



## Banks in emerging markets: well capitalised and profitable, but uneven asset quality and exposure to local government debt

23/04/2023

Confidential

### **Executive summary**

Last March, the failure of US banks highlighted the exposure of banks to rising interest rates. This risk has since materialized in the form of declining financial stocks, tighter credit conditions and declining business confidence (both of which began before March) in the US and Europe. In these regions, the banks considered by investors, rightly or wrongly, to be the most vulnerable are those with a high share of bond assets, the value of which is declining as interest rates rise.

In emerging economy banks, the nature of the risks differs. While they are generally well capitalized and have returned to their pre-pandemic levels of profitability, asset quality is very heterogeneous from one region to another: it remains good in Asia and Latin America and has improved significantly over the past decade in Central and Eastern Europe. But bad loans remain relatively high in Africa and the Middle East. Banks are also exposed to the risk of tighter external financing conditions due to the tightening of monetary policy by the major central banks, both directly (for banks with high external debt) and indirectly (when they lend to companies or governments that are themselves indebted to foreign countries). But in this context of more difficult access to international financial markets and in the absence of a significant asset purchase program by local central banks, many governments have favored domestic issues in which local banks are generally the main players. In many emerging market banks, the share of government debt in assets has therefore increased since 2020. The countries in which this ratio is highest generally coincide with those in the process of restructuring their public debt (or those for which this risk is high).

# 1. In emerging and developing countries, banks' asset quality remains mixed but profitability is increasing

#### 1.1. Banks in emerging markets are generally well capitalized

The capitalization of the banking systems of the main emerging countries is considered quite satisfactory, with the Tier 1 capital ratio exceeding 15% in most of them. In Latin America, the median level of this ratio is slightly lower than elsewhere due to the low levels of capitalization of banks in Central America (Nicaragua, Guatemala, Honduras), Chile, Peru and Bolivia, at around 10%. On the other hand, and rather reassuringly, the region's financial heavyweights, such as Brazil and Mexico, apply prudential norms in line with the Basel III standards and present more comfortable ratios, respectively at 16% and 17%.







Source: Datastream, IMF

#### 1.2. Bank profitability returns to pre-pandemic levels





Sources: IMF, GSA

Emerging and developing country banks have relatively high levels of profitability, but this varies from region to region: return *on equity* (ROE) averages well over 15% in Africa, but is around 10% in Asia and the Middle East. This relatively high profitability is due to the high level of growth in the banking markets

<sup>&</sup>lt;sup>1</sup> Indicators by region are the median of a set of countries (Asia: Bangladesh, Brunei, Cambodia, China, Fiji, India, Indonesia, Malaysia, Maldives, Nepal, Papua New Guinea, Philippines, Sri Lanka, Thailand, Vietnam; Europe: Albania, Belarus, Bosnia, Bulgaria, Croatia, Hungary, Kosovo, Moldova, Montenegro, Northern Macedonia, Poland, Romania, Russia, Serbia, Turkey, Ukraine; Latin America: Antigua, Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru; Middle East and Central Asia: Afghanistan, Armenia, Djibouti, Georgia, Iraq, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Pakistan, Saudi Arabia, Tajikistan, U. S.Africa: Angola, Botswana, Cameroon, Central African Republic, Chad, Equatorial Guinea, Swaziland, Ethiopia, Gabon, Gambia, Ghana, Guinea, Kenya, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Nigeria, Rwanda, Seychelles, South Africa, Tanzania, Uganda, Zambia, Zimbabwe)



G S A Confidential

in these countries, but also to a higher level of risk, allowing for high interest rates. This is particularly the case in Africa.

Moreover, banks in emerging countries have benefited for several years from relatively low financing costs, allowing them to maintain positive levels of profitability in the face of global shocks (although this is changing, see below).

However, the example of the Covid-19 pandemic in 2020 is a reminder that bank profitability can change rapidly in the event of a major economic shock. In Latin America, for example, where mobility restrictions had been particularly stringent and lengthy, bank profitability had halved, with median ROE falling from nearly 14% in 2019 to just 7% in 2020. The magnitude of the decline was smaller but still significant in other regions.

#### 1.3. Asset quality remains a risk factor, particularly in Africa and the Middle East.

Asset quality is a source of vulnerability for banks in Africa as well as in the Middle East and Central Asia: the median rate of non-performing loans is often above 7% in these two regions. The share of non-performing loans is above 15% in Congo, Angola, Ghana and Kenya (and even 55% in Equatorial Guinea). In contrast, Southern African countries show better performance in this area: South Africa, Botswana, and Lesotho stand out with a level of non-performing loans between 3 and 5%.

Asset quality may be deteriorated in some countries by a concentration of exposures to a limited number of counterparties (a few large companies and/or the government, see section 2). And as in mature economies, a high concentration of assets in cyclical sectors, such as construction or real estate, are also factors of exposure of banking assets to economic conditions. In emerging Europe, credit risk has declined significantly since the sovereign debt crisis and the sharp depreciation of local currencies, which led to defaults on loans denominated in foreign currencies (mainly euros and Swiss francs). The context of low interest rates and the trend of appreciation of local currencies until 2021 has contributed to easing the financing conditions of the private sector. However, higher interest rates and currency depreciation could lead to a deterioration in bad loans in the coming quarters.

And even when banks are not directly exposed to currency risk, they may be exposed to the risk of tighter external financing conditions: the tightening of monetary policy by the major central banks may have a direct impact, for banks with high external debt, and an indirect impact (when they lend to companies or governments that are themselves indebted to foreign countries).



Figure 3: Rate of non-performing loans (% of total loans)

Source: Datastream, IMF



This risk is all the more important to monitor as the initial liquidity of banks in emerging countries is very uneven. Faced with monetary tightening, **banks in emerging countries find themselves in contrasting situations, since regulation and liquidity ratio requirements are very heterogeneous. In addition, not all central banks have the same capacity to control the liquidity of the banking system while maintaining their credibility is more limited**. The situation therefore appears particularly delicate for banks in countries such as Egypt and Nigeria: their ability to meet their short-term dollar commitments is constrained by the depreciation of their currency. In Turkey, too, around 40% of the country's bank deposits are denominated in foreign currency, which makes the liquidity situation of banks very sensitive to changes in the value of the pound. In Europe, several countries, including Hungary, Romania, Croatia, and Northern Macedonia, have low liquidity coverage ratios for short-term liabilities of less than 40%.





Source: Datastream, IMF



Figure 5. Share of bonds in total bank assets (%)

Source: IMF

This memorandum and the information and data contained therein (the "Memo") are strictly confidential and intended only for the person or entity to which it is addressed. GSA has prepared the Memo based on, among others, publicly available information which has not been independently verified. The Memo is for general information purposes only, is not intended to constitute, and is not intended to be construed as financial, legal and/or other professional advice. GSA disclaims to the extent possible by law, all responsibility in relation to this Memo Finally, in its April 2023 Financial Stability Report, the IMF pointed out that less than 1% of emerging market banks have short-term debt that accounts for more than 15% of their total liabilities, compared to nearly oneeighth in advanced economy banks. In contrast, a significant number of countries have low deposit insurance coverage and are therefore potentially more prone to deposit outflows. The median countries in Africa and the Americas have deposit insurance coverage rates of only 24% and 37%, respectively. Those in Asia (about 40 percent) and especially Europe (over 50 percent) have coverage rates that are higher<sup>2</sup>.

#### Which emerging and developing countries have the riskiest banking sector?

In order to quantify the different types of risks detailed above, we construct a synthetic risk indicator per country, on a scale from 0 to 1 (1 = maximum risk). The total score is calculated by aggregating the scores of 6 variables covering the different banking risk factors. **Bank capitalization** is measured through the value of the Tier 1 ratio (ratio between Tier 1 capital and risk-weighted assets). **Bank liquidity** is approximated by the liquid assets/current liabilities variable, **profitability** by the return on equity, and **asset quality** by the non-performing loan rate. Finally, the credit-to-GDP ratio and its year-on-year change correspond to the last two variables, which measure the **risk of a credit bubble**. Equal weights are assigned to each risk factor, i.e. 20% for the first four variables and 10% for the last two variables (i.e. 20% for the credit bubble risk as a whole).

The bank risk indicator allows us to rank emerging and developing countries according to their scores. The countries included are the "emerging markets and developing economies" defined by the IMF. However, in order for a country to be assigned a risk score, the available data must allow us to calculate a score for the country for at least 4 of the 6 variables. Countries that do not meet this condition, numbering 47 out of 151<sup>3</sup>, are therefore not included in the ranking. Bhutan is the country with the highest risk score, followed by Lebanon (0.78) and Equatorial Guinea (0.74). Ukraine comes in sixth and China in eleventh place.



#### Figure 5: Top 25 riskiest emerging market countries according to GSA's banking sector risk indicator

<sup>2</sup> Global Financial Stability Report, April 2023 (imf.org)

<sup>&</sup>lt;sup>3</sup> Countries for which no risk score is calculated are Algeria, Andorra, Aruba, Bahamas, Bahrain, Benin, Burkina Faso, Cape Verde, Congo, Egypt, Eritrea, Guinea-Bissau, Guyana, Haiti, Iran, Ivory Coast, Jamaica, Laos, Liberia, Libya, Mali, Mauritania, Mongolia, Morocco, New Zealand, Niger, Oman, Puerto Rico, Qatar, Sao Tome and Principe, Senegal, Serbia, Sierra Leone, Somalia, Sudan, South Sudan, Suriname, Syria, Taiwan, East Timor, Togo, Tunisia, Turkmenistan, Venezuela, Vietnam, Yemen, and Zimbabwe.



# 2. Many banks in emerging countries are exposed to local government debt

In the context of the combined rise in public debt and interest rates, the risk of banks being weakened by exposure to local public debt increases. The existing literature identifies **three main channels of** transmission between bank risk and sovereign risk.

First, there is the **banking exposure to sovereign debt**. Holding considerable shares of their respective countries' debt, banks are exposed to the **risk of losses on their assets** if public finances come under pressure and the market value of government debt declines. Banks, especially those with less capital, may then be forced to **reduce lending to businesses and households, which** weighs on economic activity. The second transmission channel relates to the **safety nets provided to banks by the government**. Tensions in public finances can undermine the **credibility of these guarantees**, weaken investor confidence and, *ultimately*, harm the profitability of banks. Struggling banks would then turn to the state for a bailout, which would put an even greater strain on public sector finances. The last channel is related to the macroeconomic context. A shock to public finances could raise interest rates throughout the economy, reduce the creditworthiness of firms and households and thus increase the credit risk for banks.

#### 2.1. The factors of banks' exposure to sovereign debt are diverse

While the level of exposure of banks to sovereign debt varies from country to country, the factors are often similar. One factor is **macroprudential regulations** that encourage banks to hold a quota of government-issued debt instruments. Another factor is the **role of the banks'** *primary dealers*, which justifies their carrying a large share of government debt on their balance sheets.

In addition to these universal factors, there are explanations that apply particularly to **emerging countries**, including **the lack of access to international markets**. Indeed, the State, being deprived of external sources of financing, falls back on its local market. In this respect, the existing literature mentions a risk of pressure from governments, forcing banks to hold public debt. Finally, in a context of pressure on public finances, **risk transfer strategies** may justify the enthusiasm of banks for sovereign securities. Indeed, banks are increasing their exposure to sovereigns in order to take advantage of the higher yields that characterize the instruments of distressed sovereigns.

### 2.2. In contrast to advanced economies, banks' exposure to government debt has increased in emerging economies since 2020

In the aftermath of the covid-19 crisis, emerging and developed economies experienced opposite dynamics in bank exposure to sovereign risk. Indeed, according to the BIS<sup>4</sup>, in developed economies, bank holdings of domestic sovereign debt temporarily increased in the first year of the pandemic, before rapidly declining to below pre-Covid-19 levels. In emerging markets, however, banks increased their exposure to domestic government debt in the aftermath of the pandemic, accelerating a momentum that had begun earlier.

This difference in dynamics since 2020 can be explained by the **reaction of central banks**. Indeed, in developed countries, the response to the threat of the pandemic on the economy has led to a **considerable expansion of central bank balance sheets**. By conducting **large-scale asset purchase programs**, central banks in developed countries financed the purchase of national public debt. Also, the "*funding-for-lending*" mechanism put in place by central banks encouraged banks to lend more to the private sector, reducing the amount that could be devoted to the purchase of public debt instruments.

Conversely, in the emerging countries, in the absence of a significant asset purchase program and given the difficulty for governments to issue bonds on the international markets since the end of 2021

<sup>&</sup>lt;sup>4</sup> Source: BIS, Covid, central banks and the bank-sovereign nexus, 2023: <u>Covid, central banks and the bank-sovereign nexus (bis.org)</u>



G S A Confidential

due to the tightening of US monetary policy, commercial banks are being called upon to finance public debt.

The countries with the highest public debt risks are also generally those whose banks with claims on local government account for a large share of total assets (see Figure 6). These include countries that are in the process of restructuring their public debt (e.g., Ghana and Zambia) or others that may do so in the coming months.

This raises the question of the risk incurred by the banking sectors of countries with unsustainable debt in a domestic debt restructuring. Indeed, banks' assets may be directly and indirectly eroded by the haircut: the higher the haircut required to establish debt sustainability, the more severe the conditions faced by the private sector (impacting its ability to pay), making bank loans riskier and therefore less valuable. Banks may also face deposit withdrawals (the intensity of which increases with the economic shock), which may force them to liquidate some assets at low prices, thus reinforcing the correlation between the haircut and the depreciation of the bank's assets.

### Figure 6: Index of vulnerability of their public finances (x-axis) and banking sectors' exposure to sovereign risk (y-axis) in 2021



Note: The y-axis intersects the x-axis at the average of the banking sector vulnerability indices of 172 countries analyzed by GSA (equivalent to 0.29, with 0 being the lowest risk index and 1 the highest).

For the following countries, total assets data are current to 2022: Albania, Cambodia, Ecuador, Georgia, Guatemala, Iceland, Indonesia, Lesotho, Madagascar, Maldives, Moldova, Montenegro, Nicaragua, Northern Macedonia, Turkey, E-A-U, Uzbekistan.

Source: IMF, Datastream, GSA



#### Figure 7. Share of bonds in total bank assets (%)





This memorandum and the information and data contained therein (the "Memo") are strictly confidential and intended only for the person or entity to which it is addressed. GSA has prepared the Memo based on, among others, publicly available information which has not been independently verified. The Memo is for general information purposes only, is not intended to constitute, and is not intended to be construed as financial, legal and/or other professional advice. GSA disclaims to the extent possible by law, all responsibility in relation to this Memo