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Covid-19 and the monetary-fiscal policy nexus in Africa

Christopher Adam, Enrique Alberola and Albert Pierres[1]

Abstract

The Covid-19 pandemic reinforced the already close interactions between monetary and fiscal policies in Africa. Policymakers provided support to their economies in a coordinated way. Both policies were countercyclical and complementary. Central banks reacted more forcefully than fiscal authorities, as high debt constrained the fiscal response. The tighter fiscal-monetary policy nexus – while effective in facing the pandemic shock – presents risks for the future. The worsening fiscal situation represents a major challenge, not least for central banks. Against a backdrop of inflationary pressures and subdued recovery, political pressures could weigh on the management of monetary policy and generate tensions between policymakers. For central banks, reasserting the paramount importance of the goal of price stability is essential in order to reaffirm solid boundaries between fiscal and monetary policy, and to fend off fiscal dominance risks.

JEL Classification: E32, E58, E61, H30.

Keywords: central banks, fiscal policy, policy interactions, Covid-19, Africa.

[1] This paper was prepared for the Roundtable of Governors from African central banks organised by the BIS and held on 30 November 2021. Christopher is a professor at Oxford University; Enrique and Albert work at the BIS. We thank Claudio Borio, Agustin Carstens, Stijn Claessens, Benoit Mojon and Hyun Shin for their comments. The views expressed in this document are those of the authors and do not necessarily reflect those of the Bank for International Settlements.

Introduction

The economic downturn induced by the Covid-19 pandemic required a broad policy response globally that placed large demands on fiscal and monetary policies. In Africa, the resulting close fiscal-monetary policy coordination further strengthened the tight nexus between the two policies.

The recovery in Africa is being hampered by the slow rollout of vaccines and higher inflation. The surge in public debt has weakened further public finances, limiting the scope for supporting the recovery. Monetary policy remains accommodative, but rising inflation may call for a tighter stance. Higher interest rates would put a brake on activity. These developments could compromise the hitherto beneficial interaction between monetary and fiscal policies and raise challenges ahead.

The note discusses these issues, drawing on two central bank surveys, the first comprising 22 African central banks and the second 20 other emerging market economies (EMEs).[2] The first section reviews the policy response to the Covid-19 crisis; the second focuses on the interaction between monetary and fiscal policy; the final section examines the challenges this interaction has produced.

1. Policy response to the Covid-19 crisis

African policymakers moved decisively to provide support to their economies as the pandemic hit, leading to a close interaction between monetary and fiscal policies.

The central banks' response was wide-ranging (Graph 1, first panel). The reduction in policy interest rates was similar on average to that in other EMEs, with benchmark rates reaching historical lows in almost half of the African countries (second panel and Annex Graph 1). Over half of the central banks reduced reserve requirements. Central banks were also active in foreign exchange markets. Forex interventions were more common in Africa – over 40% of cases – than in other EMEs. But only 20% provided FX funding to banks, compared with over 60% in other EMEs.

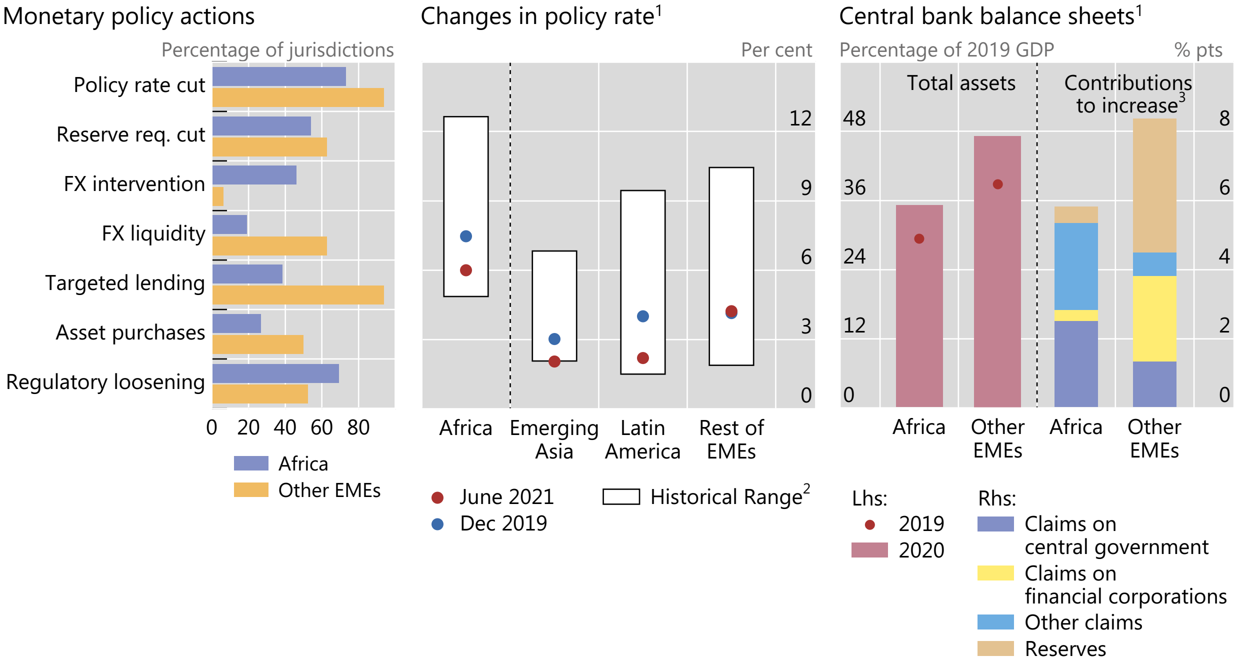
Often for the first time, monetary authorities used unconventional monetary policy measures, albeit to a lesser extent than in other EMEs. Over one quarter resorted to asset purchases, mainly of claims on the central government, compared with half elsewhere, with an average size of around 2% of GDP (World Bank (2021)).[3] According to the survey (Annex Graph 2), the main objective of asset purchases was to facilitate market functioning. Around 40% of the central banks in the region established lending schemes to channel credit to targeted sectors, a much lower proportion than in other EMEs. An easing of prudential standards supported bank lending.

2 African central banks: AO, BCEAO, BEAC, BW, DZ, EG, GH, KE, LS, MA, MG, MU, MW, MZ, NA, NG, RW, TN, UG, ZA, ZM, ZW. Other EMEs: Asia (CN, HK, ID, IN, KR, MY, PH, SG, TH and VN); Latin America (AR, BR, CL, CO, MX and PE); CEE (CZ, PL, HU and RU).

3 Arslan et al (2020) show that central bank asset purchases had non-negligible effects on EMEs' yields.

The multifaceted monetary policy response meant a closer interaction with fiscal policy and led to a sizeable expansion of central bank balance sheets (Graph 1, third panel), mainly through higher claims on the central government.

Wide-ranging monetary policy actions increased central banks' balance sheets Graph 1



Africa = AO, BCEAO, BEAC, BW, CI, CV, EG, GH, KE, LS, MG, MU, MW, MZ, NA, NG, RW, SZ, UG, ZA, ZM; Emerging Asia = HK, ID, IN, KR, MY, PH, SG, TH and VN; Latin America = AR, BR, CL, CO, MX and PE; CEE = CZ, PL, HU and RU; Other EMEs includes emerging Asia, Latin America and CEE; Rest of EMEs includes CEE, IL, TR and SA.

[1] Aggregates based on the simple average across groups. [2] From January 2007 to present. [3] Contribution to the change in total assets between 2019 and 2020. Reserves are converted into local currency.

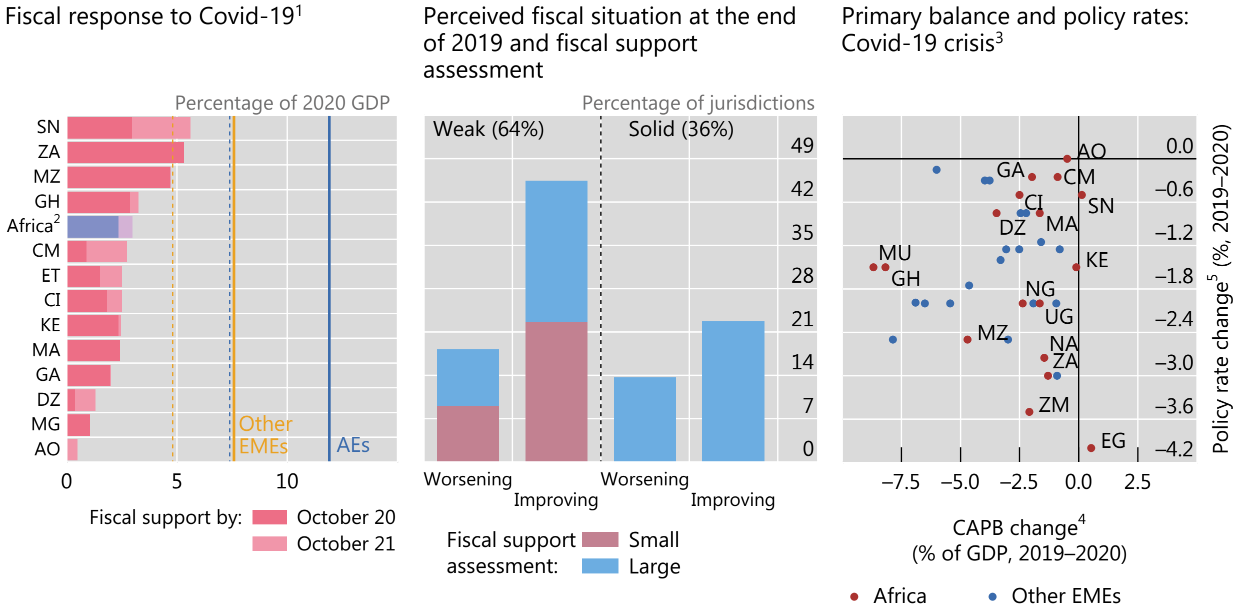
Sources: IMF, *International Financial Statistics*; Datastream; national data; BIS Survey; BIS calculations.

Fiscal support in African economies (averaging 2.9% of GDP) was much smaller than in other EMEs (Graph 2, first panel). And few countries adopted non-budgetary measures, such as off-budget forms of financing to firms or credit guarantees, in contrast to their widespread use elsewhere.

The vulnerability of public finances constrained the fiscal response. Two thirds of survey respondents noted that the fiscal situation was already weak pre-crisis (Graph 2, second panel). Of these, half regarded the subsequent fiscal support as small. Debt sustainability pressures were seen as the principal reason for the limited support while lack of instruments, lags and inefficiencies in fiscal systems were also mentioned as contributory factors. On the positive side, the fiscal response leveraged mobile money deposit accounts to better reach households and went hand in hand with higher transparency in spending (IMF (2020)).

Mirroring the reaction in other EMEs, both monetary and fiscal policies acted counter-cyclically and, therefore, were complementary in the downturn. Graph 2, third panel, shows most African countries placed in the lower left quadrant, indicating a loosening of both the fiscal and monetary policy stance. This response was remarkable since historically the policy stance in Africa - as in other EMEs- has tended to be pro-cyclical during recessions.[4] Overall, however, monetary policy played a bigger role than fiscal policy in Africa compared to other EMEs, as shown by the clustering around the vertical axis in the graph.

Limited fiscal support did not preclude countercyclical policies | Graph 2



[1] Budgetary fiscal response as estimated in the October 2020 and October 2021 IMF Fiscal Monitor updates; The dashed (solid) vertical lines indicate the simple average in October 2020 (October 2021) for AEs and Other EMEs. [2] Aggregate based on the simple average. [3] Argentina not shown. [4] CAPB = Cyclically adjusted primary balance to potential GDP. [5] Policy rate changes calculated based on end-of-period data and have been extended with short-term interest rates to increase data availability.

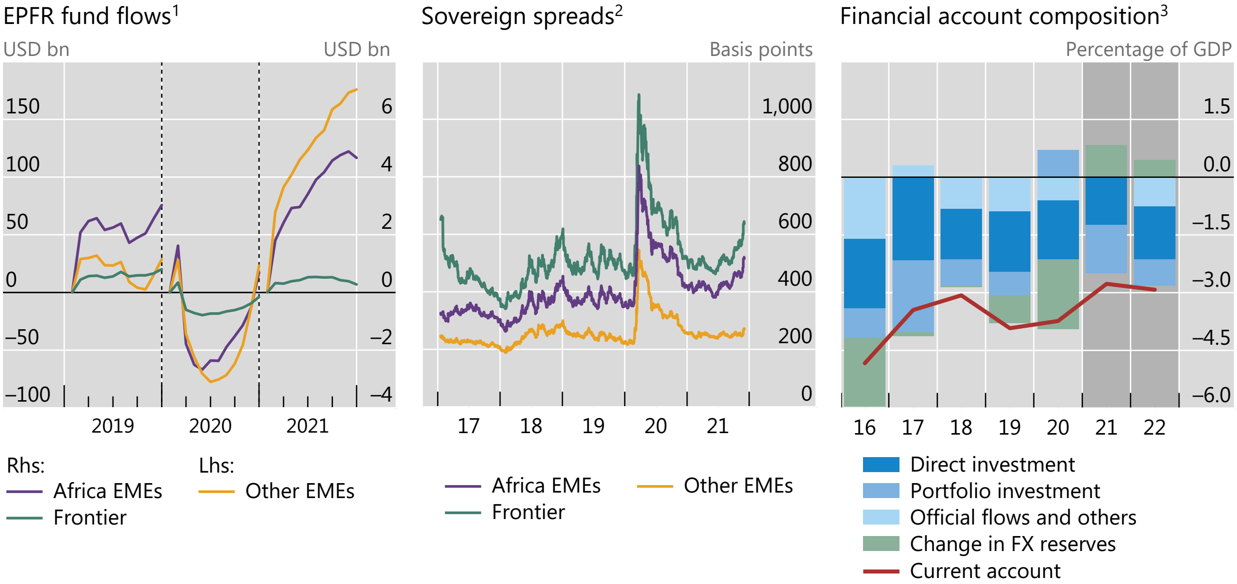
Sources: IMF, *Fiscal Monitor* (October 2020 and 2021 updates) and *World Economic Outlook*, October 2021; BIS survey; BIS calculations.

Pre-pandemic external financial conditions provided policymakers with more policy space relative to previous recessions and crises. The Covid-19 crisis was wholly unanticipated and exogenous, not the result of built-up macroeconomic imbalances. Moreover, as shown in Annex Graph 3, prior to the shock global risk aversion (proxied by the VIX) was low, policy rates in advanced economies were low and EME exchange rates were generally stable.

The global nature and response to the Covid-19 shock also facilitated the actions undertaken by African policymakers. The fiscal and monetary policy stimulus at the global level provided additional support while the implementation by AEs and other EMEs of similar strategies including unprecedented measures- made easier for African policymakers to follow suit.

4 For evidence on procyclicality in Africa, see Ndjokou and Mbassi (2018) for monetary policy and Herrera et al (2019) or Konuki and Villafuerte (2016) for fiscal policy. All of them find that the main factor determining procyclicality is the lack of financial depth.

The sudden stop of capital inflows jeopardised external financing Graph 3



[1] Yearly cumulative non-resident portfolio flows over months since the start of 2019, 2020 and 2021. [2] Foreign currency sovereign bond spreads relative to US government bonds; Africa EMEs = MA, EG and ZA; Frontier = AO, CI, ET, GH, KE, NG and TZ. [3] Financial account balance in net terms. The shaded area indicates forecasts.

Sources: IMF, *International Financial Statistics*; EPFR Global; JPMorgan Chase; BIS calculations.

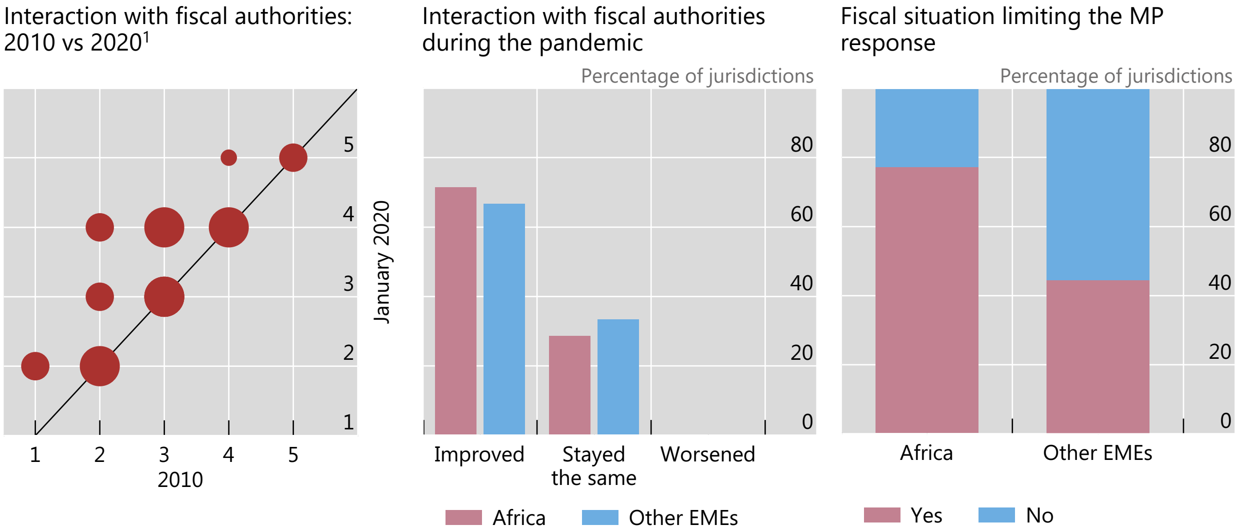
The countercyclical response proved generally effective, helped by the improvement in conditions globally. The financial turmoil in March 2020 was acute but its aftermath was short-lived. While capital inflows collapsed and spreads spiked (Graph 3, first and second panels), the initial sudden stop reversed quickly as global financial conditions eased. External financing needs remained broadly stable in 2020 (third panel), as official support[5] partly offset the retreat of private flows, and remittances proved more resilient than initially expected (Kpodar et al (2021)). A reduction in foreign reserves filled the remaining financing gap.

One reason for the policy effectiveness is that monetary and fiscal policies acted in concert. Indeed, the survey reveals that cooperation, already close and in the main satisfactory, improved during the emergency (Graph 4, first and second panels).

Meetings and consultations among the authorities intensified, with new coordinating forums set up in several countries. While generally assessed as positive, around 80% of African central banks – almost double the proportion in other EMEs– nevertheless acknowledged that the fiscal situation placed restrictions on the monetary policy response (third panel).

[5] The G-20's Debt Service Suspension Initiative (DSSI) launched in May 2020 has benefited particularly African countries. The DSSI involves the temporary suspension of payments owed to official bilateral creditors. As many as 32 out of 41 eligible low-income African countries have applied, with potential savings of $6.5 billion. In addition, In August 2021, an allocation of IMF special drawing rights (SDRs) sought to boost FX reserves and create more budgetary space. African countries received $33 billion (1.5% of GDP), distributed according to quota.

Improved monetary-fiscal interactions underpinned countercyclical policies Graph 4



[1] The scale is: 1 = no coordination; 2 = needing improvement; 3 = adequate; 4 = very good; 5 = excellent; the size of the bubbles is proportional to the number of countries, the smallest size represents a single country.

Sources: BIS survey; BIS calculations.

2. Monetary and fiscal policies: current conditions

While the close interaction of monetary and fiscal policies during the crisis proved beneficial, they have also left a legacy which could generate tensions going forward, especially if macroeconomic conditions worsen. Higher inflation, fiscal fragilities and linkages between the two policies underlie these concerns.

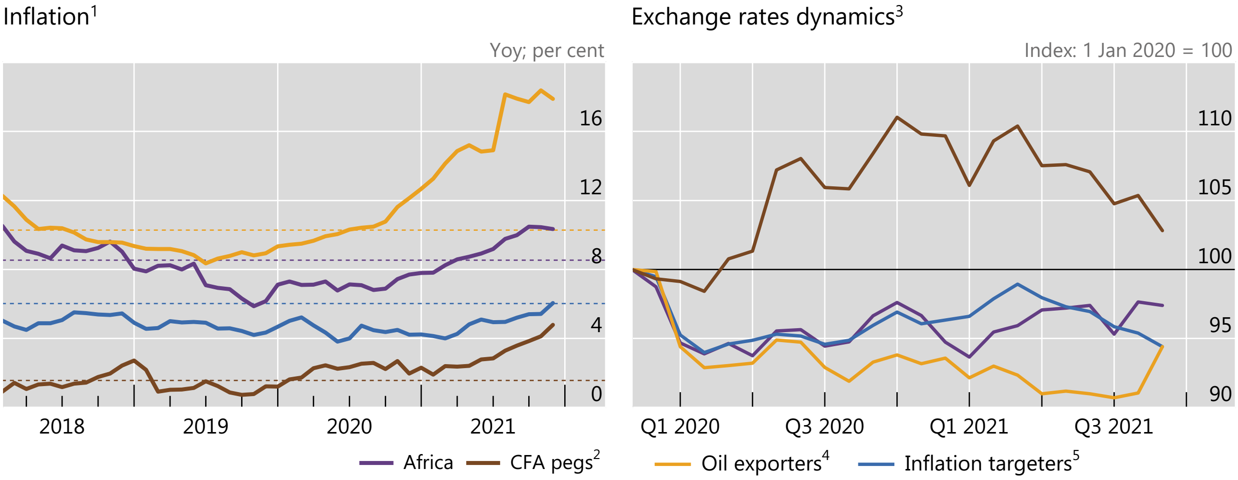
Monetary policy space and limitations

On balance, and country differences aside, headline inflation moved little after the onset of the pandemic (Graph 5, first panel). The subdued moves reflected the crosscurrents driven by the drop in aggregate demand and commodity prices, on the one hand, and currency depreciations (second panel) and increases in food prices, on the other. Since late 2020, however, inflation has risen, in the wake of higher global commodity prices, global bottlenecks, pass-through from currency depreciations at the start of the pandemic and adverse climate shocks. Inflation accelerated especially in the group of oil exporters due to large depreciations as the oil price collapsed.

Structural limitations suggest that monetary authorities in Africa will find it more difficult than elsewhere to control inflationary pressures, despite the steady improvement of monetary frameworks (Annex A). For one, the share of food and fuel prices in the consumer basket is much higher than in AEs and other EMEs. These prices are subject to largely exogenous supply shocks, which increase the volatility of consumer price inflation and limit its response to a monetary policy tightening. In addition, low levels of financial intermediation combined with large bank holdings of public debt and high levels of non-performing loans weaken the bank lending channel and hinder the transmission mechanism (Annex B).

Exchange rates and inflation

Graph 5



[1] The horizontal dashed lines indicate the average of the period 2010–21. [2] BEAC and BCEAO. The CFA franc is pegged to the euro. [3] An increase in the index refers to an appreciation of the currency. [4] AO, CM, DZ, GA and NG. [5] GH, KE, UG, RW and ZA.

Sources: IMF, *International Financial Statistics*; Datastream; BIS calculations.

Fiscal policy space and limitations

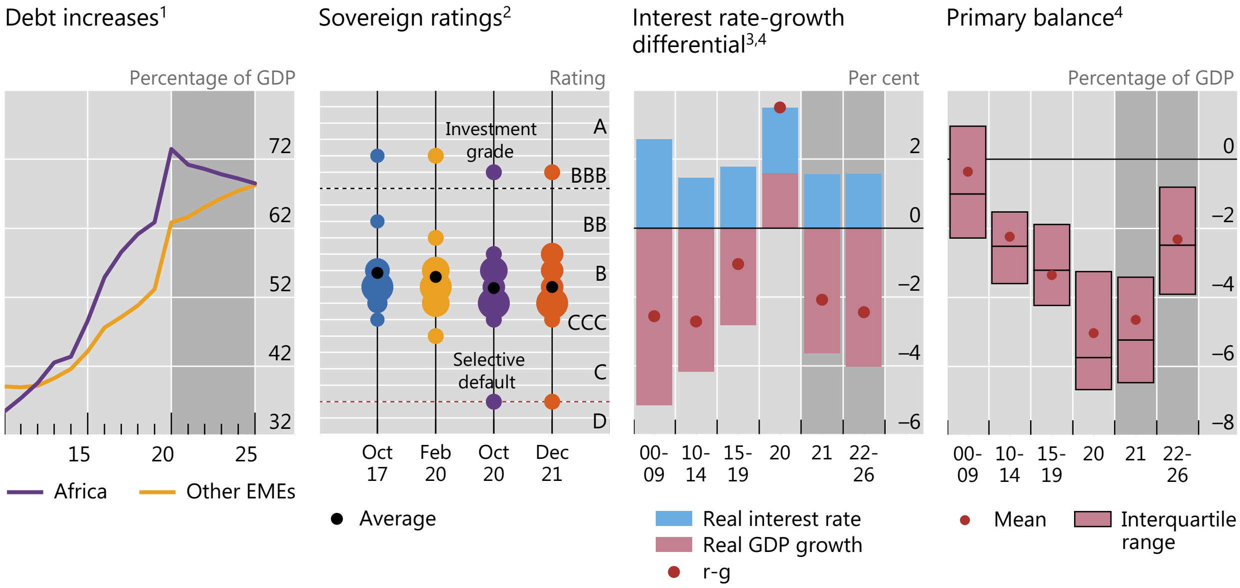
Covid-19 has taken its toll on public finances. While the average deficit did not increase much compared with those of other EMEs – from 5.2% of GDP in 2019 to 7% in 2020 – the debt ratio rose more than 10 percentage points, to over 70% of GDP (Graph 6, first panel) and the average maturity of public debt dropped from 8.2 to 7.7 years. Sovereign rating downgrades followed (second panel). Revenues and external financing fell and only the combination of external official support, central banks backing and an even higher reliance on domestic banks allowed governments to cover the higher financing needs.

The pandemic has exacerbated a long-term trend: fiscal fundamentals have deteriorated in many African countries in the last two decades, despite some improvements in fiscal frameworks. Admittedly, mobilisation of fiscal revenues has increased and public financial management and fiscal practices have generally strengthened. But progress has stalled in the last few years (World Bank (2020)), with persistently large deficits feeding into higher debt. The surge in debt ratios took place despite favourable conditions, with real GDP growth (g) exceeding the real interest rate (r) (third panel), as primary fiscal deficits (fourth panel) were consistently above their debt-stabilising levels.

At the same time, the growing access of African economies to the international financial markets has increased the exposure of government finances to volatile capital flows (see Annex B) and reduced the proportion of concessional debt that often comes at longer maturities and lower interest rates (Calderon and Zeufack (2020)).

The worsening fiscal situation has weighed on credit ratings that have been trending down in the last decade. Fiscal vulnerabilities are widespread; by the end of 2019, more than half of low-income African countries were at high risk of debt distress, double the share in 2013 (IMF (2021)).

Fiscal fundamentals deteriorated in the last decade despite high growth — Graph 6



The shaded areas indicate forecasts.

[1] Aggregates are based on the PPP-weighted average of real GDP; shaded areas indicate forecasts. [2] Ratings based on S&P for AO, BW, CG, CI, CM, GH, KE, NG, RW, SN, UG, ZA and ZM; The size of the bubbles is proportional to the number of countries in each rating; the smallest size represents a single country. [3] Difference between the effective real interest rates (r) and the growth rate (g). Effective real rates are computed as the ratio of interest payments to total public debt. [4] Aggregates based on the simple average.

Sources: IMF, *International Financial Statistics* and *World Economic Outlook*, October 2021; S&P Global Ratings; BIS calculations.

Monetary and fiscal policy interactions: central bank assessments.

The tighter nexus between monetary and fiscal policy brought about by the crisis highlights risks for the future. Some of the risks arising from monetary and policy interactions are direct. Tighter monetary policy makes fiscal consolidation harder, as the large share of short-dated government debt makes the fiscal position highly sensitive to interest rate movements; fiscal fragilities, in turn, constrain monetary policy. Others are more indirect: the strong bank-sovereign nexus (see Annex B) compromises the bank lending channel of monetary policy transmission, while the combination of some weaknesses in banks' balance sheet and their now larger holdings of government debt can undermine financial stability, hamstringing monetary policy.

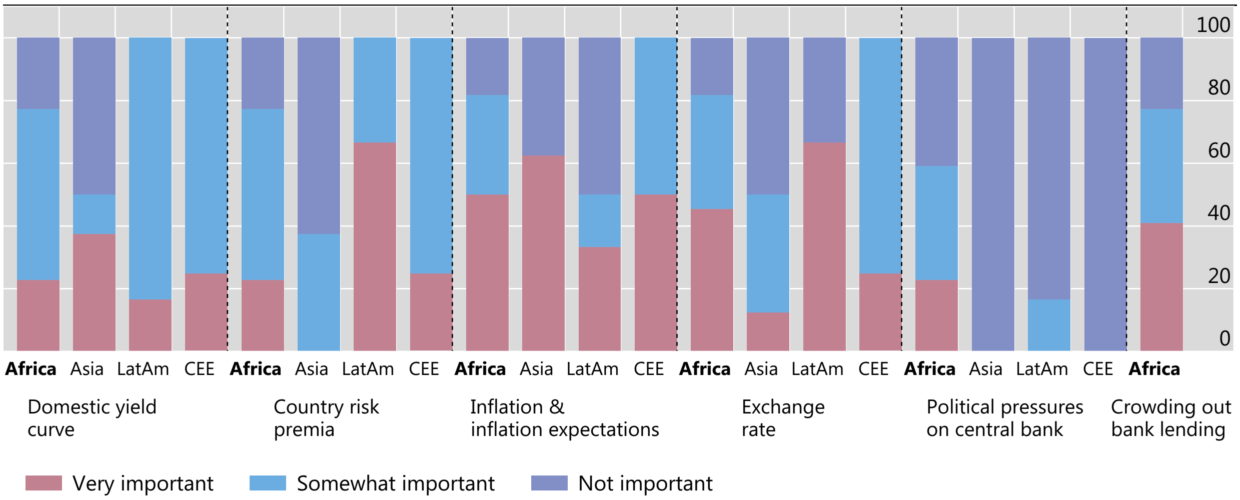
How do central banks in the region view these interactions? On balance, while acknowledging its importance, African central banks report the impact of fiscal sustainability on the domestic yield curve and country risk as less important than their

Latin American or central and eastern European peers (Graph 7).[6] By contrast, the crowding out of domestic bank lending is a more serious concern (last column), reflecting the tight bank-sovereign nexus. Some respondents noted that the high yields of government securities diverted loanable funds from credit to the private sector during the pandemic.

Fiscal policy affects monetary policy space through several channels[1]

Share of economies, in per cent

Graph 7



[1] Based on central bank responses.

Sources: BIS survey; BIS calculations.

Survey respondents attach high importance to the impact of fiscal conditions on inflation, in line with views in other EMEs. This is consistent with the fact that subsidies and price regulations affect a large share of the consumer basket. It is also consistent with broader evidence indicating that the link between deficits and inflation is weaker in countries with more independent central banks and inflation targeting (IT) regimes (Annex Graph 4) and where financial markets are more developed.[7] The importance attached to the link between fiscal sustainability and the exchange rate is part and parcel of the same perspective.

A striking difference from other EMEs concerns the effect of political pressures on monetary policy. Most respondents from the region regard such pressures as very important (23%) or somewhat important (36%); by contrast, only one other EME considered this channel as somewhat important. One possible reason is a shorter track record of de jure autonomy and weaker de facto central bank independence in Africa. Another could be the greater constraints that fragile public finances impose on fiscal authorities, drawing them further into attempts to influence central banks. The recent debates in some countries over whether the IMF's SDR allocation should be used for reserve management or fiscal financing illustrate these tensions.

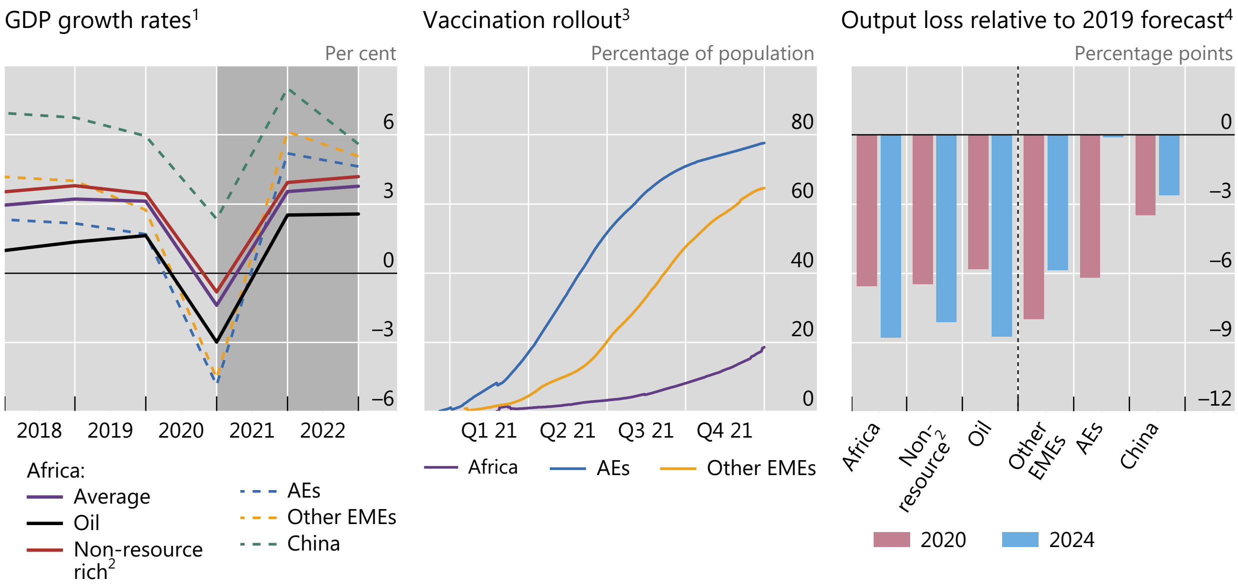
[6] A possible reason might be less developed local debt markets and relatively less access to international capital markets.

[7] See, for instance, Catao and Terrones (2005), and, for African countries, Ahmad and Aworinde (2019).

3. Policy interactions going forward

Economic prospects suggest that, going forward, the likelihood of tensions between monetary and fiscal policies could increase, raising tricky trade-offs.

Belated vaccination hinders the recovery and increases long-term output losses — Graph 8



[1] Aggregates based on the PPP-weighted average of the real GDPgrowth. [2] Includes 26 countries, non-oil and non-commodity exporters. [3] Percentage of total population who received at least one dose. Aggregates based on the weighted average of the total population. [4] Output loss in 2020 computed as the difference between growth rates in 2020 and the IMF WEO forecasts in October 2019; the cumulated output loss up to 2026 uses the differences in forecasts between October 2019 and October 2021.

Sources: IMF, *World Economic Outlook*, October 2021; Oxford University, Blavatnik School of Government; BIS calculations.

The economic backdrop

The global economy is returning to the pre-pandemic activity level, driven by the progress in vaccination and new rounds of large fiscal packages in AEs (Graph 2 above), but the recovery is uneven (Graph 8, first panel). In EMEs outside Africa, a slower vaccination rollout (second panel), limited additional fiscal support and the start of monetary policy tightening are hindering the rebound in activity. In AEs, the persistence of higher inflation calls for faster monetary policy tightening than previously expected and generates uncertainty in financial markets. Global financial conditions are still largely accommodative, but might tighten earlier than expected. Investor sentiment is wobbly and capital flows to EMEs are volatile, even after a strong comeback (Graph 3 above). Financial stability concerns in China add further to an uncertain outlook.

The recovery is particularly subdued in many African economies. For 2021, the estimated GDP growth is 3.5%, enough to return to the previous GDP levels but insufficient to reverse the large cumulative income losses in per capita terms, given high population growth. Moreover, cumulative output shortfalls relative to pre-pandemic forecasts are projected to be larger and linger longer than elsewhere (Graph 8, third panel). Domestic demand remains sluggish. Among the key factors hindering the recovery are very low vaccination rates. Less than 20% of the African population was vaccinated at the end of 2021 and many countries risk having less than half of population vaccinated by mid-2022 (IMF-WHO (2022)).

The external financing situation remains vulnerable. Admittedly, strong external demand and easy global financial conditions are still supportive. For instance, international bond issuance has recovered to pre-crisis levels and some ratings have been upgraded this year. Yet the persistence of large financing needs could hamper the recovery (Graph 3 above). Sustained inflows of private capital cannot be taken for granted and official sector support will remain important, but the DSSI expired at the end of 2021.

To complete the picture, global inflationary pressures are proving less transitory than initially expected. Bottlenecks in transportation and energy markets continue to disrupt supply chains and are now expected to affect inflation well into next year. These developments will heavily influence price developments in Africa; the subdued recovery in internal demand and a lower incidence of climate-related shocks could limit domestic inflationary pressures, while renewed exchange rate depreciations could add to them, particularly if external financial conditions worsen.

The interactions between monetary and fiscal policies

The combination of a subdued recovery and higher inflation raises complex issues for monetary policy and fiscal policy and their interaction. But the specific challenges differ as between the near term and the longer term.

Take fiscal policy. In the near term, the increase in fiscal revenues, access to the international capital markets and official initiatives (DSSI and IMF's SDR allocation – if used for fiscal purposes) is allowing for some degree of stimulus. But this is unlikely to be sustained. Indeed, a majority of central banks in the region see fiscal policy as still expansionary in 2021 but then shifting towards neutral already in 2022. As for the medium term, there is a consensus that continued weak fiscal fundamentals call for consolidation to bring back debt onto a sustainable trajectory and mitigate financing risks. Admittedly, current forecasts point to a reduction of debt-to-GDP ratios (Graph 6 above). But debt levels are already too high for comfort. Moreover, the assumptions behind the projections are very favourable: relative to pre-pandemic levels, real interest rates are forecasted to be below, in spite of much higher debt and lower ratings, and fiscal primary balances well above.

Fiscal discipline and a renewed effort to improve public finances are critical. This requires the mobilisation of additional domestic revenues and a more efficient management of expenditure. In this regard, the crisis may provide an opportunity to reinvigorate previous efforts to improve fiscal frameworks. The expansion of financial access and the digitalisation of fiscal services during the pandemic could help broaden the tax base and support a sustained increase in revenues. The enhanced transparency of fiscal procedures could contribute to more efficient spending processes and catalyse other changes. How much and how quickly these improvements could increase revenues and the effectiveness of expenditure is, however, difficult to assess.

For its part, monetary policy has to balance support for the economy with the need to keep inflation in check. On the one hand, the slow recovery and the supply forces boosting inflation would argue for a wait-and-see approach. The slow recovery could make second-round effects less likely; the supply constraints weaken the effect of a tightening and could wane over time. On the other hand, if inflation persists, expectations could become unanchored and cause a sharp currency depreciation, especially if the external financing constraint tightens. So far, African central banks have generally not responded to higher inflation: very few increased rates in 2021, even as many other EMEs started to raise them.

The trade-offs and possible tensions with fiscal policy may well become sharper as the normalisation of monetary policy generally shrinks fiscal space. Moreover, when fiscal positions are fragile, tightening monetary policy can spill into higher sovereign risk premia and depress the exchange rate instead of lifting it (Alberola et al (2021)). As a result, not only is the fiscal constraint hardened further, but the disinflationary impact of the interest rate rise is offset by an exchange rate depreciation. In addition, without easy access to central bank financing, governments need to increase their borrowing from the markets. And, as financial regulation is tightened back, banks may reduce their appetite for public debt.

The close link that ties monetary to fiscal policies, reinforced during the pandemic, raises the spectre of fiscal dominance. In this case, the fiscal implications of monetary policy crimp the room for manoeuvre available to central banks – whether because the economic and fiscal consequences inhibit monetary policy actions ("economic fiscal dominance") or because of political economy pressures ("political fiscal dominance").[8]

For central banks, reasserting the paramount goal of price stability is of the essence. Supported by appropriate institutional safeguards, this can help reaffirm solid boundaries between monetary and fiscal policies and fend off fiscal dominance risks. That said, the only way of improving the underlying policy trade-offs is to raise sustainable long-run growth. This, in turn, requires appropriate structural policies supported by a growth-friendly composition of expenditures and revenues.

8 See BIS (2021a) for a more detailed explanation of the challenges related to fiscal dominance and of the need to re-establish policy buffers in both monetary and fiscal policy domains globally.

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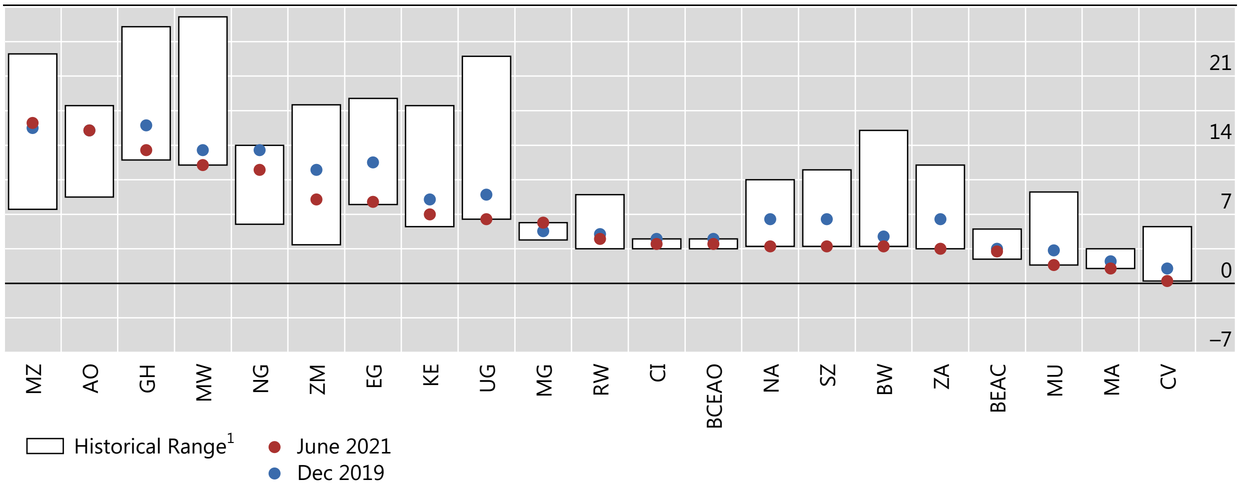
Annex graphs

Monetary policy rates

Nominal rates in per cent

Annex Graph 1



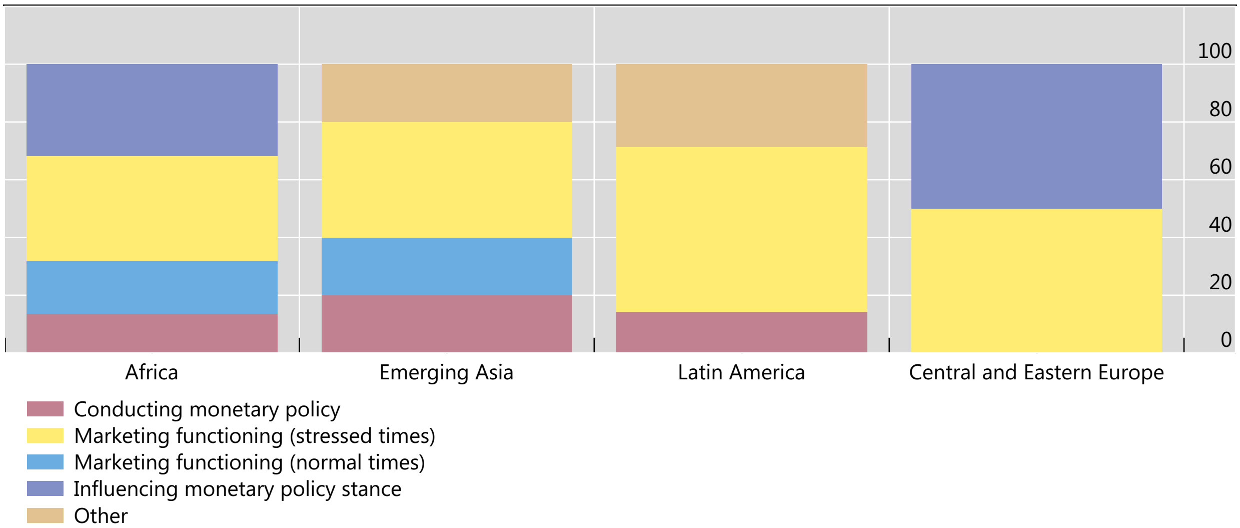
[1] From January 2007 to June 2021.

Sources: Datastream; national data; BIS calculations.

Objectives of asset purchases[1]

In percentage of jurisdictions

Annex Graph 2

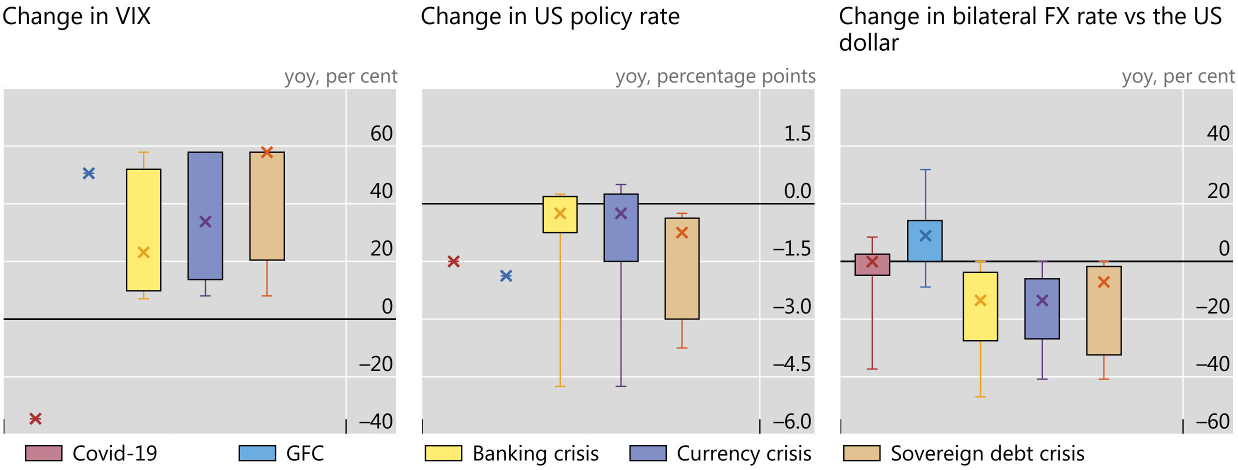


[1] Based on the responses of central banks that engaged in asset purchases.

Sources: BIS survey; BIS calculations.

Favourable external financial conditions at the onset of the pandemic[1]

Annex Graph 3

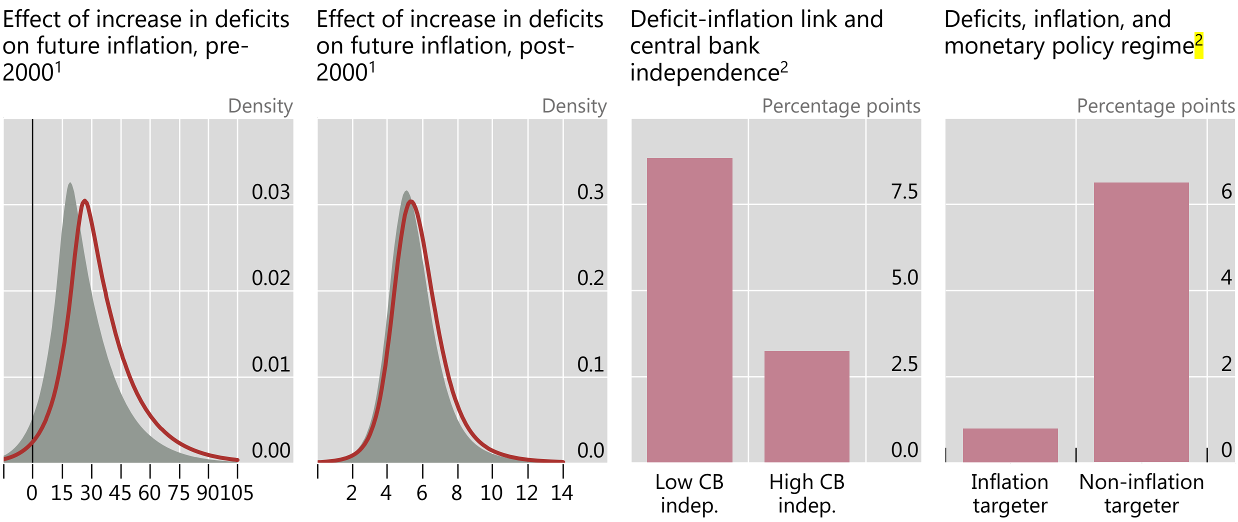


[1] The floating bars show the interquartile range, the cross represents the median and the poles mark the min-max range of the data. The summary statistics are calculated for each crisis type in the period before the crisis starts using quarterly or annual data. A particular crisis episode can be classified as more than one crisis type. The data set includes only three sovereign debt crises.

Sources: IMF; Consensus Economics; Datastream; national data; BIS calculations.

Fiscal deficits, inflation and central bank independence in EMEs

Annex Graph 4



[1] Change in one-year-ahead conditional inflation forecast distribution (change from grey to red) when there is a one standard deviation increase in deficits. To compute the distributions, all other variables are set at their means. The model is estimated for a panel of 23 EMEs and developing economies over 1960–2019. The shift in the pre-2000 distribution is statistically significant at conventional levels at the 25th, 50th and the 75th percentiles; the post-2000 shift is not statistically significant. [2] Effect of a one standard deviation increase in deficits over two years on one-year-ahead inflation, computed at the 50th percentile of the future inflation distribution. The methodology follows the first and second panel and it includes an interaction variable. In the third panel, the interaction is between the level of central bank independence and the two-year change in deficits. Low (high) CB independence corresponds to below (above) average CB independence. In the fourth panel, the interaction is between a dummy variable for inflation targeters and the two-year change in deficits, as well as the dummy variable included on its own. In both cases, the interaction variable is statistically significant at the 5% level.

Source: Banerjee et al (2020); BIS calculations.

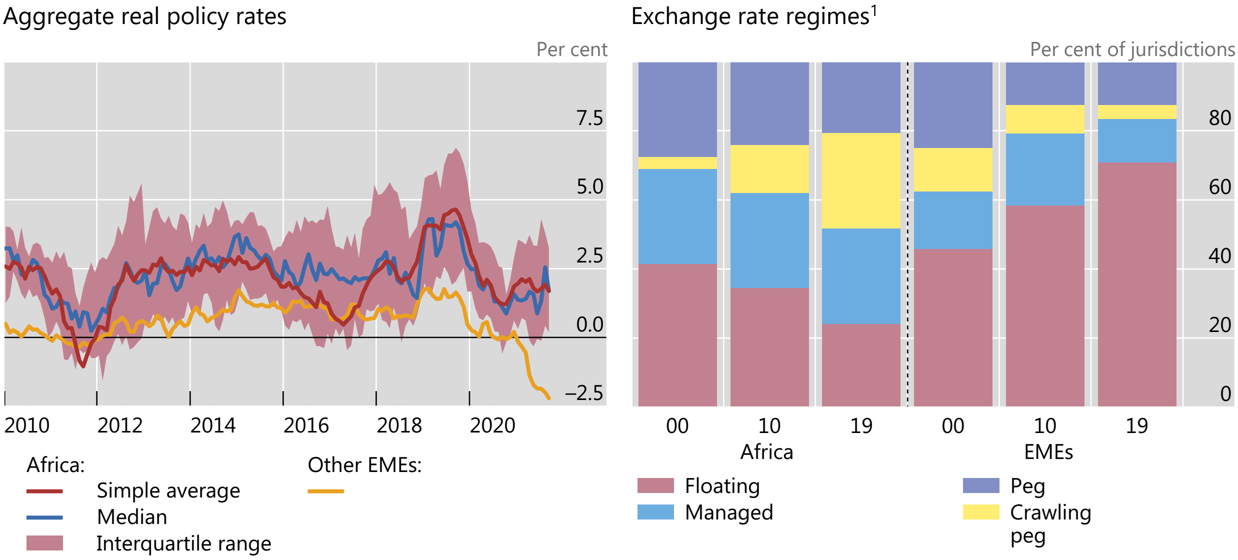
Annex A: Evolution of the monetary policy frameworks

In the past, effective monetary policy in African economies was often undermined by a combination of a lack of clarity in objectives, fiscal dominance and a monetary transmission mechanism widely seen as "weak and unreliable" (Mishra et al (2012)). In the last two decades, however, central banks in Africa have made significant progress in improving their monetary frameworks (Berg and Portillo (2018)). High and stable growth, combined with fiscal stabilisation, laid the foundations. And the removal of heavy financial repression and progress in financial deepening improved the transmission mechanism and supported more effective monetary policy regimes.

Reflecting this progress, inflation rates in the last decade have reached single digits and remained there in most countries. Success in maintaining low and stable inflation has been mixed, however, with an upward drift in inflation from the mid-2010s. While inflation rates are generally still above those of other EMEs, real interest rates are also higher and in positive territory, having been there over the whole of the past decade (Graph A1, first panel).

The transition towards domestic anchors for price stability has proceeded slowly. Only five central banks have adopted full-fledged inflation targeting (IT) regimes while another three are shifting towards it. Monetary targeting is receding across the region, not least as the growing use of mobile money has increased the volatility and unpredictability of the demand for money. Backed by more sophisticated operational frameworks and improved transmission mechanisms, benchmark policy interest rates have emerged as the key monetary policy instrument.

Real policy rates and exchange rate regimes | Graph A1



[1] De facto exchange rate arrangement as classified by the IMF.

Sources: IMF, *World Economic Outlook*, October 2021 update and *Annual Report on Exchange Arrangements and Exchange Restrictions* (AREAER); Datastream; BIS calculations.

Although domestic anchors are becoming more prevalent, the exchange rate continues to play a central role in monetary policy frameworks in Africa, to a larger extent than in other EMEs. The proportion of countries that maintain a de facto pegged exchange rate remains high (second panel) and has even increased in the last decade. "Fear of floating" tends to prevail, reflecting financial stability concerns; in particular exchange risks on commercial debt and on bank balance sheets (IMF (2016)). Continued reliance on commodity exports and high import dependence for critical intermediate inputs also argue for tight management of the exchange rate and the regular use of foreign exchange interventions (Schanz (2019)).

Yet, as the experience of other EMEs indicates, a flexible IT regime can be effectively combined with a degree of active management of the exchange rate, usually with the support of macroprudential policy (BIS (2021b), Gosh et al (2016)). As economies mature, the exchange rate increasingly serves as a shock absorber, even though foreign exchange interventions may continue to play a relevant role, helping to prevent excessive volatility and being used with "macroprudential" considerations in mind.

Annex B: Financial development in Africa and the impact of the pandemic

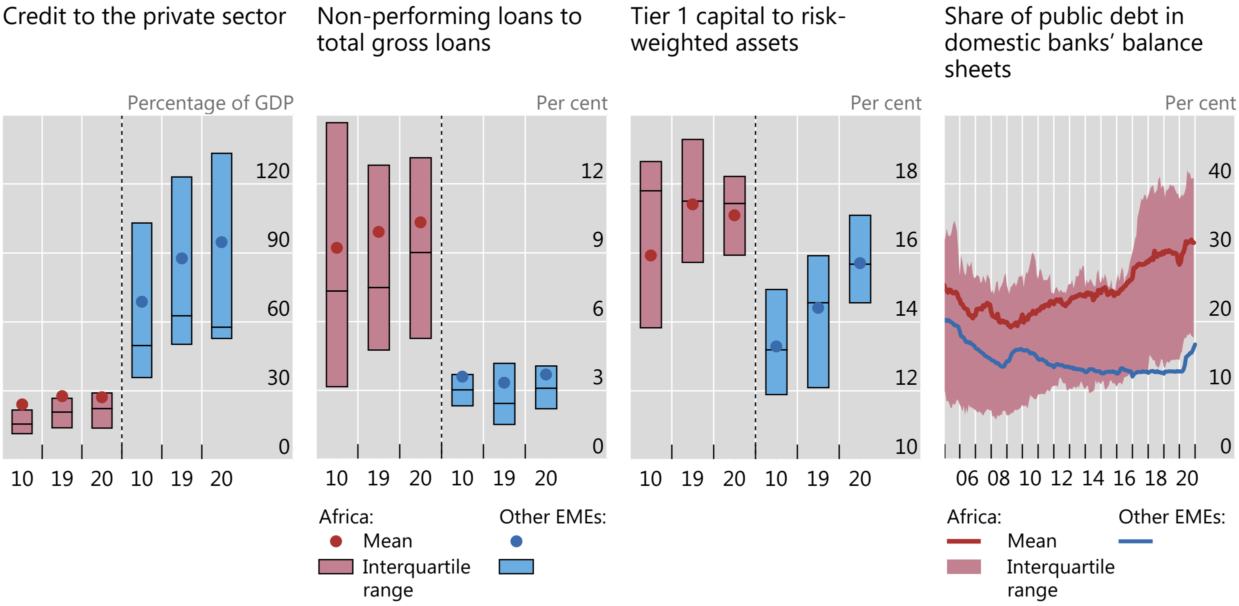
African economies have made important progress in the last two decades. Their financial systems have expanded in parallel, although they remain underdeveloped in many countries. Economies have progressively started to open their capital accounts, attracting more foreign capital, and domestic financial intermediation has increased.

Access to international capital markets has accelerated in recent years. The number of African emerging and frontier markets is still low – around a dozen of countries– but it is progressively increasing. Between 2017 and 2019, this group issued $71 billion in international markets, more than the total issuance in the previous 15 years. While remaining more reliant on concessional finance from IFIs and donors than other emerging regions, the African investor base has also become more diversified; the private sector now holds 40% of external sovereign debt, compared with 25% in 2010, while China has become the largest bilateral creditor. The corollary of expanded access is, of course, increased exposure of public and private borrowers to the volatility of private capital flows.

The banking sector is now bigger, more efficient, better capitalised and much better regulated than in the mid-1990s (IMF (2016)). Credit to the private sector has doubled, but banks still lend much less to the private sector than do their counterparts in other EMEs (Graph B1, first panel). Non-performing loans are much higher in Africa than in other EMEs (second panel), amounting to 9% of the loan portfolio on average, although this varies widely through the region.

Banks in Africa operate with capital ratios that are higher than in other EMEs (third panel), although this partly reflects the larger share of low risk-weighted lending to the government. African banks' lending has been increasingly skewed away from the private sector, reinforcing the bank-sovereign nexus. By 2019, banks' holdings of public debt accounted for around 30% of total assets (fourth panel), around twice as high as in other EMEs.

Banking indicators: African banks compared with those of other EMEs[1] Graph B1



[1] Aggregates based on the simple average of the respective years.

Sources: IMF, *International Financial Statistics* and *Financial Soundness Indicators*; BIS calculations.

Capital markets in the region have deepened in the last decade but they are still narrow, with the exception of a few countries. The stock of domestic public bonds has doubled from $100 billion to more than $200 billion since 2006 (AfDB (2021)), but relative to other EMEs the market is still quite shallow (just over 10% of GDP) and maturities are short. Corporate issuance in domestic markets is still small, although it has gathered pace in recent years.

In contrast to the relatively sluggish growth of the banking sector and domestic capital markets, African countries are at the forefront of innovations in mobile money and digital financial services. Africa accounted for almost two thirds of global mobile money transactions by value in the wake of Covid-19. These innovations have been important drivers of financial inclusion and have played a key role in the payment system through the pandemic, especially amongst the poor. As the use of mobile money-enabled saving and credit services is still incipient, they cannot offset the low levels of credit to the private sector, especially to the SME sector.

The impact of the pandemic on the African financial systems has been sizeable. International bond issuance stopped during the middle quarters of 2020, but has recovered since. Digital financial services experienced a big push during the pandemic, fostered by central bank measures; mobile money accounts increased by 12% last year, while the value of their transactions increased by 23% over the same period (GSMA (2021)). Credit growth to the private sector stalled or reversed in a majority of countries, while bank lending to the public sector increased further. Some survey respondents noted that the high yields of government securities crowded out credit to the private sector. NPLs did not change much, but they may rise as regulatory forbearance is reversed, further squeezing private sector credit growth.

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