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19 October 2023

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Sovereigns – Global

Fiscal arrears indicate weak governance and possible liquidity risks before defaults

Summary

Domestic fiscal payment arrears — or delayed payments to government contractors, suppliers, employees or pensioners — offer insights into sovereign credit quality. Persistent and high arrears are typically indicative of governance issues, poor public financial management capacity or a weak culture of timely payments. Governments under economic or fiscal stress also often accrue fiscal arrears when access to liquidity is constrained and as debt payments get prioritized over other obligations. Arrears can contribute to social hardship, household and business solvency issues, deteriorating bank asset quality, higher government procurement costs, tax compliance issues and increased government debt. Using Bank of Canada/Bank of England fiscal arrears data and our debt default data, we find:

» **Fiscal arrears increase in times of stress and weigh on a sovereign's credit**. With more sovereigns currently rated Caa and below than historical norms, investors may experience losses across more sovereigns than typical. Arrears data offers insights into which governments are under stress as global growth slows and financial conditions tighten, as fiscal arrears have economic, fiscal and financial consequences.

» **Extraordinary fiscal arrears can reflect weak governance standards and liquidity problems.** Persistent and high arrears in the Republic of Congo (Caa2 stable), Zambia (Ca stable), the Democratic Republic of Congo (B3 stable), Tunisia (Caa2 negative), Papua New Guinea (B2 stable), Gabon (Caa1 negative), Bosnia and Herzegovina (B3 stable) and eSwatini (B3 stable) suggest shortcomings such as inefficient bureaucratic processes, weak commitment controls, poor oversight of state-owned enterprises (SOEs) or weak payment cultures. Increased arrears in Iraq (Caa1 stable) and the Bahamas (B1 stable) are rooted in governance issues but suggest emerging liquidity problems.

» **The correlation between fiscal arrears and sovereign defaults is strong.** Our analysis shows that at the time of default, at least half of the defaulted sovereigns had significant arrears. On average and across defaulted sovereigns with available arrears data, fiscal arrears tend to increase substantially in the three years leading into a default.

» **Fiscal arrears can be widely damaging to a sovereign's economy, examples show.** Harmful results of persistent fiscal arrears can be found in numerous examples, such as the historical defaults in Ukraine (Ca stable), Ecuador (Caa3 stable), Moldova (B3 stable), Greece (Ba1 stable), Barbados (B3 stable), Zambia, Lebanon (C no outlook), Mali and **Ghana.** Some sovereigns have avoided debt distress despite high fiscal arrears, however, with external support.

What are domestic fiscal payment arrears?

Domestic fiscal payment arrears, or 'fiscal arrears', are defined as delayed payments to domestic government suppliers, contractors, employees and pensioners. While the exact time frame varies by jurisdiction and is defined under local law, payments are typically considered 'in arrears' after 30, 60 or 90 days. Countries in Sub-Saharan Africa are the least efficient when paying invoices, where it takes an average of 148 days.[1] Fiscal arrears data collected in the Bank of Canada/Bank of England sovereign default database used in our analysis is sourced primarily from the IMF. Debt payment arrears, such as delayed interest and maturity payments to official or commercial creditors, are not considered fiscal arrears.

Fiscal arrears tend to increase during periods of stress

Governments that are experiencing increasing liquidity constraints can be forced to prioritise debt payments at the expense of other obligations, resulting in increasing fiscal arrears during periods of economic and fiscal distress. As global growth slows and liquidity troubles mount because of tightening global financial conditions, more governments may decide to prioritise payments to creditors to avoid default, resulting in increasing fiscal arrears on other payment obligations. With more sovereigns currently rated Caa and below than historical norms, we expect investors to experience losses across a higher number of sovereign debt issuers than typical. Analysis of fiscal arrears offers insights into which sovereigns are experiencing acute liquidity pressures, or which are suffering from longstanding financial management or governance difficulties and are therefore vulnerable to economic and fiscal shocks.

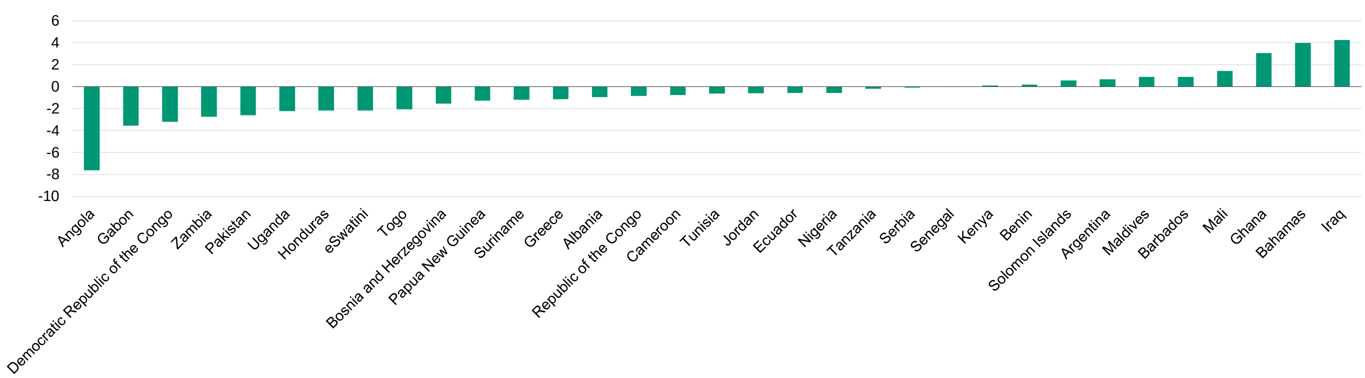
For example, during the 2020 oil price collapse, fiscal arrears in oil exporters **Gabon** and the **Republic of Congo** increased by 4.2 and 10.3 percentage points of GDP, respectively, as collapsing government revenue combined with the considerable governance difficulties presented by the pandemic. More recently in April 2023, Kenya (B3 negative) delayed payments to civil servants with authorities citing tightening liquidity conditions and a need to prioritise debt payments and avoid default during the current period of fiscal distress.

Since 2019, fiscal arrears have increased most significantly in **Iraq**, the **Bahamas** and **Ghana**, providing insights into how the pandemic and the commodity price shock following Russia's invasion of **Ukraine** harmed these countries (see Exhibit 1). Both **Zambia** (2020) and **Ghana** (2022) defaulted on debt obligations following an increase in fiscal arrears.

Exhibit 1

2019-22 growth/decline in fiscal arrears

Percentage point change in GDP



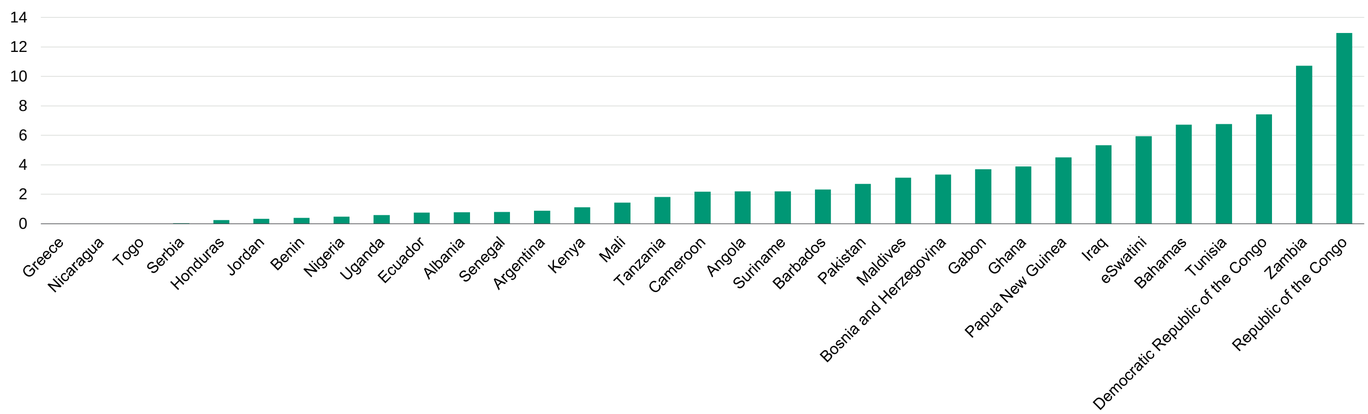
Sources: Bank of Canada/Bank of England database and Moody's Investors Service

Fiscal arrears are rooted in weak institutions and poor governance

While arrears tend to increase in periods of economic and fiscal stress, persistent and high arrears are indicative of sovereigns with poor institutional capacity and low governance standards. Meeting spending commitments in a timely manner across a wide network of government suppliers, employees and contractors is a complex task often involving a wide range of government functions, including procurement, budgeting, revenue management, debt and treasury management, and human resources. Large and persistent arrears can indicate inefficient bureaucratic processes, governance issues or weaknesses in financial management, including ineffective commitment controls, inaccurate revenue forecasting or poor accounting procedures.

Fiscal arrears are persistently high in the **Republic of Congo**, **Zambia**, the **Democratic Republic of Congo**, **Tunisia**, **eSwatini**, **Papua New Guinea**, **Gabon**, and **Bosnia and Herzegovina** (see Exhibit 2). All these sovereigns have consistently been unable to meet domestic non-debt payment obligations on time and have recorded fiscal arrears of around 5% of GDP and above in recent years, demonstrating persistent difficulties with fiscal policy effectiveness and credibility or weak payment cultures, as well as vulnerability to economic or fiscal shocks.

Exhibit 2
2022 fiscal arrears
% of GDP



Sources: Bank of Canada/Bank of England database and Moody's Investors Service

For example, in the years before **Zambia**'s 2020 default, fiscal arrears were high initially because of chronic structural weaknesses in public financial management and budget execution. Lack of expenditure controls, poor enforcement of budget ceilings and overly optimistic revenue forecasts resulted in the accumulation of government and SOE arrears with suppliers because of unbudgeted purchases of goods and services. Additional shortcomings in cash management and budget transparency presented further difficulties in verifying and clearing the fiscal arrears. Similar institutional capacity constraints cause persistent arrears in the **Democratic Republic of the Congo**, **Papua New Guinea** and **eSwatini**. The recent sharp increase in the **Bahamas**' fiscal arrears came following elections and transition to a new government revealed significant unpaid obligations in SOEs, demonstrating poor SOE governance, as well as weak budget management, transparency and disclosure that was only revealed with a transition of power.

Furthermore, as fiscal arrears can be incurred without immediate penalty from creditors, these can also be indicative of broader societal issues such as a weak payment culture and weakness in the judiciary and broader civil society given the lack of recourse against the government for missed payments. Governments in these jurisdictions can delay payments to private sector suppliers, contractors or staff, as well as tax refund arrears to businesses and households, with little consequence as those affected have little recourse via the judiciary. Oil producers **Gabon** and the **Republic of Congo** frequently run arrears even during periods of high oil prices and strong government liquidity, partially because of a weak payment culture, which does not emphasise timely payment of domestic obligations, as well as because of institutional capacity constraints.

Governance issues are also a leading cause of arrears. In **Bosnia and Herzegovina**, a complex decentralised state structure and insufficient political cooperation impair the government's ability to meet its payment obligations on time, and significant social security and healthcare arrears have accumulated, particularly among SOEs. SOEs are similarly a leading source of arrears in

Tunisia, as weak governance and the poor financial performance of the sector have caused persistent cross-SOE arrears and delayed payments to the central government, social security system and private entities. Similarly, delays in the formulation and approval of a national budget and borrowing plan due to a parliamentary gridlock in **Iraq** have recently led to an increase in arrears despite strong government liquidity from high oil prices.

How does Moody's account for fiscal arrears in sovereign ratings?

In sovereign ratings, fiscal arrears are an outcome of existing credit weaknesses that can lead to further deterioration in a sovereign's credit quality across multiple channels.

» **Institutional and governance strength.** We typically make negative adjustments to institutional and governance strength scorecard outcomes for sovereigns with persistent fiscal arrears. Persistent and high fiscal arrears provide evidence of poor commitment controls, weaknesses in fiscal management capacity or weak payment culture.

From *Rating Methodology: Sovereigns (November 2022)*:

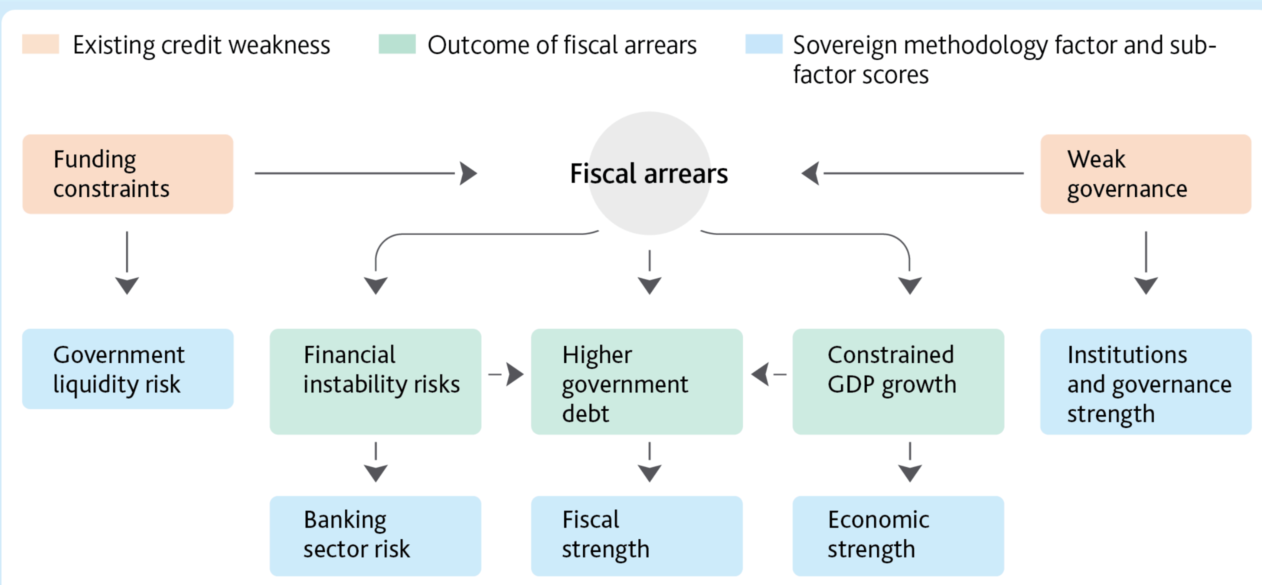
"… we may also make a downward adjustment to the factor score if the government has a frequent history of accumulating significant arrears to creditors, including suppliers or government employees. Frequent and large arrears can point to weak fiscal management, a poor culture of repayment and ultimately, a fragile rule of law and contract enforcement."

» **Government liquidity risk.** A government's inability to pay domestic non-debt obligations on time may be indicative of broader liquidity issues, most notably for sovereigns with increasing fiscal arrears.

» **Banking sector risk**. Fiscal arrears impair household and business liquidity, weighing on their ability to fulfil payment obligations and straining bank asset quality.

» **Fiscal strength**. While not necessarily captured in our debt metrics, fiscal arrears do nevertheless weigh on future fiscal outcomes when they ultimately need to be repaid.

» **Economic strength**. Fiscal arrears to households and businesses limit consumption and investment, weighing on a sovereign's economic strength.

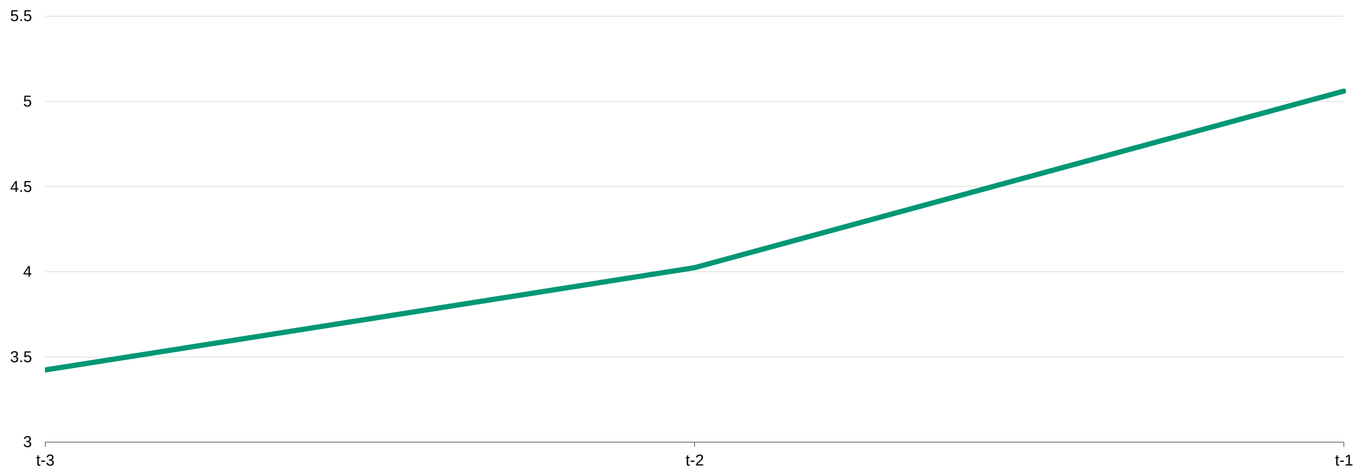


Correlations between fiscal arrears and sovereign debt defaults are strong

Because persistent fiscal arrears are typically indicative of institutional weaknesses and increasing fiscal arrears suggest emerging liquidity issues, it is unsurprising that fiscal arrears tend to increase, on average, leading into a default. Our analysis of default data, as well as the Bank of Canada/Bank of England fiscal arrears data[2], shows that at the time of default, at least half of the defaulted sovereigns had significant arrears, which is likely an underestimation given data reliability and availability issues among some defaulting sovereigns, such as Venezuela (C stable) and Belize (Caa2 stable). On average and across defaulted sovereigns with available arrears data, fiscal arrears tend to increase substantially in the three years leading into a default (see Exhibit 3). Examples from default experiences in **Ukraine**, **Ecuador**, **Moldova**, **Greece**, **Barbados**, **Zambia**, **Lebanon**, **Mali** and **Ghana** demonstrate this relationship.

While increasing arrears do not necessarily result in debt defaults and cannot be considered a bellwether, they can still be indicative of the potential for fiscal distress. Portugal (Baa2 positive) saw fiscal arrears increase as liquidity constraints grew during the European debt crisis until it received support from the euro area and the IMF in 2011. Jordan (B1 positive) similarly had high and persistent arrears until 2012, when it entered an IMF programme and accessed funding to avoid debt distress.

Exhibit 3
Fiscal arrears increase on average leading into a sovereign default
Average year-end fiscal arrears for defaulted sovereigns, % of GDP



t = year of default, sovereigns with no arrears data omitted.
Sources: Bank of Canada/Bank of England database and Moody's Investors Service

Fiscal arrears can be damaging to a sovereign's credit profile

While prioritising debt payments can avoid a debt default in the short term and increasing fiscal arrears do not necessarily result in a sovereign debt default, fiscal arrears inevitably weigh on the sovereign's credit profile. The economic, fiscal and financial knock-on effects of payment delays to domestic businesses, households and the financial system exacerbate existing stresses, reinforcing the risk of fiscal distress for governments.

Delayed payments can contribute to social hardship and solvency issues for households and businesses expecting to receive these payments, which weighs on GDP growth and potentially increases social risks and future demands on government resources. This can, in turn, create a negative feedback loop of ever-increasing fiscal arrears and negative spillovers to a sovereign's broader credit profile. For example, the IMF[3] estimates that a one-standard deviation decline in GDP growth increases the fiscal arrears-to-GDP ratio of Sub-Saharan African sovereigns by 0.9 percentage point, and these effects are amplified in countries that are heavily reliant on commodity exports. In highly indebted economies, this can in turn hurt the financial system by weakening bank asset quality and performance, weighing on financial stability.

High and persistent arrears also affect government finances directly. Government suppliers that frequently face payment delays increase prices to account for these payment delays, leading to higher government procurement costs over time. Tax compliance and enforcement issues also increase in jurisdictions that experience delays in tax refunds, while eventually verifying and clearing arrears creates ongoing administrative complexities and opportunities for corruption, which weighs on government effectiveness and public confidence in institutions. Furthermore, the government typically has to issue more debt when fiscal arrears are eventually cleared, resulting in a higher debt burden.

Persistent fiscal arrears can lead to higher government corruption as it allows for some discrepancy among government officials as to which payments get prioritised, further eroding trust in public institutions and governance, potentially leading to social or political unrest. For example, **Lebanon's** government arrears to the social security fund, hospitals and suppliers are well known. While accurate estimates are difficult to determine, public confidence in the government's institutions has been severely weakened recently, partially as a result of corruption allegations regarding payment priority.

Overall, higher government arrears ultimately weigh on GDP growth, increase financial instability risks and lead to higher government debt, which our research shows are leading causes of sovereign debt defaults.

Case studies

» In **Ukraine**, arrears to pensioners, public employees and suppliers increased in years before the 1998 and 2000 defaults. In both cases, high occurrence of government corruption, along with growth in fiscal arrears, eroded trust in public institutions, increased social risks and incidences of civil unrest, and undermined earlier gains in economic stability, contributing to deterioration in broader credit quality and to eventual defaults (see Exhibit 4).

» **Ecuador's** default in 1999 came in the midst of a severe liquidity crisis for the government following banking failures and supply shocks, which also led to a rapid increase in fiscal arrears leading into and following the default (see Exhibit 5).

» In **Greece**, a debt crisis was triggered in October 2009 when the newly elected government announced a much larger-than-expected budget deficit for the year, and the fact that debt and deficit figures had been understated in previous years. Greece's debt crisis exposed deeper problems with its economic and fiscal institutions, economic structure and other issues that undermined its competitiveness and solvency. The government increasingly accumulated domestic arrears as its liquidity position deteriorated until the 2012 debt restructurings. Greece's fiscal arrears have decreased as its credit quality improved since its default and were completely cleared as of 2022 (see Exhibit 6).

» In **Barbados**, weak oversight of SOEs and poor expenditure management led to high government arrears to the broader public sector, notably in transfers to SOEs and statutory bodies, as well as in payments to the National Insurance System, mainly payroll contributions and rents. As fiscal and external imbalances grew steadily, the government used arrears to government goods and services providers, and for VAT and other tax refunds amid a growing liquidity constraint, which further weighed on economic activity until a newly elected government decided to default on all interest payments on its commercial external debt in June 2018 (see Exhibit 7).

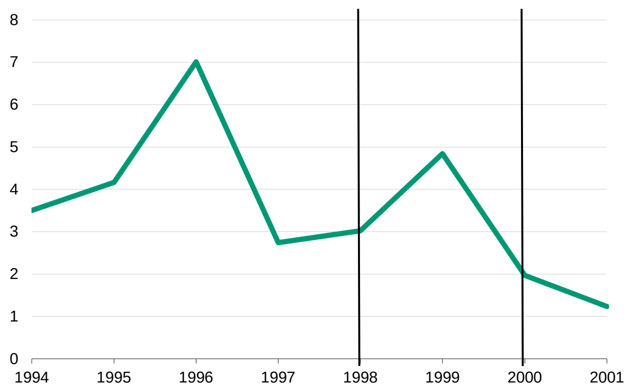
» In **Zambia**, government delays in paying pension contributions and civil servant payrolls increased liquidity pressures in the financial system, limiting credit growth and contributing to an increase in non-performing loans from 6.1% in 2014 to 11.6% by 2020. As domestic financing conditions tightened, government arrears to suppliers and independent power producers increased further, undermining private sector creditworthiness and private sector-led economic activity, while also increasing procurement costs for the government. These pressures on government financing and GDP growth left the government vulnerable to the fiscal shock brought on by the pandemic, culminating in the 2020 default (see Exhibit 8).

» **Lebanon's** government arrears to the social security fund, hospitals and suppliers are well known; however, accurate estimates are difficult to determine. Nevertheless, estimates of fiscal arrears suggest Lebanon's institutional and governance profile deteriorated in line with an increase in fiscal arrears leading into the ongoing debt default since 2020 (see Exhibit 9).

» In **Mali**, a lack of commitment controls and poor SOE governance result in the regular occurrence of fiscal arrears. In 2022, arrears to domestic suppliers increased after sanctions were imposed on Mali by the Economic Community of West African States (ECOWAS), which blocked access to the regional financing market and caused the government to default on debt service payments. Fiscal arrears remained high after sanctions were lifted as tightening liquidity conditions prevented the government from accessing sufficient financing (see Exhibit 10).

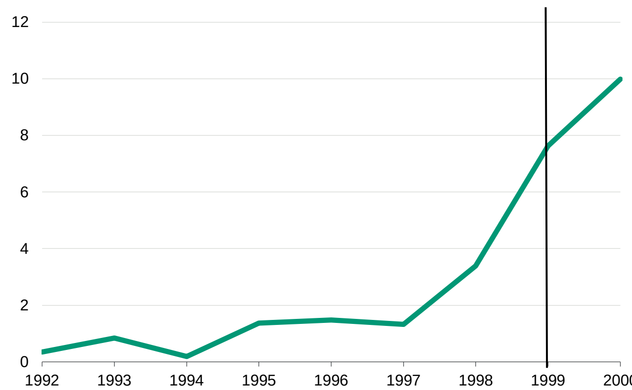
- In **Ghana**, low revenue generation, high interest costs and a shallow domestic financing market weighed on government liquidity and domestic payment arrears increased as access to liquidity deteriorated, notably to the energy sector, with the government defaulting on local and foreign currency debt in 2022 (see Exhibit 11).
- Weak public financial management and legislative compliance in **Portugal** saw local governments and hospitals run increasing arrears following the 2008 financial crisis and leading into the European debt crisis. Portugal avoided default using a joint IMF/EU bailout in 2011, which allowed it to clear some existing arrears and led to improvements in governance and gradually lower accumulation of new arrears (see Exhibit 12). **Jordan** similarly had arrears increase rapidly to more than 5% of GDP when it entered an IMF programme in 2012, which eventually led to a decline in arrears to around 1% of GDP by 2018 (see Exhibit 13).

Exhibit 4
Ukraine's 1998 and 2000 sovereign defaults
Fiscal arrears % GDP, vertical line indicates default event



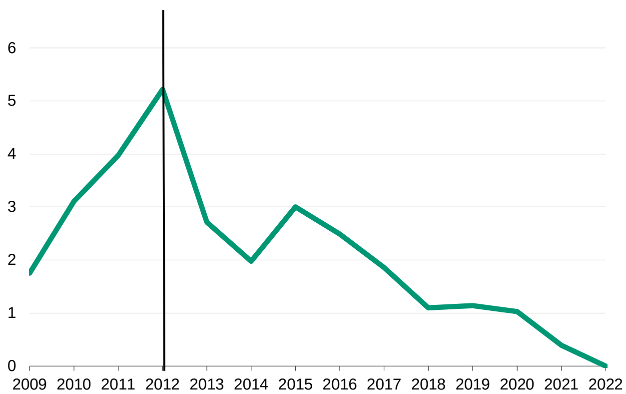
Sources: Bank of Canada/Bank of England database and Moody's Investors Service

Exhibit 5
Ecuador's 1999 sovereign default
Fiscal arrears % GDP, vertical line indicates default event



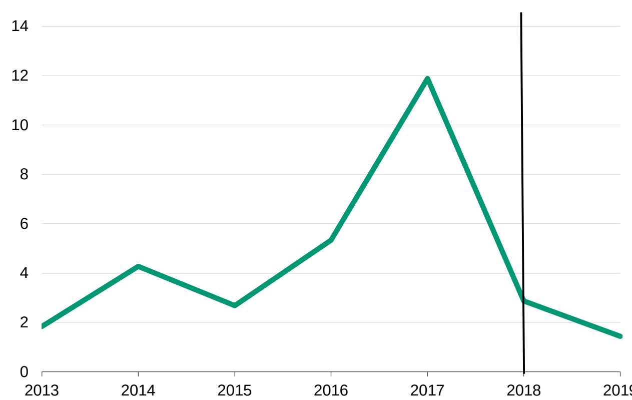
Sources: Bank of Canada/Bank of England database and Moody's Investors Service

Exhibit 6
Greece's 2012 sovereign default
Fiscal arrears % GDP, vertical line indicates default event



Sources: Bank of Canada/Bank of England database and Moody's Investors Service

Exhibit 7
Barbados' 2018 sovereign default
Fiscal arrears % GDP, vertical line indicates default event

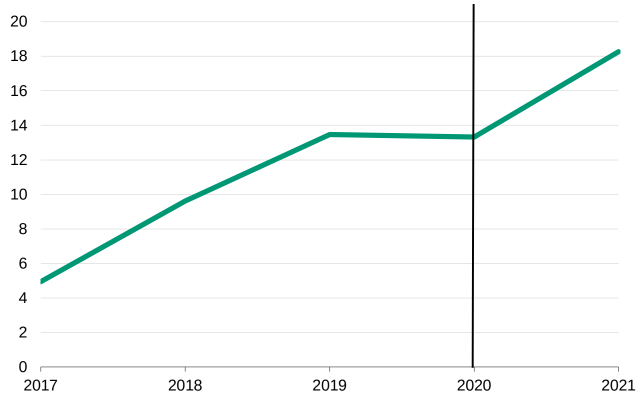


Sources: Bank of Canada/Bank of England database and Moody's Investors Service

Exhibit 8

Zambia's 2020 sovereign default

Fiscal arrears % GDP, vertical line indicates default event

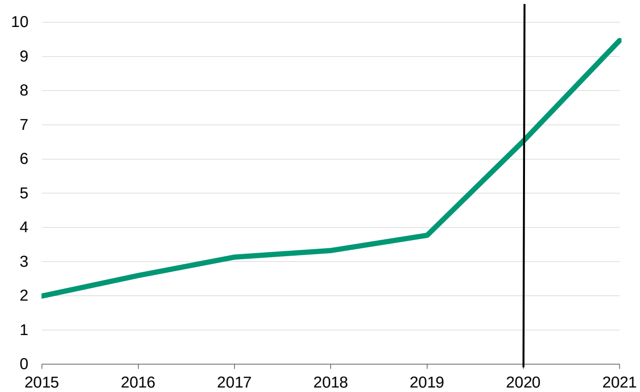


Sources: Bank of Canada/Bank of England database and Moody's Investors Service

Exhibit 9

Lebanon's 2020 sovereign default

Fiscal arrears % GDP, vertical line indicates default event

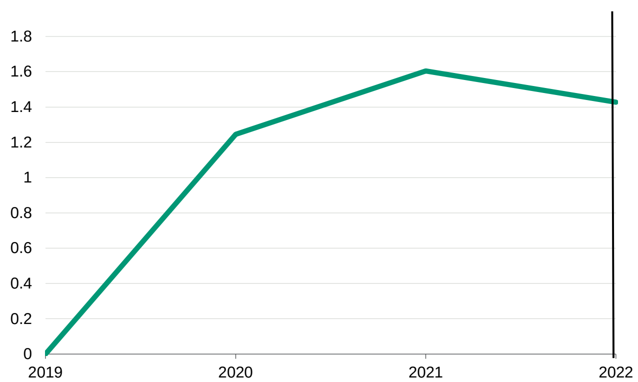


Sources: Bank of Canada/Bank of England database and Moody's Investors Service

Exhibit 10

Mali's 2022 sovereign default

Fiscal arrears % GDP, vertical line indicates default event

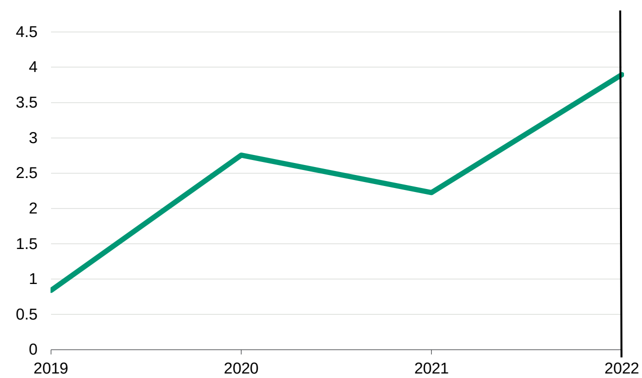


Sources: Bank of Canada/Bank of England database and Moody's Investors Service

Exhibit 11

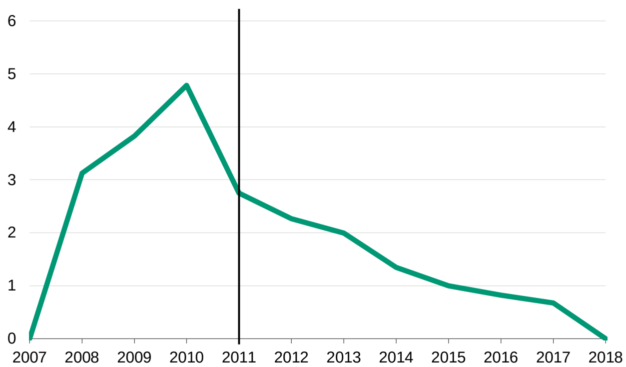
Ghana's 2022 sovereign default

Fiscal arrears % GDP, vertical line indicates default event



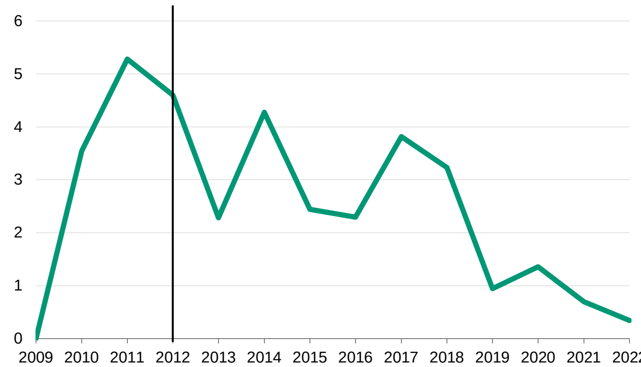
Sources: Bank of Canada/Bank of England database and Moody's Investors Service

Exhibit 12
Portugal's 2011 IMF/EU arrangement
Fiscal arrears % GDP, vertical line indicates default event



Sources: Bank of Canada/Bank of England database and Moody's Investors Service

Exhibit 13
Jordan's 2012 IMF programme
Fiscal arrears % GDP, vertical line indicates default event



Sources: Bank of Canada/Bank of England database and Moody's Investors Service

Endnotes

1 The invisible burden: how arrears could unleash a banking crisis; Bosia, Ramalho, Reinhart; March 2021

2 BoC–BoE Sovereign Default Database: What's new in 2023?, July 2023

3 IMF Regional Economic Outlook: Sub-Saharan Africa, October 2019

REPORT NUMBER 1359550

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