure 6: Inflationary Pressures



¹⁴ Domestic factors such as the prices of locally produced food and services were also important in explaining inflation rates.
¹⁵ See Figure 2 above demonstrating fiscal impulse across several countries.



Sources: IMF - World Economic Outlook, Opec, World Bank, Investing.com.
Figure 6.a and 6.b – estimated values for inflation at the end of 2022

The Federal Reserve started raising the Fed Fund Rates in the second quarter of 2022, responding to high inflation rates in the US and in other developed economies as well as market uncertainty, Figure 7.b. Between 2012 and 2020 the average rolling window 12-month inflation rate¹⁶ was only 1.6 percent but increased to 4.7 percent in 2021 and rose further to 7.1 percent in the first half of 2022. Market uncertainty was also above average in this period. The VIX index, Figure 7.a, a real-time market index designed to measure expected market uncertainty,¹⁷ peaked in 2020, just after the Covid-19 outbreak, and fell until February 2022, when Russia invaded Ukraine, following which it remained well above the 2010-2019 average of 16.8.

Flattening of the U.S Treasury yield curve suggested a forthcoming downturn in the U.S. economy. The US 2Y-10Y T-bond spread, a leading indicator of output growth, started to decline in mid-2021, Figure 7.b, forecasting a possible U.S.

recession, even in an environment with high U.S. inflation. Similar to the situation in the U.S., the gaps between the 2Y and 10Y Treasury bonds yields in Kenya, Figure 7.d, and in Nigeria, Figure 7.e, are also closing, possibly indicating a coming slowdown in these economies as well.

In line with the rise in short-term interest rates, the cost of sovereign external borrowing has risen in 2022 to levels that are higher than in 2019 or even during the Covid-19 crisis. This discourages case study countries, such as Kenya and Ghana, from borrowing on the Euromarket on commercial terms to meet their external financing needs, further constraining their policy options and adding to already high risks of debt distress. Sovereign risk premiums have also risen in the region. The spreads of Kenyan and South African 2-year and 10-year Treasury security yield over similar 2-year and 10-year US Treasury Bonds yields rose after the outbreak of Covid-19 and are currently well above pre-pandemic

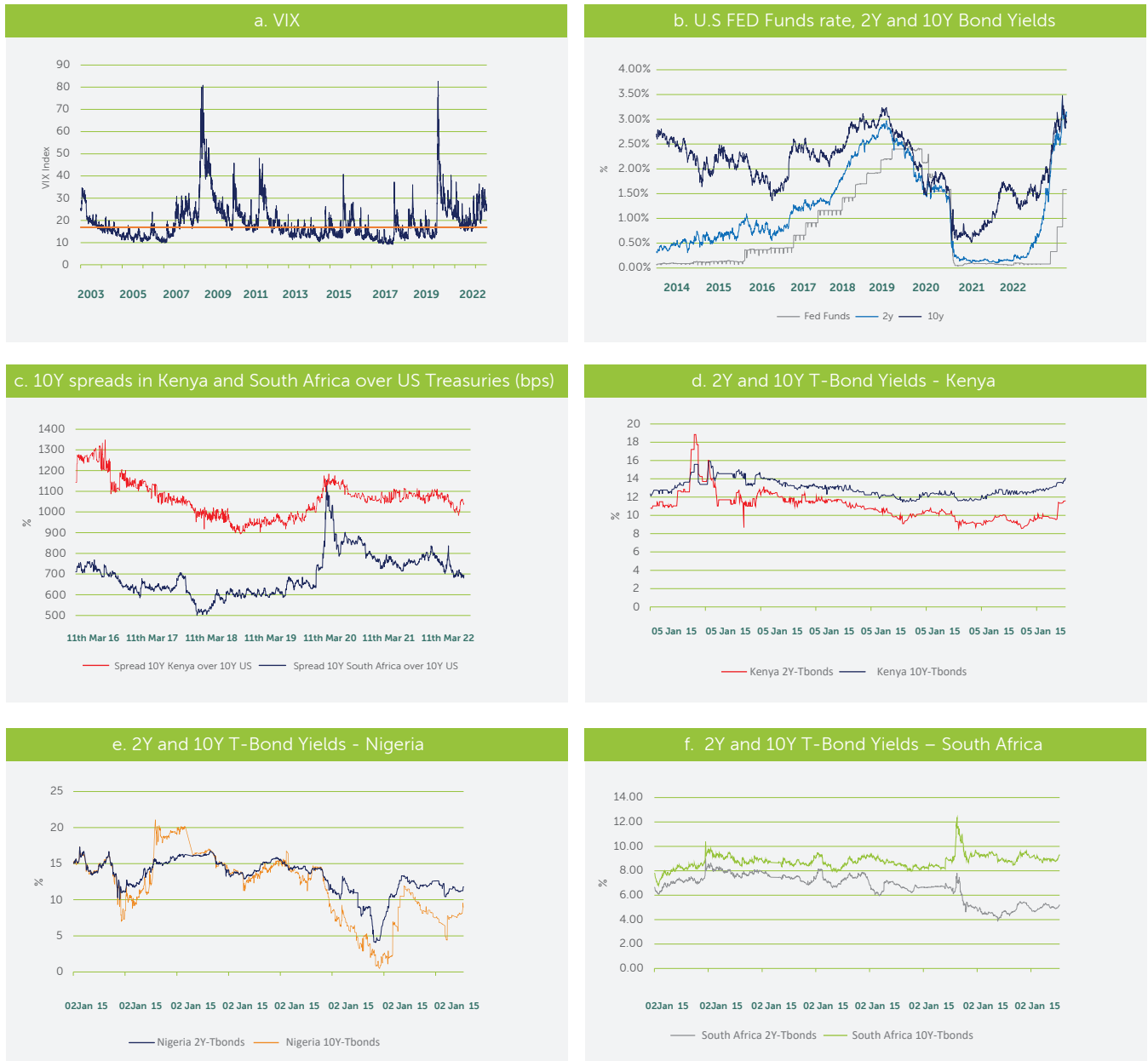
16 This rate is computed every month and considers the cumulative inflation rate in the last 12 months.

17 The Chicago Board Options Exchange – Cboe Volatility Index (VIX) – is a real-time market index designed to measure expected uncertainty of the S&P500 index over the coming 30 days. It is frequently used as a reference for market uncertainty.

levels (rising by around 100 bps and 200 bps, respectively), Figure 7.c. High sovereign borrowing costs raise the risk of external debt distress in Ghana and Kenya, and potentially also in Nigeria, unless Nigeria is able to expand oil production to take advantage

of higher oil prices to deal with its external exposure¹⁸. Ethiopia has requested support under the G20 Common Framework for Debt Treatment to deal with its external debt.

Figure 7: Monetary and Financial Markets



Sources: IMF - World Economic Outlook, World Bank, Investing.com.

¹⁸ Recently, there has been discussion about the sustainability of Nigeria's external borrowing with a member of the Monetary Policy Committee of the Central Bank expressing concern that increasing accumulation of costly Eurobonds and poor revenue growth could lead Nigeria to external debt distress. The Nigerian Debt Management Office released a press statement refuting that this would be the case. <https://www.thisdaylive.com/index.php/2022/07/13/experts-fgs-appetite-for-eurobond-may-likely-move-nigeria-to-debt-distress/>

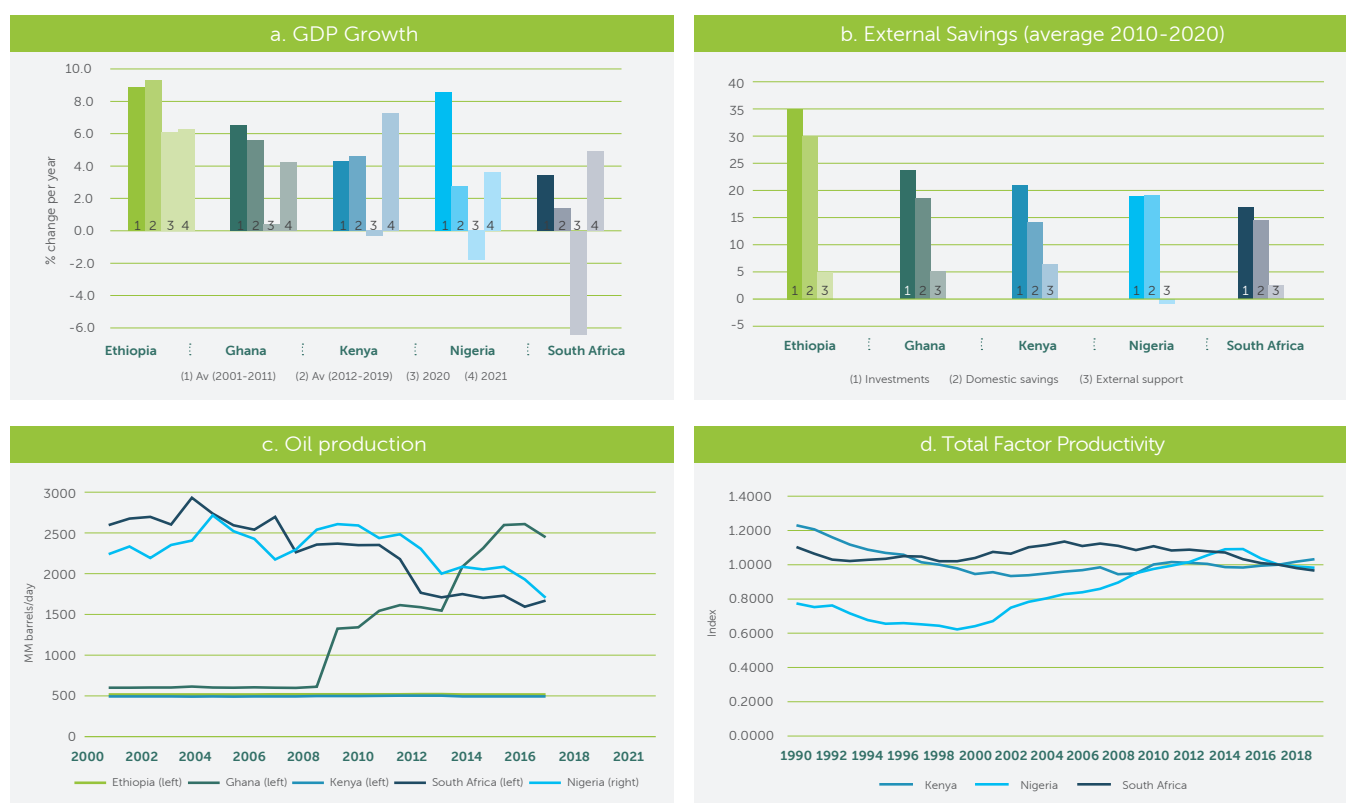
Structural imbalances, the Covid-19 pandemic, and the Ukraine War may compromise growth prospects

Structural imbalances and the combined shocks of Covid-19 and the Ukraine war, together with monetary tightening, may compromise growth prospects in the region. While external financing when used for public investment provides the basis for higher economic growth rates, questions arise as to whether this growth model is still sustainable. While Ethiopia, Ghana, Kenya, and South Africa have in the past relied on foreign capital to fund domestic investments, Figure 8.b, the increased cost of servicing external debt poses challenges in terms of generating sufficient additional revenue to manage these countries' external indebtedness and sustain current GDP growth levels, Figure 8.a. Externally-financed investment in public infrastructure could contribute to reducing dependency on low value-added exports, although in the period 2012 to 2019 the impact of public investment on the composition of exports would appear to have been overwhelmed by weakening commodity prices. In these countries this resulted in deterioration in the terms of trade, augmented pressure on foreign exchange reserves, and constrained capacity to service their external debt.

In 2022 central banks in advanced markets have tightened monetary policy and raised interest rates. This was done to stem inflationary pressures caused by pent-up demand unleashed following the Covid 19 lockdowns and resultant supply-chain bottlenecks, as well as the impact of the Ukraine war – especially on energy markets. While the rise in domestic and external borrowing costs acts to dampen GDP growth and raises the cost of debt service, rising inflation rates also work towards reducing the cost of debt service in real terms¹⁹.

Seen in a longer-term perspective, low output growth in Kenya and South Africa is partly a reflection of declining total factor productivity²⁰, Figure 8.d. While the South African economy is more developed and diversified, in the period 2001 to 2019, average output growth in South Africa was lower than in the other case-study countries. As a result, with the same inputs of labor and capital South Africa produces relatively less. Until 2016 Nigeria experienced stable growth in total factor productivity, partly explained by foreign direct investment in the oil sector, but since then productivity and GDP per capita have fallen, Figure 8.c.

Figure 8: Economic indicators



Sources: World Economic Outlook, Federal Reserve of Saint Louis, and US Energy Information Administration

19 Inflation raises domestic nominal incomes resulting in a reduction of the domestic debt burden measured in relation to GDP. Assuming there is some delay in the response of the local currency/US\$ real exchange rate to increases in local inflation, during the adjustment period higher domestic inflation will reduce the external debt burden, see further discussion of Purchasing Power Parity below.

20 Total Factor Productivity (TFP) is a measure of productive efficiency. It measures how much output can be produced from certain amounts of inputs (capital and labor).



2. Debt sustainability in the context of global shocks

Public debt sustainability is being tested: by funding needs arising due to long-term structural imbalances; augmented spending in response to the Covid-19; and the recent significant rise in borrowing costs. Fiscal space is very limited and public debt to GDP ratios across the five case-study countries are now at their highest levels since 2007, Figure 9. Both government debt levels and expected debt service costs are well above prudent levels for low and lower-middle income countries, exposing case-study countries to solvency and liquidity risks²¹. In addition, computational simulations show that public debt levels may worsen in 2022 and 2023 and will remain high for the next ten years, because case-study countries continue to depend on debt financing to finance their recurrent internal (from fiscal

deficits) and external (from current account deficits) imbalances.

An important challenge in the next ten years will be finding an equilibrium between fiscal responsibility and addressing urgent social demands. The Covid-19 pandemic and the war in Ukraine have increased the proportion of the population in case-study countries living in extreme poverty. Rising food and energy prices predominantly affect the most vulnerable and can result in social tensions. In such an environment, it will be important that fiscal consolidation strategies protect the most vulnerable groups and greater attention is paid to such areas as managing contingent liabilities and reducing subsidies to state-owned enterprises or privileged groups.

Uncontained solvency risks

Case-study countries failed to take advantage of debt relief initiatives in early 2000's and the positive commodity cycle in the ensuing years to contain their sovereign borrowing.

As a result, they confronted recent shocks with few buffers. Although Ethiopia, Ghana, Kenya, and Nigeria achieved high average GDP growth rates following the debt relief initiatives in the early 2000's, due to recurrent fiscal and current account deficits – combined with weakening commodity prices in the decade 2010-2020 – they were unable to contain the level of their indebtedness, Figures 9.a to 9.e.

Computational simulations reveal that debt to GDP ratios will reach even higher levels in Ghana, Kenya, and South Africa in the coming decade than before the debt relief initiatives of the early 2000's, Figures 9.a to 9.e. Although the level of debt to GDP in all five case-study countries appears to be sustainable, the level of debt in Ghana, Kenya, and South Africa will stabilise at very high levels. This will constrain public investment due to the burden associated with servicing public debt.

In contrast to these three countries, public debt to GDP is expected to stabilise at 43 percent in Nigeria and 32 percent of GDP in Ethiopia. Nigeria and Ethiopia benefit from lower levels

of debt accumulation in coming years due to higher anticipated domestic inflation rates and negative real yields on Government securities symptomatic of some degree of financial repression. In Ethiopia, the GDP deflator was above 20 percent per year in 2021, while real deposit and lending interest rates were negative at only 7 percent and 14.3 percent respectively. Such negative interest rates are only possible because the Ethiopian authorities rely on state-owned institutional investors – pension funds and banks – to absorb the issuance of government securities, thereby imposing losses on domestic savers.

Although inflation and low and negative real yields contribute to easing strains on public debt sustainability – as discussed further in section 3 below – they are also likely to be harmful to market development. Another factor underpinning the simulated accumulation of Government debt is optimism regarding future GDP growth. This applies to the GDP forecast used in estimating the debt trajectory for Ethiopia but is also true of forecasts for Ghana and Kenya.²² Significant structural reforms would be needed to explain the envisioned fall in public indebtedness in Ethiopia, Figure 9.a²³. Box 2 provides a summary of the methodology used in arriving at the debt scenarios used in Figure 9.

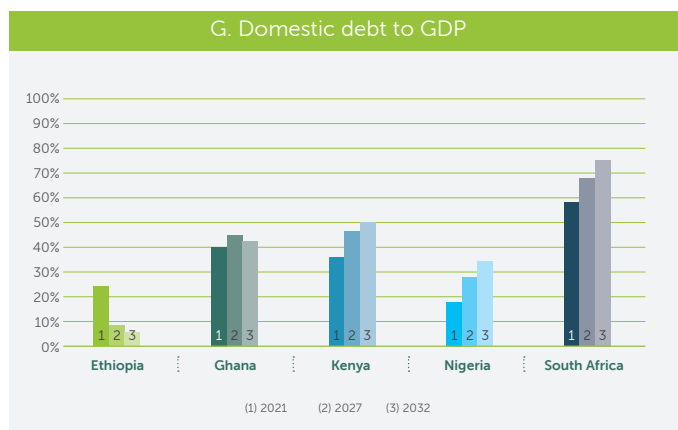
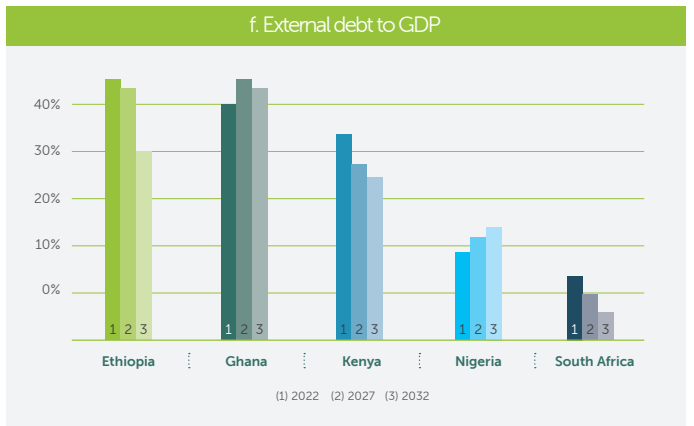
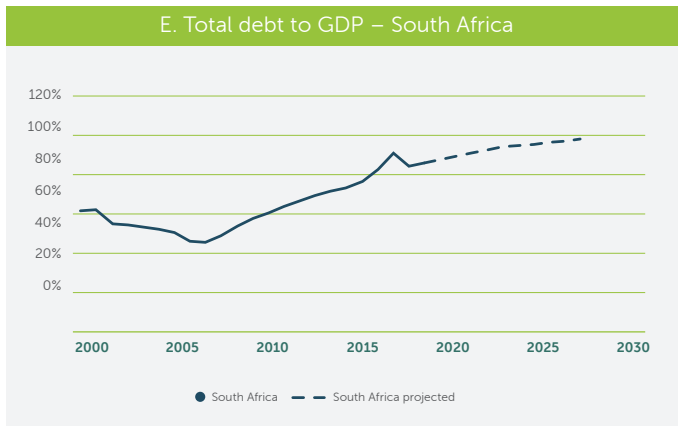
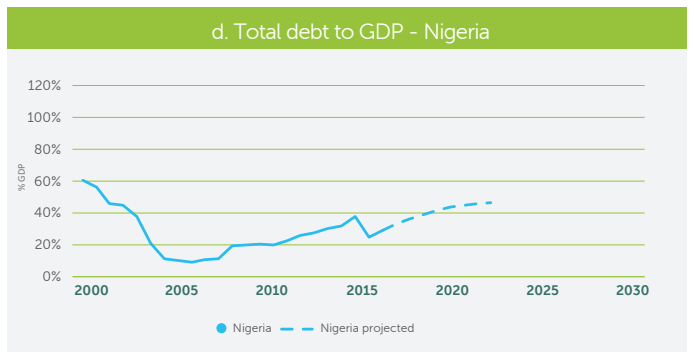
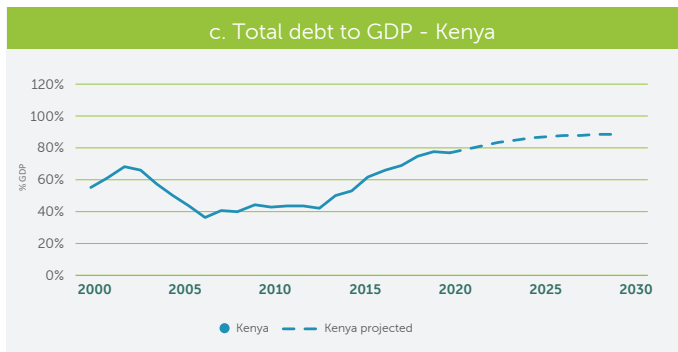
Figure 9: Projections for the size of public debt (2022 – 2032)



21 There are many definitions of the desirable level of public debt. For instance, IMF (2018) assigns debt burden thresholds for countries of weak, medium, and strong capacity at 35 percent, 55 percent, and 70 percent of GDP. ECOWAS (2016) defines a threshold of 70 percent of GDP as an economically sustainable limit for its member countries.

22 Based on IMF (2021a) - World Economic Outlook data, April 2021.

23 Debt simulations in Figure 9 build on IMF's macroeconomic forecast (IMF, 2022). The dotted lines illustrate the level of indebtedness that would occur, were the historical public debt trajectory (from 2010 to 2020) to continue. The stability of these forecasts is subject to challenge: overly optimistic forecasts may reduce country authority incentives to undertake sound macroeconomic policies, while overly pessimistic forecasts may raise a country's financing costs, thereby curtailing the availability of funding. The IMF's macroeconomic forecasts are adopted as they are considered "neutral" – i.e., providing consistency among scenarios across different countries.



Sources: IMF World Economic Outlook (April 2022) and authors' forecasts for 2022 to 2031

The absorptive capacity of government debt markets in emerging markets is limited. While developed economies, such as Japan and Italy, can live with high levels of public indebtedness, the capacity of domestic markets in emerging markets is more limited. "Original sin" refers to the degree to which countries can rely on funding raised in local currencies in the form of debt securities or need to fund themselves abroad in foreign currency. When comparing the five case-study countries, high levels of government indebtedness are much more readily absorbed on the well-developed South African capital market with a well-developed institutional investor base than on the capital markets of other case-study countries. Due to limited absorptive capacity, most developing countries cannot meet all their financing needs in local currency and are obliged to borrow abroad, thereby exposing themselves to "original sin" and to debt shocks, Figure 9.f²⁴.

High external indebtedness is cause for concern. A frequently used measure of external solvency is the volume of external

public debt in relation to the level of exports. Over the next decade this measure is anticipated to be particularly high in Ethiopia, Ghana, and Kenya, Figure 10.e. Ethiopia would need to apply all its export proceeds for more than five years to repay its external public debt, while Kenya would need to apply its export proceeds for three years. As discussed in the next section, external indebtedness also exposes sovereign borrowers to higher liquidity risks, should foreign currency inflows prove to be insufficient to service foreign debt or to pay for essential foreign-currency denominated imports.

Computational simulations reveal that higher inflation in Ethiopia, Ghana, and Nigeria will contribute to lowering public debt to GDP over the next ten years. Inflation affects both domestic and external debt. On the domestic front, higher inflation expands both the nominal tax base and the GDP deflator, leading to higher public revenues and lower debt to GDP ratios. In containing the level of debt, it may be more politically expedient to accept slightly higher inflation than to implement fiscal

(1999) and Reinhart, C., Rogoff, K., and Savastano, M. (2003).

consolidation measures. Inflation also works to mitigate the burden of external debt. According to Purchasing Power Parity (PPP), over time the change in the nominal exchange rate will reflect the difference between domestic and external rates of inflation. However, assuming unchanged US\$ inflation and some delay in the response of the local currency/US\$ real exchange rate to increases in local inflation, during the adjustment period the depreciation of the nominal exchange rate will be smaller than the increase in inflation differential. As a result, the burden of net obligations in foreign currency and the GDP deflator are temporarily lowered in the interim period.

However, while inflation may support public debt sustainability, it is associated with deleterious social consequences. Inflation

reduces the purchasing power of the poor. Although it may be politically more palatable than fiscal consolidation, higher inflation is an inefficient way to share the burden associated with fiscal consolidation because it ultimately affects the whole population. Traditional fiscal consolidation efforts can target collecting higher revenues from those that can afford to pay them or reducing expenditures linked to privileged segments. High inflation rates are frequently associated with governments that seek to avoid dealing with structural reforms. In addition, as macroeconomic risks in inflationary environments are usually higher, inflation tends to raise sovereign credit risk premiums and the level of nominal interest rates throughout the economy resulting in lower potential long-term output growth.

Box 1: Debt Simulation Methodology

This section uses a public debt simulation model to forecast the trajectory of public debt for the five case-study countries. For each country, the analysis builds on a baseline scenario and on a stylised long-term public debt strategy. In constructing the baseline scenario for each country, reliance was placed as far as possible on macroeconomic forecasts and analysis developed by the IMF/World Bank. Additional information is used from analysis undertaken by the governments of the five case-study countries, particularly about the impact of the Covid-19 crisis and the war in Ukraine on their revenues and expenditures, and about contingent claims.

Output growth and inflation forecasts were derived from the World Economic Outlook (April 2022), and forecasts for imports and exports and for fiscal variables were based on the latest Debt Sustainability Analyses undertaken by the IMF/World Bank. Data from these sources was supplemented with official government data.

Other than in Ethiopia and Nigeria, it is assumed that the real FX rates remain constant, i.e. the nominal FX rate adjusts to reflect the difference between domestic and foreign inflation rates. To reflect the managed exchange rate policies adopted by Ethiopia and Nigeria, the nominal exchange rate is estimated to follow a linear extrapolation of the historical trend.

Public debt strategies adopted by case-study countries build on the assumptions made in each country's most recent medium-term debt strategy, and the cost of the debt issuance is based on information published by central banks.

Liquidity and refinancing risks

Public debt accumulation resulting from the Covid-19 crisis brought a rise in total debt service, exposing all five case-study countries to liquidity risks. While total debt service to GDP ratios are particularly high in Ghana, Kenya, and South Africa, Figure 10.a, the forecast level of total debt service to revenues is worrisome and represents a significant liquidity risk for all countries, Figure 10.b. In Ethiopia, Ghana, and Nigeria this is partially attributable to the low revenue mobilisation.

High levels of the total debt service are largely attributable to the burden associated with servicing of domestic debt.

This is due to the short maturity profile of domestic debt and greater reliance on domestic debt as opposed foreign debt, Figure 9.g. Despite efforts to extend the maturity of their domestic debt, at end 2021 debt maturing within one year represented around 30 percent of government debt in Ghana, Kenya, and Nigeria^{25, 26}. As a result, almost a third of domestic debt will need to be refinanced in the short-term, at a time when higher interest rates are putting pressure on debt sustainability.

²⁵ Latest available data for Nigeria are from 2018.

²⁶ The percentage of debt maturing within the next year is a refinancing risk indicator broadly used by sovereign debt managers as an indicator of liquidity risk. The higher the ratio, the higher will be the short-term fund raising required to refinance outstanding public debt.

Figure 10: Projections of public debt service



Source: Authors' forecasts

However, the most important liquidity risk exposure for Ethiopia, Ghana, Kenya, and Nigeria is associated with their external indebtedness. Although the domestic debt service levels are much higher than the external debt service levels, figures 10.a to 10.e, the liquidity risk associated with the external debt is much higher. While the domestic government debt is financed in local currency within domestic financial system, where domestic banks and institutional investors represent 'captive demand', no such assurances apply to external debt. Thus, external debt service can put pressure on international reserves and on the financing of the balance of payments²⁷ and may have adverse effects on foreign currency markets, domestic and external interest rates and (through devaluation of the currency) on domestic inflation.

Computational simulations show that the risk of external debt distress in Ethiopia, Ghana, and Kenya is considered high due to excessive reliance on foreign debt²⁸. This was the case even before Covid-19, and current simulations suggest that Nigeria will also be exposed to external debt distress, as external debt servicing costs absorb an increasing share of fiscal revenues, Figures 10.d and 10.e.²⁹ These figures highlight that limited availability of foreign exchange required to fund the current account deficit

27 Among items financing the balance of payment are foreign direct investments (FDI) and foreign portfolio investments (FPI).

28 See IMF(2020a), IMF(2020c), and IMF(2020d).

and service external debt is a constraining factor. Prospects for resolving such liquidity pressures in the short to medium term are limited, as they depend on structural changes required to reverse underlying trade imbalances. In 2022/2023 these pressures could become even more acute due to rising interest rates.

In other instances, liquidity risks attributable to external debt service have given rise to sovereign debt default. Box 2 finds similarities between the trajectory of public debt in Argentina prior to the recent default with the current debt trajectories for public debt in Ethiopia and Kenya. The consequences of debt default can be severely damaging in terms of both macroeconomic instability, reduced per capita income, higher unemployment, and increased poverty.

Box 2: The Argentinian debt default of May 2020 – similarities with Kenya and Ethiopia³⁰

The government of Argentina stopped paying interest on public debt on May 22, 2020. This was Argentina's ninth default in 200 years. Due to the severity of the situation, the IMF/WB performed four DSAs in less than two years (in December 2018, April 2019, July 2019, and March 2020).

Since 2018 the IMF had been forecasting that by 2020 the share of external debt-to-GDP would rise to nearly 60 percent and the external debt-to-exports ratio would reach 370 percent. Although lessons learnt from the levels of external debt-to-GDP ratio and external debt-to-exports ratio cannot simply be transferred from one country to another as their situations will differ, it is possible to infer a positive association between the level of the risk indicators recorded for Argentina and the probability of sovereign default in other countries.

The forecasts adopted by the DSAs reveal "intrinsic optimism" about country authorities' ability to implement significant policy reforms to reverse the upward trend in debt risk indicators. The DSAs from 2018 and 2019 assumed that Argentinian external debt would fall from around 58 percent of GDP in 2019 to around 53 percent of GDP in 2020 and 43 percent in 2023, implying an unrealistic fiscal consolidation of no less than 15 percent of GDP in just four years.

It appears that the treatment of individual countries varies in arriving at macroeconomic forecasts. While the macroeconomic forecast for Kenya would appear more realistic, the forecast for Ethiopian is surprisingly optimistic³¹, see Figure 9.a above. These different approaches result in quite divergent and adverse incentives. In the Ethiopian case, the forecast would appear to encourage the authorities to maintain macroeconomic policies which over time will prove to be unsustainable, while in the Kenyan case the authorities are not given full credit for adopting sound policies.

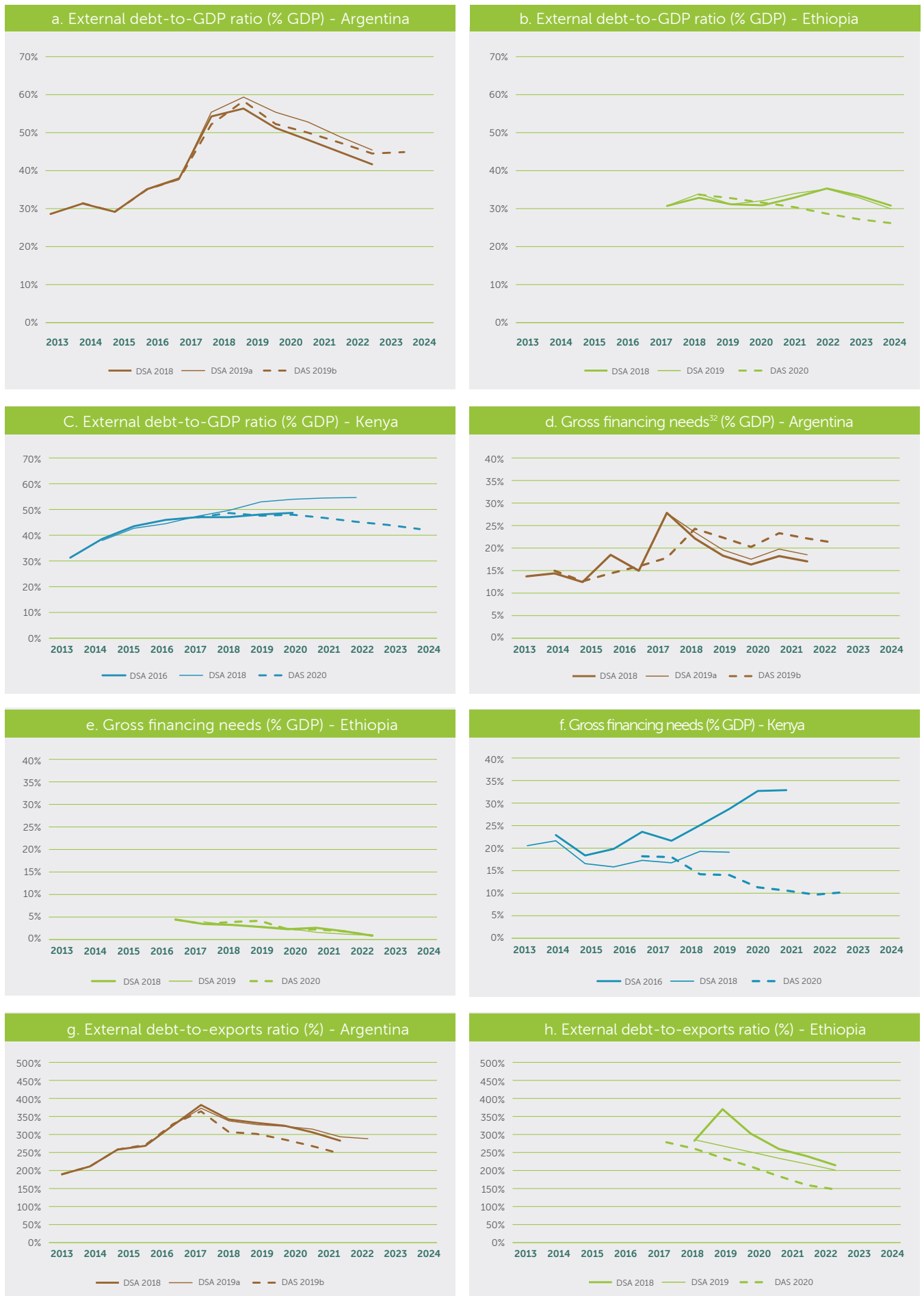
To put some perspective on the liquidity risks faced by Ethiopia and Kenya, the figures below compare liquidity risk indicators for Argentina, Ethiopia, and Kenya. They demonstrate that there are similarities between the various measures of external debt vulnerability confronting all three countries, serving as a warning to the Ethiopian and Kenyan authorities regarding current external debt risk exposure.

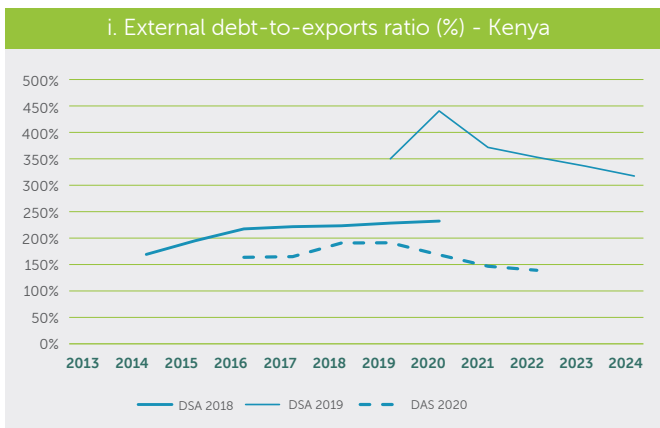
29 Figures 10.d and 10.e show that the risk of debt distress in these countries is high whether it is measured as a proportion of government revenues or as a proportion of exports, and are well above the estimated desirable liquidity thresholds. For debt service to government revenues, liquidity thresholds are 18 percent for Ethiopia and Kenya and 22 percent for Kenya. For debt service to exports, liquidity thresholds are 15 percent for Ethiopia and Ghana and 25 percent for Kenya. These thresholds are derived from a Probit econometric model that considers, among other control variables, the debt burden, output growth, and the country's CPIA rating (IMF (2017).

30 For Kenya and Ethiopia, data used in box 2 are from the latest IMF/World Bank debt sustainability analyses. This data differs from that used in the analysis cited in the text, see box 1 on methodology.

31 IMF (2021a).

Figure 11. External debt-to-GDP ratio (% GDP)



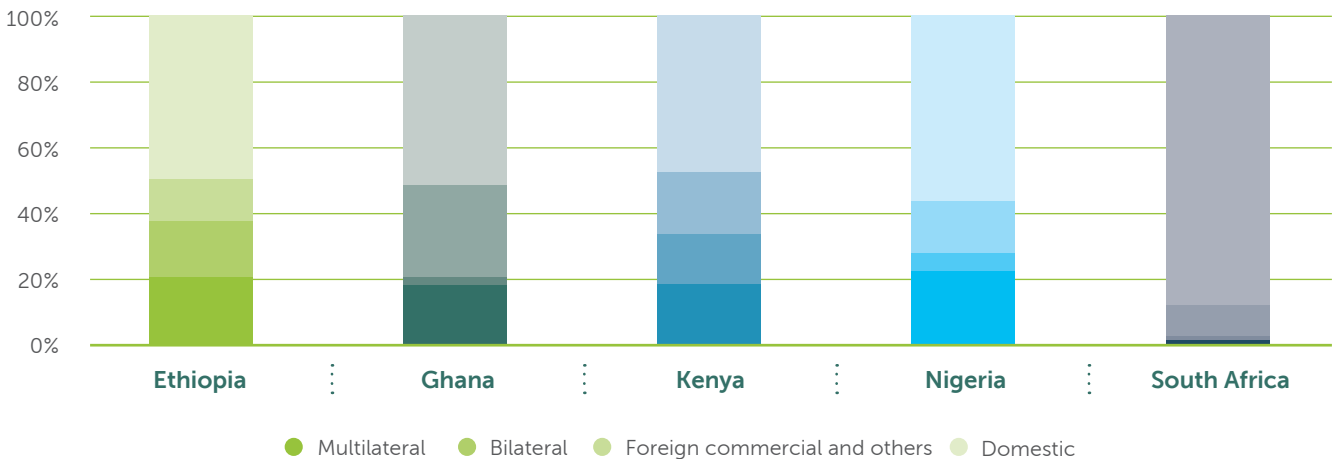


Source: IMF Debt Sustainability Analysis

Issues relating to public debt strategy

Case-study countries access external markets to varying degrees. In funding the government, South Africa relies to a greater extent on domestic markets and accesses external markets primarily on non-concessional terms. Concessional multilateral and bilateral external debt continue to represent a large portion of external debt in Ethiopia, Ghana, Kenya, and Nigeria, Figure 12.

Figure 12: Sources of public debt financing (% total) – 2020



Sources: Ministries of Finance and Central Banks

While foreign portfolio investors play a significant role in funding the government, particularly in South Africa, their funding is susceptible to swings in confidence. The presence of foreign investors signals confidence in local markets and helps to deepen domestic security markets, thereby helping to put downward pressure on government borrowing costs. However, foreign portfolio investors are fickle and can place pressure on exchange rates and international reserves. Maintaining such portfolio inflows in times of macroeconomic uncertainty, when they are most needed, can prove challenging. The percentage of government securities held by foreign portfolio investors at the end of 2021 stood at 16 percent in Ghana (down from 37 percent in 2017), 11 percent in Nigeria and 29 percent in South Africa³³.

Foreign direct investment (FDI) can help to foster economic growth, support human capital development, and encourage introduction of new technologies. In shallow and less

sophisticated financial markets, the lack of sufficiently deep forward markets in foreign exchange poses challenges to FDI. Due to the lack of foreign exchange hedging instruments, foreign exchange risks are usually passed on to users, for example in the form of tariff adjustments on services delivered by FDI-financed utilities. This may stymie investor interest due to risks associated with project beneficiaries' limited ability to pay. While specific hedging instruments have been developed to address the needs of development finance organisations in hedging foreign exchange risks on underdeveloped capital markets, such instruments are specifically tailored, and therefore provide relatively costly solutions. Strengthening hedging capacity would help to deepen local financial markets by better catering for the hedging needs of foreign investors. Regulation of access to foreign exchange, as exercised in Ethiopia and Nigeria, further discourages foreign direct investments, as project sponsors face repatriation risk and may be unable to repatriate the foreign

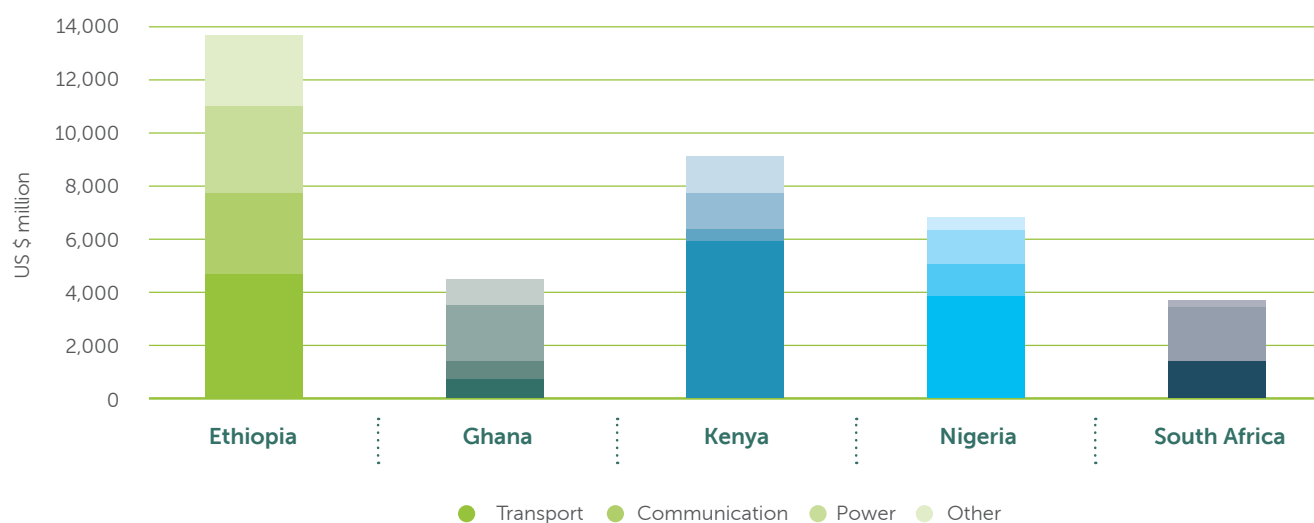
³² Defined as the sum of the budget deficit and funds required to roll over debt that matures in the course of the year
³³ These levels are much lower in Kenya and in Ethiopia.

exchange they need at the time when payments are due to foreign investors.

Reliance on bilateral creditors can expose recipient countries to geopolitical risks. A growing concern in recent years has been the extent of sovereign indebtedness to Chinese bilateral creditors. Although it would seem to be in their own interest to avoid debt distress, Chinese creditors have been reluctant to engage in the recent efforts by the G-20 to adopt the “Common Framework” designed to establish new rules for restructuring of sovereign debt³⁴. In addition, China has been accused of not being transparent about its lending to emerging markets, creating

a “hidden debt problem”³⁵. Debtor countries and multilateral institutions have an incomplete picture of how much sovereign borrowers owe to China³⁶. Part of the problem arises as Chinese lenders have imposed stricter confidentiality clauses than other lenders, especially since 2014³⁷. The Export-Import Bank of China restricts borrowers from sharing loan contract terms or any other loan information without the lender’s explicit permission or unless required by law. Currently available data suggest that Africa has 1141 loans from Chinese parties amounting to debt of US\$ 153 billion³⁸. Among the five case-study countries Ethiopia and to a lesser extent Kenya are heavily exposed to Chinese bilateral creditors, Figure 13.

Figure 13: Total Chinese loans by sector (2000-2019)



Source: Johns Hopkins SAIS China-Africa Research Initiative

Ex-post assessment of the cost of external financing

Over the last decade, Ethiopia, Ghana, Kenya and Nigeria have come to rely on international financial markets for part of their gross financing needs. Among the motivations for drawing on international markets are diversifying the investor base, being able to borrow larger volumes which are required to establish benchmarks issues, lowering ex-ante borrowing costs (vis-à-vis domestic markets), and establishing credibility with foreign portfolio investors on the domestic government securities market by demonstrating that the issuer has established the required legal and domestic institutional framework to issue sovereign bonds abroad.

While these advantages apply to larger issuers, they pose challenges to countries with smaller borrowing needs. Countries

issuing Eurobonds in smaller amounts cannot reap the benefits associated with price discovery and are unable to establish a liquid secondary market for their issues. In such cases bonds may well be sold in large lots to a few institutional investors that buy and hold them in their portfolios. Another problem for small sovereign borrowers is linked to the relative size of such international issuances, usually of the order of US\$ billions, and their ability to raise foreign currency to repay the principal. While not an issue for larger borrowers, this can be an important source of refinancing risk for smaller sovereign borrowers.

After a pause in early 2020, Ghana and Kenya returned to funding their fiscal deficits through the issuance of Eurobonds in 2021. Ghana raised \$3 billion (twice oversubscribed) through

34 The Zambian authorities announced the first sovereign debt restructuring under the Common Framework involving China in July 2022

35 Horn, Reinhart and Trebesch, 2020.

36 This applies both to the size and terms of Chinese lending, but more importantly to the security provided to Chinese creditors in the form of pledges on natural resources.

37 Anna Gelpern, 2015.

38 China Africa Research Initiative, 2021.

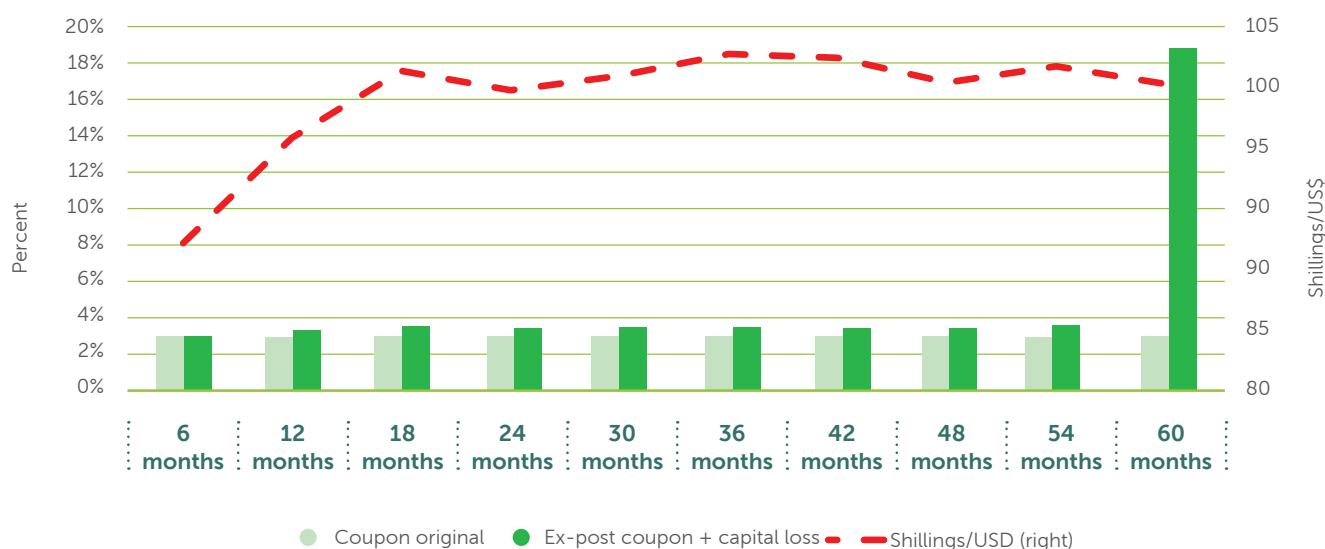
the issuance of a 4-year zero coupon bond in 2020³⁹, while Kenya raised \$1 billion through the issuance of a 12-year Eurobond (four times oversubscribed) at an interest rate of 6.3 percent in 2021⁴⁰. Several factors explained the high sustained demand for emerging market debt securities in 2021, even when the expected trajectory of public debt appeared unsustainable and there was risk of debt distress: the effective risk premium on emerging market sovereign issues was high when compared with the yield on government debt securities issued by advanced countries; the relatively small size of emerging market securities in institutional investor's portfolios combined with demand for emerging market securities stemming from institutional investors' risk diversification; and some degree of comfort in emerging market countries' creditworthiness based on past experience relating to the bail-out of private creditors in debt restructuring efforts.

The Eurobond market for sovereign debt may not be as attractive as a funding source in 2022. In the first half of 2022, among potential borrowers in Sub-Saharan Africa only Nigeria and Angola accessed the Eurobond market. Higher interest rates on foreign currency denominated debt significantly reduced the attractiveness of Eurobond issuance to emerging market

sovereign issuers, Figures 7.b and 7.c. A 'rule of thumb' is that when sovereign yields cross the 10 percent threshold, the window for a new issuance closes. Yields on debt issued by Ghana, Kenya and Nigeria had risen well above this threshold by the end of 2021.

Public debt managers also need to be aware that potential ex-ante 'savings' associated with foreign borrowing can easily be offset ex-post due to exchange rate and interest rate changes. While the cost of borrowing externally may be lower in terms of interest payments, depreciation of the exchange rates and increases in market interest rates applied to floating rate instruments can easily offset any apparent 'ex-ante' cost-saving compromising the cost savings associated with concessional funding from official multilateral and bilateral creditors. Figure 14 provides an illustration of the impact of a currency depreciation on the ex-post cost of debt simulated on the five-year Eurobond issued by the Kenyan National Treasury in 2014⁴¹. Both the cost of coupon payments and repayment of principal were much higher than originally expected. Instead of the initially envisaged borrowing cost of 5.88 percent, the ex-post borrowing cost was 9.32 percent.

Figure 14: Impact of foreign exchange devaluation on ex-post cost of public borrowing⁴²



Contingent fiscal risks

Exposure to contingent fiscal risks limits the capacity of case-study countries to contract public debt. Contingent liabilities can take the form of explicit or implicit government guarantees, including contingent risks associated with financial sector bail-outs, operational exposures of state-owned enterprises, commitments arising from private-public partnerships, pension system obligations, etc.⁴³ Where estimates of contingent liabilities are published, the methodologies used in assembling and calculating them are not readily available. The scope of obligations included in the estimation of government contingent liabilities is also quite varied. Information on the likelihood that contingent liabilities will be realised is difficult to come by. These factors make it difficult to compare contingent risks across countries. As a result, estimates of contingent liabilities vary considerably among the five case-study countries, partly reflecting different methodological approaches, see Box 3.

39 20-year WAL. The traditional Eurobonds priced at 7.75%, 8.625% and 8.875%, respectively. The 20 Year Tranche, which priced at 8.875% is also expected to fill a gap in Ghana's yield curve, ensuring that Ghana now has a well-defined yield curve with issuances across the curve from 4 years to 41 years. <https://mofep.gov.gh/press-release/2021-03-30/global-investors-demonstrate-strong-support-for-ghana-fiscal-plans-and-revitalization-strategy>.

40 <https://www.businessdailyafrica.com/bd/economy/terms-of-kenya-sh108bn-fresh-eurobond-revealed-3441560>

41 The illustration used here refers to a five-year Eurobond for US\$ 500 million issued by the Kenyan National Treasury in June 2014 yielding a coupon of 5.875 percent.

42 The left-hand y-axis shows the percentage of face value of the initial issuance.

43 IMF (2009).

Box 3: Estimating contingent fiscal liabilities

Ethiopia is an outlier in terms of potential exposure to contingent liabilities. Significant contingent liabilities are attributed to the financial sector, which is dominated by two public financial institutions, the Commercial Bank of Ethiopia (CBE) and the Development Bank of Ethiopia (DBE), representing 57 percent of banking system assets. Accumulation of sizeable non-performing loans could result in the government having to assume sizeable contingent risks in recapitalising these banks. In the case of CBE, 40 percent of the loan portfolio represents exposure to state-owned energy producers, exposing the government to significant contingent risks. State-run pension funds also represent a source of contingent fiscal risk, as pension funds invest almost exclusively in public debt securities, which have yielded negative real returns in recent years, resulting in a situation where the government could be called upon to recapitalise the pension system. Estimates of contingent exposures are not currently included in official documents.

In Ghana, contingent liabilities are estimated to represent 8.4 percent of GDP⁴⁴. The main sources of contingent fiscal risk are state-owned enterprises, Public Private Partnerships (PPP) projects, obligations of local governments, and SNITT, the government-sponsored provident fund⁴⁵. Sizeable contingent liabilities have been realised in recent years in the form of financial sector clean-up costs (equivalent to about 4.6 percent of GDP) and clearance of arrears of the Electricity Company of Ghana (about 1.8 percent of GDP)⁴⁶. In December 2020, the Ministry of Finance cleared US\$1 billion of the arrears of independent power-generation companies. Nonetheless, still outstanding energy sector contingent liabilities amount to between 4 percent and 5 percent of GDP⁴⁷.

Kenya's exposure to contingent liabilities was recently estimated as being as high as 40 percent of GDP⁴⁸. The largest components are public corporation liabilities (17.6 percent of GDP), pension liabilities (9.6 percent of GDP), liabilities associated with public-private partnerships (8.0 percent of GDP) and liabilities associated with bank deposit insurance (3.1 percent of GDP). Counties are another source of potential risk for Kenya: of Kenya 47 counties, 13 had negative net assets in FY 2017/2018.

According to the Nigerian Ministry of Finance, the largest sources of contingent liabilities are pension arrears to public employees followed by commitments to the Nigeria Bulk Electricity Trading. These sources accounted for 94 percent of contingent liabilities, equivalent to 1.5 percent of GDP⁴⁹. Excluded from this estimate are the negative net worth of the Asset Management Corporation of Nigeria (AMCON) revealed to be Naira 3.9 trillion in 2017, most of which represent liabilities of the Central Bank of Nigeria⁵⁰. Lost seigniorage revenues also account for an important source of contingent fiscal risk in Nigeria. By funding various subsidised schemes and investments, the Central Bank of Nigeria (CBN) assumes a development role that reduces the income it would normally generate for the government, thereby circumventing the process associated with oversight of fiscal expenditures by the government and by parliament.

In South Africa, Eskom alone represents a contingent exposure equivalent to 5.8 percent of GDP. Other sources of contingent risk are the national airline (South African Airways), the post-office (South African Post-office), the weapons manufacturer (Denel), and the broadcasting corporation (South African Broadcasting Corporation), claims against public-private partnerships, the road accident fund, and the post-retirement medical assistance for employees. The IMF estimates the contingent liabilities amount to 21.4 percent of GDP⁵¹.

During the Covid-19 crisis, government contingent liabilities have increased across all five case-study countries due to loan forbearance sanctioned by central banks. In those instances where the loan repayment period was extended or loans were restructured due to the pandemic, central banks provided leniency to financial intermediaries regarding requirements for loan classification and provisioning. Such forbearance has tended to camouflage increases in loan non-performance, and loans that have benefitted from this more lenient treatment may turn out to be non-performing once the forbearance measures are lifted. Recent interest rate developments will exacerbate these risks, as companies will need to refinance their loans at higher cost, potentially raising contingent costs in terms of the funding required to support bank restructuring.

44 IMF (2019c).

45 Ghana (2019c).

46 Ghana (2021a).

47 Fitch ratings (2021b).

48 IMF(2020c).

49 Nigeria (2020).

50 IMF(2019b).

51 IMF(2020d).



3. Financial market responses to recent shocks

Although fiscal consolidation efforts will eventually be required to reverse chronic imbalances resulting in the unsustainable accumulation of public debt, it is unlikely that case-study countries will be able to implement such policies in the near term. Not only have Covid-19 and the war in Ukraine increased reliance on debt financing, but they have resulted in the postponement of efforts to increase tax revenues and reduce expenditures. In response to Covid-19 all five countries expanded public expenditures on health care, adopted measures to accelerate tax reimbursements, and deferred certain tax liabilities⁵².

The war in Ukraine has made fiscal consolidation efforts even

more difficult due to the impact of higher oil and food prices – particularly on the poorest. At such times fiscal consolidation efforts could be regarded as procyclical, further exacerbating social tensions, stoking unemployment, and making it more difficult to meet acute health care needs. In these circumstances, multilateral organisations such as the IMF⁵³ recognise the need to protect the poor. As a result, case-study countries initially focused on short-term priorities, using a combination of other financial sector-related tools at their disposal: monetary and quantitative easing, public debt monetisation, and financial repression. Box 4 describes the trade-offs that arise between countercyclical policies and fiscal consolidation.

Box 4: Trade-offs between countercyclical policies and fiscal consolidation

Tensions arise between short-term countercyclical policy considerations and the longer-term benefits associated with fiscal consolidation. These trade-offs relate to sacrifices and rewards in the present and in the future. While countercyclical policies are more tolerant towards higher spending and debt accumulation in the short-term, they transfer the sacrifice of the fiscal adjustment to future generations, assuming they will be able to pay for the increased debt. Fiscal consolidation policies, on the other hand, while bringing the sacrifice to the present generation, release fiscal space in the future, which can be used to raise public investments that will allow the economy to grow faster.

Countercyclical policies are beneficial when governments ease fiscal policies by increasing expenditure or reducing taxes during economic downturns and cut their expenses or increase taxes to build buffers during the expansionary part of the economic cycle. In most countries, the latter step is missing, and countercyclical policies end up resembling Ponzi schemes where the government borrows even more to roll over its past debt. Financial markets recognize such behavior and tend to require higher interest rates to compensate for the increased risk leading to increased debt service burdens. Governments find themselves in situations where they need to implement short-term budget cuts, for example, in non-recurrent expenses such as on public investments, to maintain long-term solvency. If this cycle is repeated for many years, output growth will be adversely affected. Conversely, fiscal consolidation efforts will positively impact market expectations and work towards supporting the expansion of private domestic and external financing of the economy, creating an environment conducive to stronger, sustainable longer-term economic growth.

From a political perspective, it is frequently difficult to implement effective fiscal consolidation measures, as such measures are scrutinised by parliament and inevitably involve assigning burdens in the form of higher taxes or reduced expenditures. In making fiscal consolidation more palatable, consolidation measures should be constructed so the adjustment burden applies to those who are better able to absorb them. One method often adopted to avoid such trade-offs is to adjust macroeconomic policies to bring about higher rates of inflation. While inflation will dilute the debt burden, it also impacts the distribution of income and spreads the adjustment burden throughout the economy, without reflecting the ability of different social segments to absorb the shock to their incomes.

52 IMF (2021b) provides a list of policies adopted by countries to limit the impact of COVID-19.

53 IMF (2022).

Monetary and quantitative easing policies

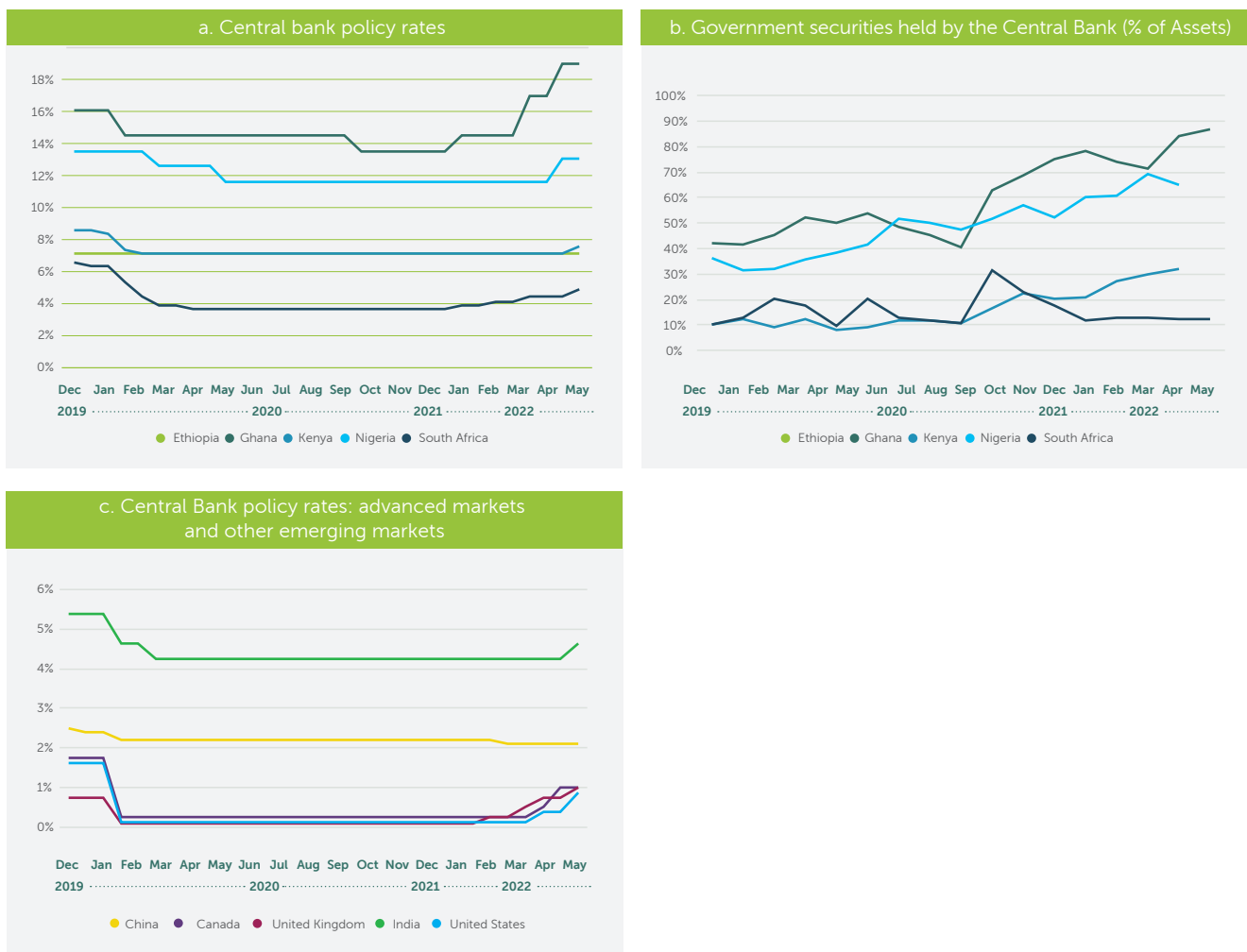
Monetary policy responses to recent shocks can be divided into two phases. The first phase focused on monetary easing started in the beginning of 2020 and the second phase focused on fighting accelerating inflation starting in late 2021.

The first phase focused on mitigating the effects of the fall on aggregate demand caused by restrictions introduced to reduce the spread of Covid-19. Case-study countries reduced policy interest rates to ease financial market liquidity, thereby also reducing the cost of servicing domestic debt and mitigating the growth in government indebtedness, Figure 15.a. Monetary easing in advanced countries indirectly supported case-study countries. Monetary authorities in advanced economies lowered their monetary policy interest rates, in most cases by more than was the case in case-study countries, Figures 15.a and 15.c,

allowing case-study countries to ease monetary policy without the eventual deleterious impact this might have on their exchange rates and the cost of servicing their external debt.

In parallel, case-study country central banks promoted quantitative easing policies through the purchase of government bonds and sale of short-term securities, Figure 15.b⁵⁴. This instrument was new to emerging market authorities and its adoption resulted in lower yields on long-term securities and reduced the interest rate on benchmark government yield-curves, thereby containing the cost of government borrowing as well as the private sector's cost of finance⁵⁵. Since 2018, Ghana and Nigeria have systematically used quantitative easing policies, Figure 15.b.

Figure 15: Central Bank Policy Rates



Source: Central Banks

54 See South Africa (2020) for a discussion about how this policy was conducted in South Africa, and Ghana (2020) for evidence for Ghana. IMF (2020e) provides a discussion of this type of policy. Information for Ethiopia is not available.

55 Prior to Covid-19, the Central Bank of Nigeria used its balance-sheet (expansion in assets) for monetary policy purposes. At the time this policy was characterised as "credit easing" rather than quantitative easing. See, Kure et al (2020).

Only in the second quarter of 2022 did central banks in advanced countries respond to inflationary pressures by raising key policy interest rates. Central banks in case-study countries followed suit. Among case study countries, Ghana was more exposed to loss of investor confidence – in part a reflection of the relatively generous fiscal accommodation undertaken in the context of the Covid-19 crisis. Finding access to external Euro-borrowing excessively expensive, the authorities reacted by tightening monetary policy much more sharply than in other case-study countries and by leaning on the Bank of Ghana to finance an increasing share of the Government's deficit.

Public debt monetisation

As part of efforts to mitigate the impact of increased government borrowing on domestic interest rates, authorities placed greater emphasis on debt monetisation⁵⁶. Over the past decade, debt monetisation had already been used widely in Nigeria and Ethiopia, to some extent in Ghana, and on a much smaller scale in Kenya and South Africa. Figure 15.b shows the increase in the share of Government assets in total Central Bank assets in Ghana, Kenya, and Nigeria. The share of Government assets to Central Bank assets increased in South Africa in 2020, but this was reversed again in 2021. When governments use central banks as a quasi-fiscal agent by placing reliance on central bank overdraft facilities to finance their expenses, by issuing government securities directly to the Central Bank, or by placing excessive reliance on central banks to purchase government securities on the secondary market, debt monetisation becomes a problem. Monetising of government debt releases financial resources to expand aggregate demand, raising doubts about the independence and efficiency of the monetary authorities in controlling inflation, and may give rise to uncertainty relating to overall macroeconomic stability.

Case-study countries dealt with debt monetisation in different ways. In Nigeria, where the use of debt monetisation predates the pandemic, the outstanding balance on the government's overdraft facility was already equivalent to 6.7 percent of GDP at end 2019, representing about 30 percent of the federal government's debt. In 2020, recourse to this facility expanded considerably, providing the government with funding equivalent to another 1.9 percent of GDP, accounting for more than half of its fiscal deficit of 3.6 percent of GDP. Formally, guidelines limit the amount of government borrowing from the central bank to 5 percent of the previous year's fiscal revenues, but use of the facility has repeatedly exceeded this limit, and in 2020 borrowing from the central bank amounted to around 80 percent of the previous year's fiscal revenues. In addition, the central bank contributed to financing quasi-fiscal operations by funding schemes for specific activities, such as supporting MSMEs, and agricultural and industrial sector policies.

In addition, the timid reaction of monetary authorities in case-study countries to higher inflation levels in 2021 helped to contain public debt to GDP ratios and could be considered as equivalent to debt monetisation. The longer the monetary authorities take to raise interest rates, the longer it will take to

anchor inflationary expectations and to bring inflation rates down. In Ghana and Nigeria, the authorities kept monetary policy interest rates unchanged for protracted periods despite rising inflation rates. On the one hand postponed action on monetary policy interest rates was unfortunate, as their impact is only apparent with delay, i.e., several months after interest rates are raised. On the other hand, the delay in starting to raise the policy interest rates helped to keep public debt levels sustainable⁵⁷.

Partly due to adoption of contradictory policies, the Central Bank of Nigeria's extremely accommodative monetary policy stance failed to feed through into bank lending rates. While reliance on monetary financing in 2020-2021 was accompanied by a sharp drop in real yields on Nigerian government securities, the overly accommodative stance of monetary policy failed to feed through into bank lending rates. With the introduction of the required 65 percent minimum loan to deposit rate in 2019, the Central Bank intended to encourage banks to lend to the private sector⁵⁸. However, the signaling to banks was highly conflicted: confronted by negative real yields on their holdings of government securities, the high level of required, unremunerated cash reserves⁵⁹, and uncertainty about borrowers' ability to repay their loans, banks found themselves in no position to encourage more lending by reducing their lending interest rates. Rather to the contrary, the risk of losses on new lending during the Covid-19 related cyclical downturn more than outweighed the penalties that would result from a shortfall in their loan to deposit ratios.

Other countries also took recourse to monetary financing to varying degrees. The National Bank of Ethiopia has financed the government over the past decade for significant amounts. On March 31st, 2022, direct advances by the National Bank of Ethiopia to the Government amounted to Birr 149,5 billion (equivalent to nearly 7% of GDP)⁶⁰. In Ghana, a fiscal rule was adopted in 2017 prohibiting government borrowing from the central bank except in exceptional circumstances⁶¹, but in the context of Covid-19, the rule was set aside, and the Bank of Ghana lent the Government US\$ 1.7 billion to help mitigate the impact of the coronavirus pandemic. In Kenya, recourse to monetary financing has been much more limited. The government makes use of an overdraft facility at the Central Bank of Kenya on which it can only draw up to 5 percent of the previous year's fiscal revenues.

56 Debt monetisation refers to the central bank's purchase of securities issued by the government whether on the secondary market or directly from the government.

57 The higher the inflation rates, the higher public revenues. At the same time, GDP deflator helps to bring debt to GDP ratios down.

58 In case of non-compliance with this ratio, banks faced penalties in the form of augmented cash reserves.

59 The Central Bank of Nigeria raised the cash reserve requirement from 22.5 percent of deposits to 27.5 percent of deposits in January 2020

60 In 2019/2020, the National Bank of Ethiopia exchanged part of its direct advances to the government for long-term bonds, and in the first quarter of 2020/21 total direct advances to the government were Birr 44.77 billion equivalent to 12.6 percent of total government revenues of 2019/20 (Ethiopia, 2021).

61 Ghana (2017).

Disbanding financial repression practices

The motivation behind financial repression practices is generally to lessen the costs of financing chronic fiscal deficits.

Financial repression can take the form of measures such as foreign exchange controls, payment of negative real interest rates, the imposition of interest rate ceilings, and investment requirements imposed on banks and institutional investors. While these measures provide relief by reducing the government's immediate financing needs and/or cost of funding, they invariably discourage private sector savings and inhibit financial deepening.

Ethiopia and Nigeria use exchange controls extensively to shield the domestic economy from the impact of exchange rate adjustments.

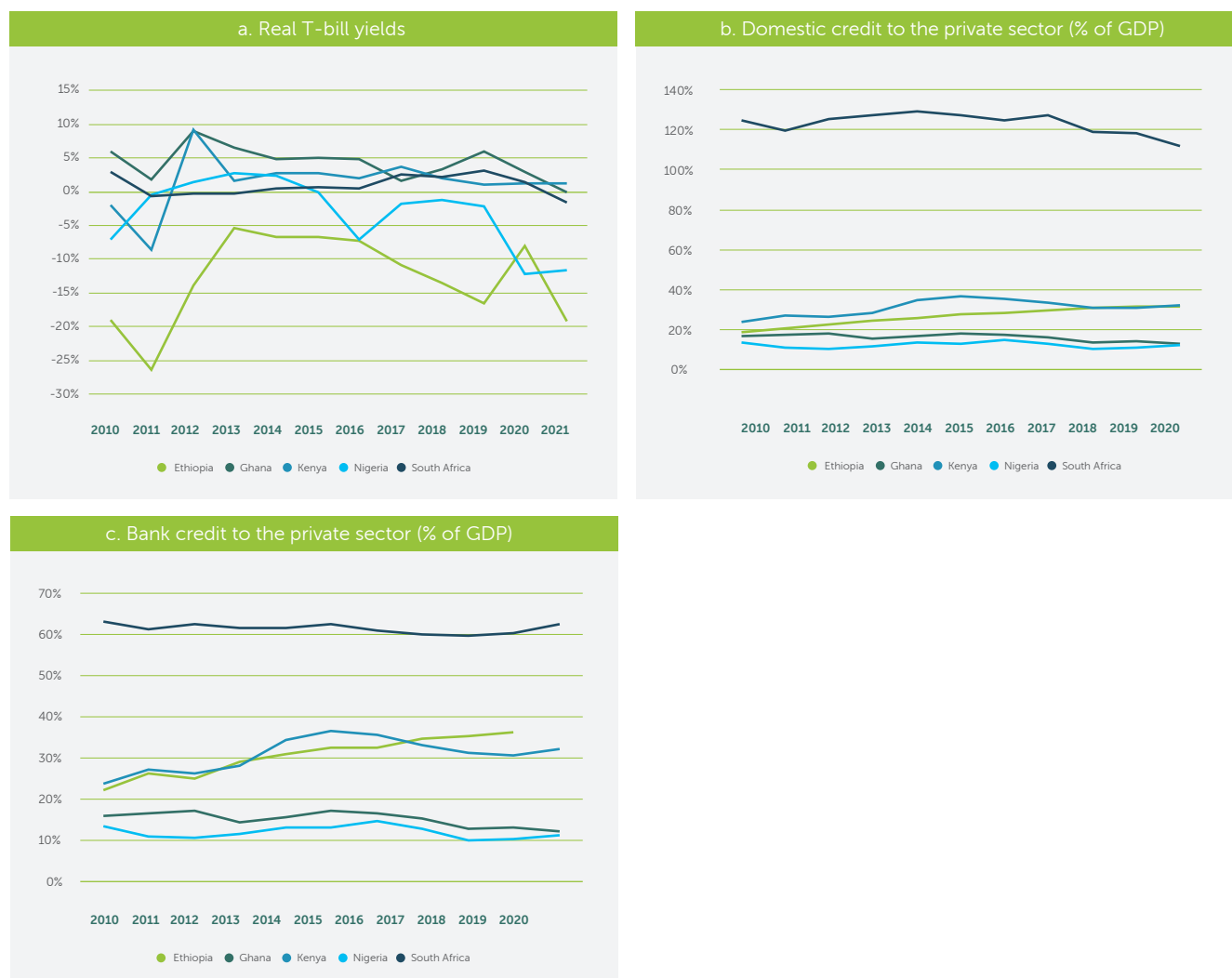
The authorities in both countries ration access to foreign exchange to curb the impact of terms of trade deterioration on import costs. This has led to extended periods of exchange rate misalignment, stalling the process of economic transition in Ethiopia, and further delaying economic diversification away from overreliance on oil exports and on revenues from taxation of oil in Nigeria. See Box 5 for a discussion of the consequences of imposing exchange controls.

As a symptom of financial repression, real interest rates on

government securities have been negative in Nigeria and Ethiopia for most of the past decade.

In Nigeria, real interest rates fell further in 2020 and 2021, as the authorities allowed real short-term T-Bill yields to be negative (averaging 12.2 percent in 2020 and 11.6 percent in 2021), Figure 16.a. By paying negative real rates of interest on their debt, the Nigerian and Ethiopian authorities succeeded in reducing their financing costs. However, negative real yields discourage savings and encourage financial disintermediation, thereby putting a brake on financial deepening and economic growth. Negative real rates of interest on government securities also work towards crowding out of domestic credit to the private sector, as banks raise interest rates on their lending to compensate for the negative real income they earn on their holdings of government securities, Figures 16.b and c. While credit to the private sector continued to expand rapidly in Ethiopia despite negative interest rates, this expansion is attributable to credit that banks were obliged to provide to state-owned enterprises. The Ethiopian authorities impose a ceiling on interest rates on bank deposits, allowing banks to raise funds at interest rates which are negative in real terms, while still earning a positive spread on their lending.

Figure 16: Symptoms of financial repression



Source: IMF

Unable to rely on market incentives, the authorities in Nigeria and Ethiopia resorted to using regulation to direct credit growth.

As noted above, the Central Bank of Nigeria sought – with limited success – to encourage banks to augment their lending beyond the level dictated by risk/reward considerations by penalising those banks with a loan to deposit ratio below 65 percent. Until recently a “27-percent rule” obliged private Ethiopian banks to purchase 5-year National Bank of Ethiopia bonds, equivalent to 27 percent of their gross credit. While financial sector policies pursued by the Kenyan authorities have overall been market conform, a cap was placed on bank lending rates and bank margins from 2016 until 2019, leading to a decline in domestic credit to the private sector, Figure 16.b and c.

Box 5: Perils associated with intervention in foreign exchange rate market

While Ghana, Kenya, and South Africa have floating foreign exchange rate regimes, Ethiopia and Nigeria have adopted exchange controls with a view to fixing the exchange rate for prolonged periods⁶². Floating rate regimes help to release tensions arising from changes in domestic and external imbalances. Fixing the nominal exchange rate results in the accumulation of tensions and postponed adjustment. Given higher inflation in SSA than in advanced countries, fixed exchange regimes will eventually need to give way to stepwise devaluations.

Not only do such stepwise market corrections impose costs on importers and exporters in terms of periodic price misalignments followed by ‘shocks’ when exchange rates eventually adjust, they also impair the development of liquid and robust foreign exchange markets. Figure 17.a shows the stepwise dynamics of the Nigerian foreign exchange market. Figure 17.b shows that in responding to the Covid-19 crisis in Ethiopia, the authorities appear to have adopted a more flexible approach to foreign exchange market management.

Figure 17: Foreign exchange rate market development



62 Since democratic elections in April 1994, the South African government has gradually dismantled strict exchange controls. South Africa has therefore now reached a stage where there are no effective exchange controls any more on current account transactions and on the movement of funds of non-residents.



4. Addressing challenges in financial market development

Immediate challenge of external debt distress

There is a risk that Ethiopia, Ghana, Kenya, and Nigeria may face an external debt crisis. Excessive reliance on external financing results in a situation where domestic or external shocks could give rise to a foreign debt crisis. In Ethiopia, Ghana, Kenya, and Nigeria external public debt levels will remain historically high for the next decade, Figure 9.f. Sovereign borrowing costs in 2022 are much higher than they were in 2019 and 2020, making it much less attractive to borrow on commercial terms abroad to meet external financing needs. Liquidity risk indicators, such as external debt service to revenues and external debt service to exports, demonstrate that these countries will have difficulties addressing refinancing risks. As outlined above the prospects for reducing pressures on Government borrowing through fiscal consolidation have dimmed due to the war in Ukraine and authorities have moved to counteract inflation by tightening monetary policy, thereby adding to sovereign borrowing costs.

Strengthening public debt management

Refinancing risks have risen due to the increase in public debt levels, greater reliance on external financing, and issuance of securities of shorter maturity on the domestic market⁶³.

These developments have raised refinancing risks in Ethiopia, Ghana, and Kenya – countries susceptible to debt distress and overexposure to external financing already prior to Covid-19.

Sound public debt management practices can contribute to mitigating such risks.

By raising the predictability of public debt issuance, by implementing public debt issuance strategies that avoid concentration of debt maturities, by placing greater reliance on the issuance of domestic debt rather than foreign debt, and by adopting market-friendly issuance procedures, it is possible to reduce exposure to refinancing risks. To date, South Africa and Kenya have shown greater willingness to adopt such market-friendly policies than other case-study countries.

One aspect that deserves greater attention post-Covid-19 is market development.

Given greater reliance on domestic debt issuance to meet government funding needs, public debt managers have an important role to play in increasing the absorptive capacity of domestic securities markets. They can contribute to this process by ensuring that debt instruments are best tailored to the needs of the domestic and external investor base. It is important that domestic money and primary markets have sufficient depth to absorb liquidity shocks as well as issuance of large volumes of government securities on the primary market. The more debt issuance by the government is tailored to meeting the needs of a diversified institutional investor base – both the needs of portfolio investors on the domestic market and of investors buying securities issued by the Government externally – the more government debt financing costs will be shielded from sudden changes in market sentiment.

The timing and sequencing of adjustments in government

debt management strategy can impact market development.

To mitigate the impact of debt issuance on interest rates and thereby lessen crowding out, the cost and risk of alternative debt strategies need to be weighed against the timing and sequencing required to transition to the desired debt composition. Moving too fast to a long-term debt portfolio could shift the yield curve upwards, resulting in capital losses to current owners of long-term debt securities. Moving too slowly may reduce the liquidity of long-term instruments and lead to a situation where institutional investors are obliged to take on more risk, as they are forced to leave their “preferred habitat” investing in the medium to long-term part of the yield curve. For example, the issuance of longer-term securities will need to be carefully timed to coincide with market development initiatives designed to attract greater participation by institutional investors, such as pension funds and insurance companies.

As part of their public debt management strategy, country authorities will benefit from diversifying available sources of funding both domestically and abroad.

Here new and evolving specialised funding avenues could be explored. For example, Nigeria could issue Sukuk bonds, thereby tapping into the demand for these products from specific groups of investors. Another possible area could be issuance of green bonds. Provided the use of the proceeds of such bonds is monitored effectively, themed debt securities could be used to fund projects with a climate-related or environmental purpose. These bonds could attract investors seeking to fulfill obligations to making climate-conscious investments and may therefore over time reduce sovereign borrowing costs given the growing supply of ESG-conscious capital looking for investment opportunities. By tailoring bond issuance to specific investor needs such specialised funding vehicles contribute to lessening crowding out pressures.

⁶³ Debt issuance data for Ghana, Kenya, and South Africa reveal that the average maturity of Government debt has fallen in recent years.

Policy trade-offs between financial market development and debt relief

Adopting policies designed to support market development gives rise to tradeoffs.

While there are gains associated with market development, in the short-term tensions may arise if these gains give rise to fiscal costs and risks. Policies designed to strengthen market development, such as discontinuing financial repression and refraining from monetary financing, while supportive of market development, will increase the explicit cost of financing the government fiscal deficit. Measures designed to support market development, such as reducing reliance on monetary and quantitative easing and unwinding debt monetisation and financial repression policies will invariably raise the cost of government financing in the short-term: rather than being 'camouflaged', such 'savings' will be explicitly included as part of the government's funding costs. Examples of such 'savings' occur when the government obliges institutional investors to buy government securities beyond the amount they might otherwise include in their portfolios, or when the government regulates the foreign exchange market with a view to preventing/delaying the depreciation of the exchange rate, thereby reducing the cost of external debt service. Short-term costs associated with market development policies may hamper the authorities' willingness to implement reforms, even when the benefits associated with fostering financial market development, particularly in terms of enhancing the sustainability of government debt, outweigh the costs in the medium to longer term. In addition, authorities may

be hesitant to undertake the transition towards more market-conform financing of their fiscal deficits, as the transition will inevitably raise awareness, transparency, and accountability regarding government funding.

Going forward, implementing the conditionalities associated with debt relief negotiations more effectively than in the past will be important in avoiding a situation where the benefits of debt relief once again only remain temporary.

Anticipated external debt levels pose a threat to debt sustainability in four case-study countries, and in the case of South Africa foreign portfolio investment poses a risk to macroeconomic stability. Previous attempts to ease the adjustment process and at the same time provide the opportunity for market development have involved debt relief and increased access to external concessional financing. Such debt relief efforts have been accompanied by conditionalities designed to put countries onto a path of fiscal consolidation and stabilisation of their external debt positions aimed at ensuring debt sustainability in the future. However, as documented in this paper, the outcomes of efforts to avoid future debt accumulation and dangers to debt sustainability were short-lived. While well-intentioned, these efforts failed to resolve macroeconomic imbalances, and countries were ill-prepared to meet the Covid-19 shock.

Greater reliance on domestic funding as a threat to market development

In recent years, greater reliance has been placed on domestic debt financing.

Due to the high risk of external debt distress and pressures brought to bear by the Covid-19 crisis and the war in Ukraine, case-study countries (other than South Africa, which already relies almost exclusively on the domestic market funding) have placed increasing reliance on domestic debt when financing their fiscal deficits, Figures 9.f and 9.g. In as much as expanded issuance of domestic debt encourages the deepening of domestic financial markets, it will have a positive impact on public debt sustainability. The deeper and more liquid are domestic markets, the higher their capacity to absorb greater recourse to domestic debt issuance and the lower the risks (in terms of the impact on funding costs) associated with increased domestic debt financing.

While deeper markets increase absorptive capacity, greater reliance on issuance of domestic debt can both be a catalyst to the deepening of local financial markets and a threat to

their development: Box 8 below provides a summary of the costs and benefits associated with market development. There is ambiguity about the effects of high levels of public debt on the volume and cost of credit available to the private sector, see summary of these trade-offs in Box 6 below. On the positive side, there are several ways in which growth in government debt complements domestic private financial market development. By supporting the development of a well-defined government yield curve, issuance of more public debt crowds in private capital. A well-defined sovereign yield curve provides a benchmark for pricing of private securities and loans, thereby reducing pricing risk and increasing the liquidity of domestic security markets. In addition, as those issuing and trading private securities typically can adopt the same security trading and depository infrastructure as used by the public sector, deeper public security markets serve to lower fixed costs for issuers of both public and private securities.

Box 6: Experience with crowding-in and crowding-out

While empirical findings overwhelmingly support the notion that government borrowing crowds out private sector credit, there is some ambiguity as to the effect of debt on credit supply.

Several studies support the traditional concept of crowding out. In a sample of 60 developing countries, Emram and Farazi (2009) found that for each additional \$1 borrowed by the government, private credit was reduced by \$1.40. Christensen (2004) used a sample of 27 sub-Saharan countries to show that a one percentage point increase in government borrowing relative to broad money results in a 0.15 percent decrease in private sector lending relative to broad money. According to more recent research for sub-Saharan Africa, a one percentage point increase in banks' exposure to the government is associated with a 0.6 percentage point decrease in the annual growth of credit to the private sector (Bouis, 2019). Fayed (2012), in a study on Egypt, shows that a one-pound increase in government borrowing reduced private credit by approximately four percentage points during the period 1998-2010. This is attributed to "lazy banks", which prefer to invest excess liquidity in low risk-return investments.

On the other hand, Borensztein et al. (2008) show that the market development (crowding-in) effect of having a higher share of public domestic bond financing dominates the crowding-out effect in a sample of both developed and developing countries. Flogstad (2017) shows more evidence of crowding-in effects of public debt issuance, especially for well-developed bond markets where the potential benefits of a growing bond market are more self-evident.

Nonetheless, the focus of concern, particularly in smaller emerging capital markets, is that crowding out will outweigh the benefits associated with government debt issuance. This occurs as securities issued by the government compete with the private sector for limited domestic private savings, thereby reducing the supply and raising the cost of credit available to the private sector. There are at least two situations where such crowding-out can take place. First, when the government issues large volumes of public debt, this tends to put upward pressure on the sovereign yield curve, thereby raising the cost of borrowing both to the government and the private sector.

This impact is amplified when banks and institutional investors find the return on government bonds more attractive than the risk-adjusted return on new lending to the private sector, and when risk premiums on private debt obligations are perceived as being too narrow. Second, regulatory requirements such as tightening of provisioning requirements on bank lending may also contribute to crowding out, as higher yields on government securities may contribute to raising interest rates on private borrowing and the volume of banks' non-performing loans, thereby reducing resources available for lending (see Box 7 for an illustration of this point).

Box 7: The importance of the timing of regulatory reforms

Adopting a gradual approach to the introduction of IFRS9 is advisable. It is likely that tensions will arise between the negative impact of IFRS9 on banks' appetite for lending at a time when crowding out pressures are already prevalent and the need to manage financial stability issues that are likely to arise due to a systemic rise in NPLs. The adoption of IFRS9 by banking sector regulators can work towards reducing lending by banks, thereby adding to the impact of increased government borrowing in terms of crowding out. Compliance with IFRS9 obliges banks to move from assessing the performance of their loan portfolios on an incurred loss basis to using an expected loss model. Expected loss models require banks to recognise any deterioration in their loan portfolios as it happens rather than on a past-due basis. While IFRS 9 will result in more accurate asset classification and therefore support overall financial stability, it would seem advisable to consider a gradual approach to the introduction of IFRS9, as it obliges banks to record their provisions on a preemptive basis and is likely to further reduce their profits and their lending capacity at a time when they are already compromised. As provisioning is not required on banks' holdings of government bonds, IFRS9 provides banks with a further incentive – in addition to those associated with crowding out described above – to reduce their exposure to risky loans and invest more of their assets in government bonds.

Crowding-in and crowding-out happen simultaneously, but under current macroeconomic circumstances it is likely that government debt issuance will crowd out credit to the private sector. Crowding-in effects tend to prevail in growing and healthy macroeconomic environments, while crowding-out effects are more frequently associated with less stable or stressed situations. As the economic impact of the Covid-19 crisis and the war in Ukraine are expected to last well beyond 2022, fiscal imbalances experienced across all 5 countries are likely to deepen further, and there is reason to believe that crowding-out effects will prevail. Lower output growth,

heightened risk aversion by the private sector, and continued recourse to government borrowing will further increase dependency on government borrowing, putting upward pressure on the yield of government securities and dampening the supply of credit to the private sector. The cessation of loan forbearance measures introduced temporarily to lessen the impact of Covid-19 on the accumulation of non-performing loans will further contribute to these pressures by obliging banks to increase their regulatory provisions and to recognise losses.

Unwinding debt monetisation policies

Rising inflationary pressures accentuate the need to unwind debt monetisation policies. Central bank financing of government deficits needs to cease both to lessen inflationary pressures and to confirm commitment to the primary mandate of central banks in controlling inflation. In responding to the adverse effects of Covid-19 Ethiopia, Nigeria, and to a lesser extent Ghana took recourse to financing their government deficits directly using funding provided by their central banks. From a macroeconomic point of view, debt monetisation unleashes inflationary pressures and raises uncertainty as regards macroeconomic management. In 2020, when country authorities reacted to Covid-19 by imposing lockdowns, the inflationary risks associated with debt monetisation were minimal due to the sharp drop in economic demand. However, over an extended period recurrent debt monetisation raises doubts about the

government's ability and willingness to implement sound and effective macroeconomic policies and will negatively affect the volume of private domestic investment and foreign direct investment. Debt monetisation practices are not market friendly, as they usually give rise to higher and more volatile rates of inflation, resulting in greater uncertainty as to ex-post real interest rates. To compensate for such uncertainty, investors will require an inflation risk premium, which, while providing some protection against inflation uncertainty, raises the cost of borrowing for both the government and the private sector. Thus, it is important that debt monetisation is brought to an end, both from the perspective of bringing inflation under control, and to confirm the autonomy of central banks, whose primary mandate is ensuring price stability.

Avoiding the consequences of financial repression

Financial repression practices should be unwound, as they have a severely detrimental impact on market development. While financial repression policies may reduce the government's immediate cost of debt service, they invariably distort financial markets, discourage savings, and inhibit financial deepening. Rather than suffer the market dislocation caused by excessive fiscal deficits, countries, such as Nigeria and Ethiopia, have resorted to various types of financial repression. Financial repression occurs when the authorities interfere with decisions of lenders in allocating credit or control (require lenders to reduce) the interest rates they charge. Similarly, foreign exchange controls adopted by Ethiopia and Nigeria seek to manipulate the market price for foreign exchange and result in artificial foreign exchange scarcity, impair price discovery by decoupling the exchange

rate from market signals, distort relative prices and the use of resources, and foster the development of parallel or illegal foreign exchange markets. Excessively easy monetary policies that result in negative real interest rates have also been prevalent in Ethiopia and Nigeria. While such policies curb the growth of public debt in the short term, they discourage the formation of savings, and encourage financial disintermediation in the medium term. By lessening market responses or introducing market distortions, repressive financial policies reduce immediate responses to shocks in terms of market signals, but at the cost of reducing confidence in market-based finance. Over time such distortions undermine the role of financial markets in allocating scarce resources to their optimal uses and may be difficult to unravel, as they are associated with opportunities for rent-seeking.

| Short-term | Long-term |
|---|--|
| <p>Focus on mitigating the risks of external debt distress</p> <ul style="list-style-type: none"> • Less exposure to external debt <p>Focus on domestic debt financing:</p> <ul style="list-style-type: none"> • Higher costs • Short-term crowding out effects <p>Public debt management strategies:</p> <ul style="list-style-type: none"> • Less exposure to risks (refinancing, FX, etc.) • More cost-effective public debt management strategies <p>Unwinding debt monetisation policies:</p> <ul style="list-style-type: none"> • More credible monetary policy • Higher public debt costs • Higher uncertainty about private sector demand for government securities <p>Addressing the impact of regulatory reforms:</p> <ul style="list-style-type: none"> • Adjust to take into consideration the impact on private sector credit supply in COVID-19 environment • May raise concerns about the Central Bank's willingness to implement the reforms <p>Avoiding the consequences of financial repression:</p> <ul style="list-style-type: none"> • Place greater reliance on financial markets in allocating credit • Market-determined cost of credit to the private sector • Higher public debt funding costs • Higher uncertainty about private sector demand for government securities | <p>Focus on mitigating the risks of external debt distress</p> <ul style="list-style-type: none"> • Reduces the macroeconomic uncertainty • Helps attracting foreign investments <p>Focus on domestic debt financing:</p> <ul style="list-style-type: none"> • Crowding-in effects • Higher capacity to absorb public debt • Lower overall public debt risk exposure • Supports macroeconomic stability (growth and employment) <p>Public debt management strategies:</p> <ul style="list-style-type: none"> • A deeper and more sophisticated public debt market • Broader investor base (institutional investors, non-residents, etc.) • Tapping the demand for niche instruments (Sukuk bonds, green bonds, etc.) <p>Unwinding debt monetisation policies:</p> <ul style="list-style-type: none"> • Anchored inflation expectations • Lower public debt costs for the smaller inflation risk premium • Higher macroeconomic stability <p>Addressing the impact of regulatory reforms:</p> <ul style="list-style-type: none"> • Balance the tension between assuring implementation of regulatory reforms and the need to deal with the adverse effects of Covid-19 and/or other external shocks. <p>Avoiding the consequences of financial repression:</p> <ul style="list-style-type: none"> • Reduce distortions and allow more efficient financial Markets • Encourage private savings and financial intermediation • Informational gains (market signals, price discovery, etc.) • Less opportunities for rent-seeking |

⁶⁴ Costs are shown in red.

References

- Borensztein, E. Cowan, K. Eichengreen, B., Panizza, U.** (2008) "Building Bond Markets in Latin America. In: On the verge of a Big Bang? Edited by Eduardo Borensztein and others. MOF_0.pdf
- Bouis, R.** (2019) "Bank's Holdings of government securities and credit to the private sector in emerging market and developing economies", IMF Working papers.WP/19/224
- Christensen, J.** (2004) "Domestic Markets in Sub-Saharan Africa", IMF Working papers 04(46). April.
- China Africa Research Initiative** (2021) "Chinese Loans to Africa" at <https://chinaafricaloandata.bu.edu/>
- Ecowas** (2016). "2016 Annual Report of Ecowas", Ecowas.
- Eichengreen, B., and Hausmann, R.** (1999) "Exchange Rates and Financial Fragility", In New Challenges for Monetary Policy. Proceedings of a symposium sponsored by the Federal Reserve Bank of Kansas City
- Eichengreen, B., Hausmann, R., and Panizza, U.** (2002) "Original Sin: The Pain, the Mystery and the Road to Redemption", paper presented at a conference on Currency and Maturity Matchmaking: Redeeming Debt from Original Sin, Inter-American Development Bank
- Eichengreen, B.; Hausmann, R.; Panizza, U.** (2007) "Currency Mismatches, Debt Intolerance and Original Sin: Why They Are Not the Same and Why it Matters". Capital Controls and Capital Flows in Emerging Economies: Policies, Practices and Consequences. University of Chicago Press. pp. 121–170
- Ethiopia** (2021) "Quarterly Bulletin – First Quarter 2020/21 – Fiscal Year Series", National Bank of Ethiopia
- Fayed, M. E.** (2012) "Crowding out effect of public borrowing". Research gate.
- Flogstad, C. N.** (2017) "Domestic bond markets in Emerging Economies: crowding in or crowding out?". Working papers in Economics. N° 15/17. Department of Economics. University of Bergen.
- Gelper, A.** (2015) "China's lending to emerging markets became more secretive after 2014". Peterson Institute for International Economics, <https://www.piie.com/research/piie-charts/chinas-lending-emerging-markets-became-more-secretive-after-2014>.
- Ghana** (2017) "Amendment n° 2 of loan and fiscal agency memorandum of understanding between the Bank of Ghana and the Ministry of Finance, entered into on the 5th of March, 2015", Ministry of Finance, December. [https://www.mofep.gov.gh/sites/default/files/news/Fiscal-Agency-MOU-BOG-](https://www.mofep.gov.gh/sites/default/files/news/Fiscal-Agency-MOU-BOG-MOF_0.pdf)
- Ghana** (2018) "2019 Medium Term Debt Management Strategy (MTDS)", Ministry of Finance, November.
- Ghana** (2019) "Fiscal Risk Statement – 2018", Ministry of Finance, March.
- Ghana** (2020) "Bank of Ghana Monetary Policy Committee – Press Release", Bank of Ghana, May.
- Ghana** (2021a) "The Budget Statement and Economic Policy – 2021", Ministry of Finance, March.
- Ghana** (2021b) "Annual Public Debt Report – 2020", Ministry of Finance, March
- Hausmann, R., and Panizza, U.,** (2002) "The Mystery of Original Sin: The Case of the Missing Apple", Harvard University, Kennedy School of Government. Mimeographed
- Horn, S., Reinhart, C.M., and C. Trebesch** (2020) "How Much Monet Does the World Owe China",
- Harvard Business Review**, <https://hbr.org/2020/02/how-much-money-does-the-world-owe-china>.
- International Monetary Fund** (2002) "Sovereign Debt Restructurings and the Domestic Economy Experience in Four Recent Cases." Policy Development and Review Department, February 21.
- International Monetary Fund** (2009) "Fiscal risks: sources, disclosure, and management," Washington, DC. <https://www.imf.org/external/pubs/ft/dp/2009/dp0901.pdf>
- International Monetary Fund** (2017) "Review of the debt sustainability framework in low-income countries: proposed reforms" Washington, DC, September.
- International Monetary Fund** (2018) "Guidance Note on the Bank-Fund debt sustainability framework for low-income countries," Washington, DC, February.
- International Monetary Fund** (2019a) "South Africa: 2019 Article IV Consultation". Washington, DC, January.
- International Monetary Fund** (2019b). "Nigeria: 2019 Article IV Consultation – Selected issues". Washington, DC, March
- International Monetary Fund** (2019c) "Ghana: 2019 Article IV Consultation – Selected issues". Washington, DC, March
- International Monetary Fund** (2020a) "Kenya – Fiscal Transparency Evaluation Update", Washington, DF. IMF Country Report No. 20/2, January 2020.

International Monetary Fund (2020b) "South Africa – 2019 Article IV Consultation", Washington, DF. January 2020.

International Monetary Fund (2020c) "Ethiopia – 2019 Article IV Consultation", Washington, DF. January 2020.

International Monetary Fund (2020d) "Joint World Bank – IMF Debt Sustainability Analysis – Kenya – 2020". Washington, DC, April

International Monetary Fund (2020e) "Emerging and Frontier Markets: Policy Tools in Times of Financial Stress" <https://blogs.imf.org/2020/10/23/emerging-and-frontier-markets-policy-tools-in-times-of-financial-stress/>, Washington D.C., October.

International Monetary Fund (2021a) "World Economic Outlook", Washington, DF. April 2021

International Monetary Fund (2021b) "Policy Responses to COVID-19: Policy Tracker" at <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>

International Monetary Fund (2022) "Regional Economic Outlook – Africa", Washington, DF. April 2022

Kaminsky, G., and Reinhart, C.M. (1999) "The Twin Crises: The Causes of Banking and Balance-of-Payments Problems." *The American Economic Review* 89 (3): 473–500.

Kenya (2020) "Guidelines on Asset and Liability Management in the Public Sector", Ministry of Finance, March

Kenya (2021) "2021 Medium Term Debt Management Strategy", Ministry of Finance, March

Kure, E. U., Mbutor, O. O., Rotimi, U. A. and Y. Adamu (2020) "The Central Bank Balance Sheet as a Tool for Monetary Policy:

Evidence from Nigeria", Central Bank of Nigeria. *Economic and Financial Review*, Volume 57/2, June 2019.

Nigeria (2018) "National Debt Management Framework 2018-2022", Debt Management Office.

Nigeria (2019) "Nigeria's Debt Management Strategy, 2020-2023", Ministry of Finance, November

Nigeria (2020) "Medium term expenditure framework and fiscal strategy paper – 2021-2023", Federal Ministry of Finance Budget and National Planning, July

Reinhart, C., Rogoff, K., and Savastano, M. (2003) "Debt Intolerance."

South Africa (2020) "Lecture by Lesetja Kganyago, Governor of the South African Reserve Bank, at the Wits School of Governance", Johannesburg, June. <https://www.bis.org/review/r200619b.pdf>

South Africa (2021) "Debt Management Report 2019/2020", Ministry of Finance.

World Bank and International Monetary Fund (2019) "Developing a Medium-Term Debt Management Strategy Framework (mtds) – updated guidance note for country authorities", World Bank, February



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