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Macrofinancial risks in Latam banking systems

Jorge Sicilia, BBVA Research

October 2023

Creating Opportunities

Summary

- The current macrofinancial environment in Latam has positive and negative factors for banking activity.
  - Among the former we have the favorable evolution of inflation and exchange rates, high margins due to higher rates and solvent banking systems (not all). Furthermore, the region has very low banking penetration levels and a very young population, which favors future growth expectations.
  - Among the latter, economic growth in Latam is expected to be weak with tight funding conditions, and the region faces geopolitical risks, financial fragmentation and other idiosyncratic risks.
- **A challenge** that Latin American banking systems must face is **the management of interest rate risk (IRR),** since NII is larger than in other regions in total revenue. In comparison with banks in many advanced economies, Latam banks make less use of interest rate derivatives. Instead, they mitigate the impact of rate changes by minimising repricing gaps between assets and liabilities.
- **Latin American banks' financial position is sound,** but with **room for improvement in asset quality and operating efficiency;** Latin American banks have heavier cost structures than banks in other regions.
- At present, the following **macrofinancial risks stand out:** (1) the growth of fixed income portfolios, which exposes banks to potential valuation losses; (2) partial dollarization in some countries; (3) liquidity tensions in some countries in an environment of higher funding costs; and (4) the high growth of some credit portfolios, which could cause delinquency problems in the future.

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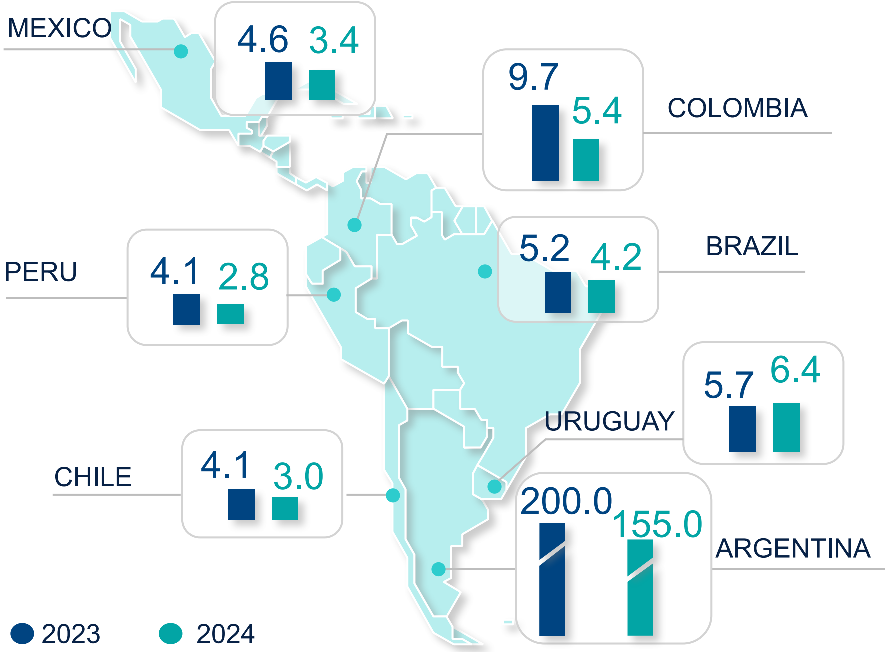
01

Macrofinancial environment: pros and cons

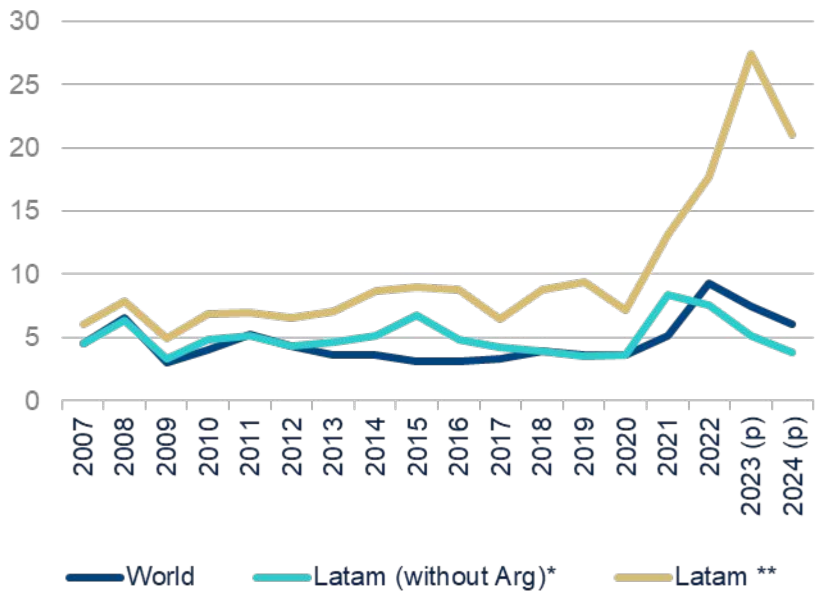
Pros (I): Inflation in Latam is expected to moderate significantly over the next two years, although still above target in most countries

INFLATION
REAL CHANGE, EOP %)



Source: BBVA Research.

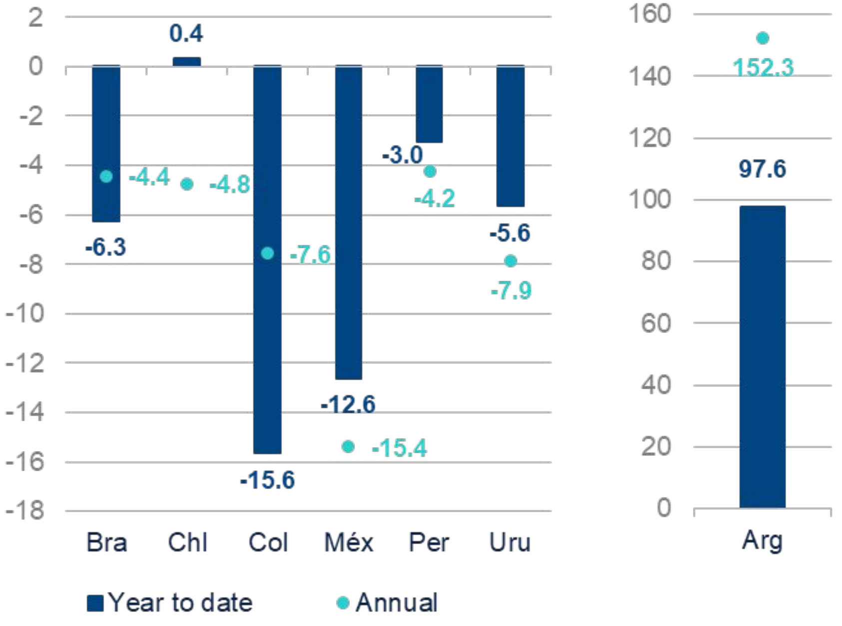
WORLD AND LATAM INFLATION
REAL CHANGE, EOP %)



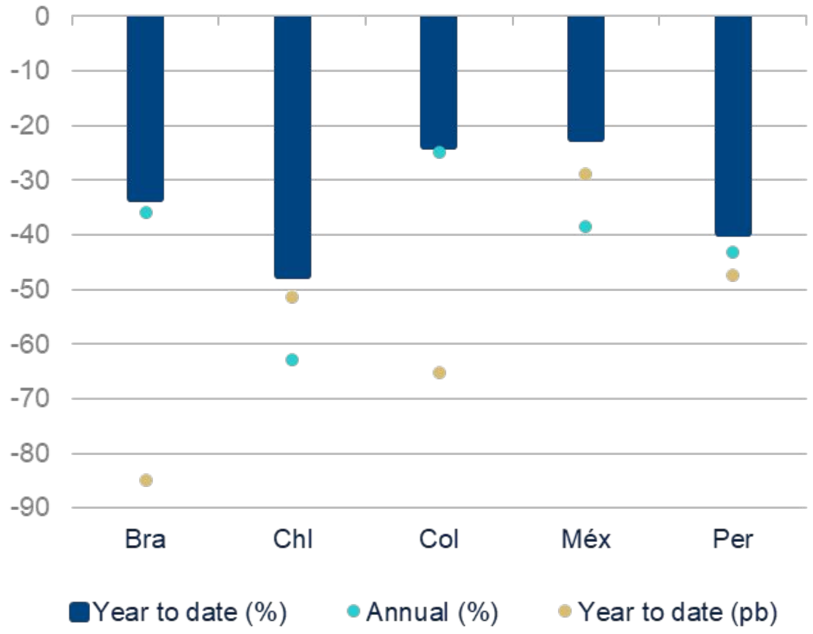
(f): BBVA Research forecasts.
(*): Includes Brazil, Chile, Colombia, Mexico, Peru, Paraguay and Uruguay.
(**): Includes Argentina, Brazil, Chile, Colombia, Mexico, Paraguay, Peru and Uruguay.

Pros (II): the region is experiencing an appreciation of its currencies in 2023, backed by a moderation in the perception of risk and appetite for its assets

EXCHANGE RATES vs USD
(YEAR-TO-DATE AND ANNUAL CHANGE, %)



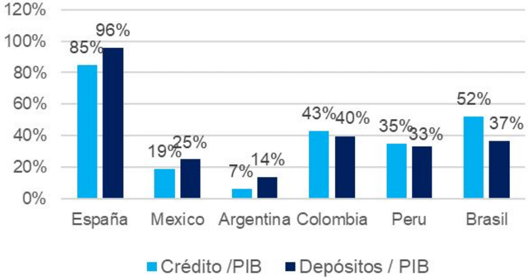
CDS
(YEAR-TO-DATE AND ANNUAL CHANGE, % AND BP)



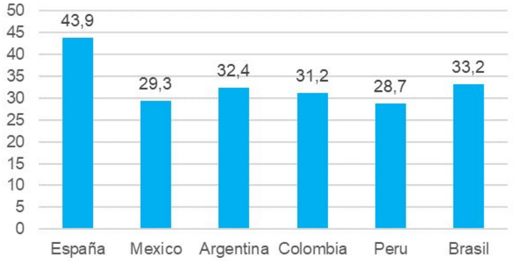
Based on data as at Aug 31, 2023.
Source: BBVA Research based on Bloomberg data.

Additional positive factors that support Latam's favorable outlook

BANKING PENETRATION

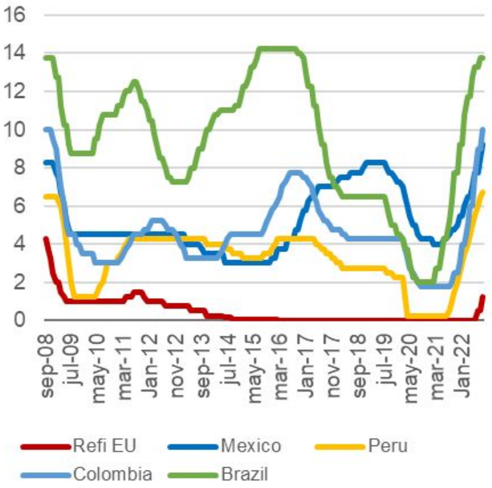


AVERAGE AGE



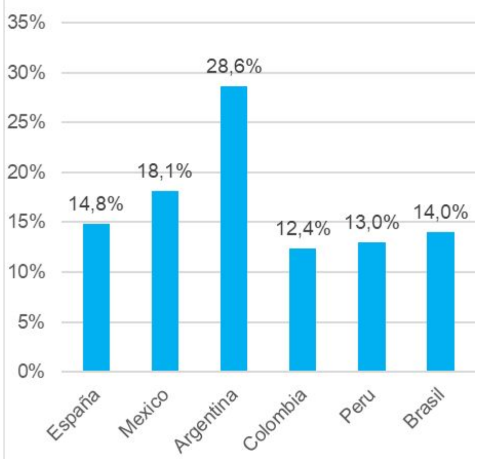
- Very low banking penetration and young and growing population pave the way for faster growth.

HIGH INTEREST RATES



- Higher rates are the norm, even before the latest inflationary episode.
- Wider margins than in advanced countries' markets.

TIER 1 RATIO

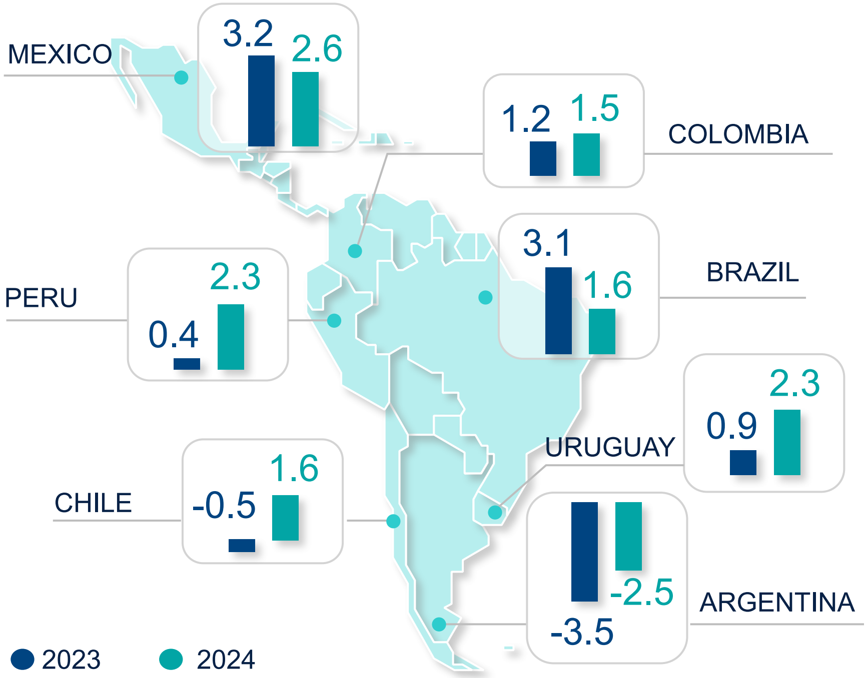


- Good solvency levels in all countries.

Source: BBVA Research and World Data Info for the average age data.

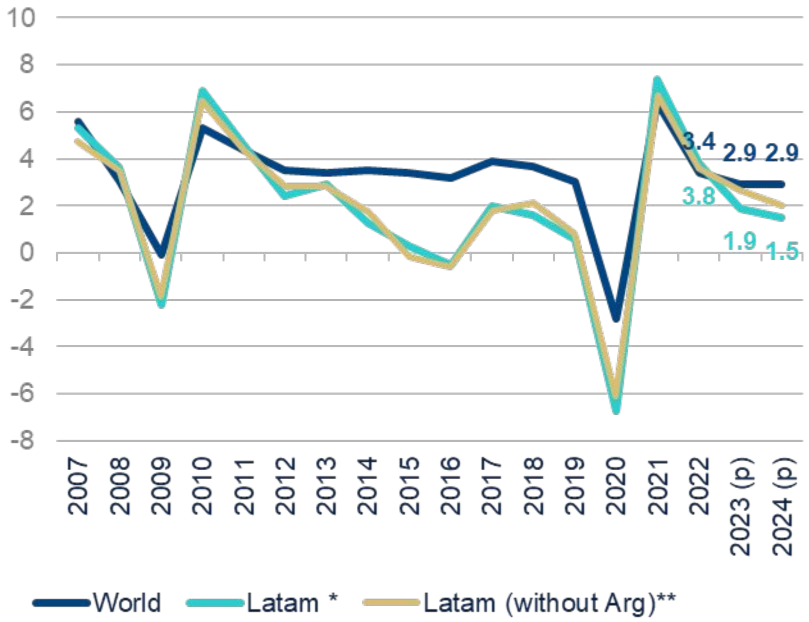
Cons: Latam will decelerate sharply in 2023, more than the global slowdown, and its growth will remain weak in 2024; and investment is lacking

GDP GROWTH
(ANNUAL CHANGE, %)



Source: BBVA Research.

WORLD AND LATAM GDP
(%)



(f): BBVA Research forecasts.
(*): Includes Brazil, Chile, Colombia, Mexico, Peru, Paraguay and Uruguay.
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Uncertain economic environment

Idiosyncratic risks
political cycle, political polarization
inadequate economic policies

Geopolitical tensions/ Financial fragmentation
reduced cross-border flows and international financial activity

Tightening funding conditions
after recent period of sharp interest rate increases, which may affect risk premia, credit ratings…will it be possible to cut rates?

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02

Interest rate risk (IRR) management

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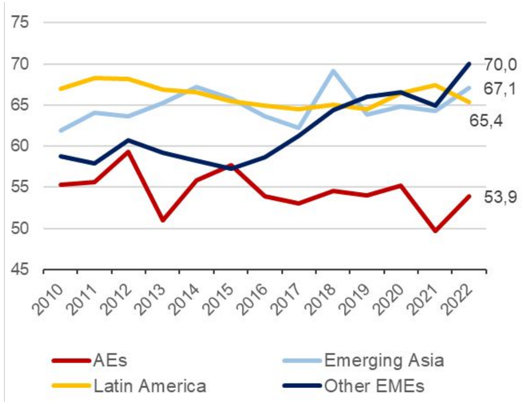
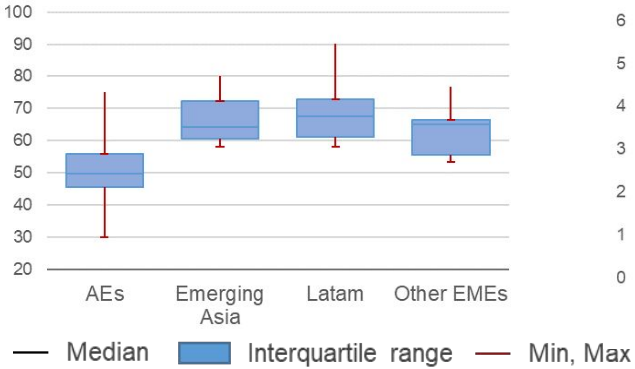
IRR: critical for Latam banking systems

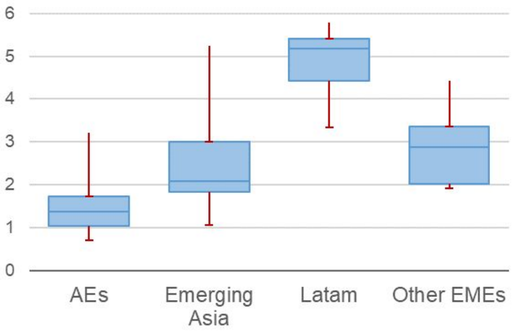
NII / TOTAL REVENUE
(%, REGIONAL MEDIAN)



NII / TOTAL REVENUE, 2021
(%)



NIM 2010-2022
(%)

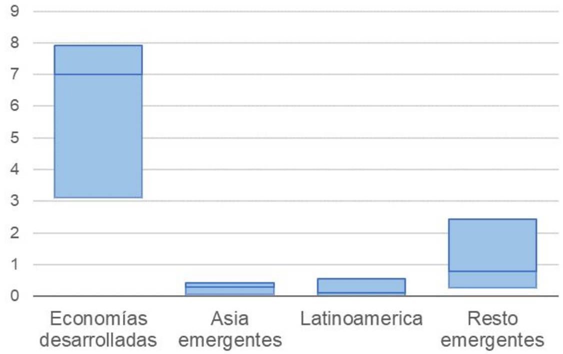


- IRR impacts the main source of revenue and income: NII, which accounted for c65% of total income at the median Latam bank, compared with less than 55% at the median AE bank. Thus the interest rate sensitivity of net interest income has an important influence on a bank's overall IRR exposure.
- Latam banks display the highest NIM worldwide, which only increases the importance of IRR management in the region. This is even more relevant today given the continued increase in fixed-income portfolios in Latam banks (both supply and demand.

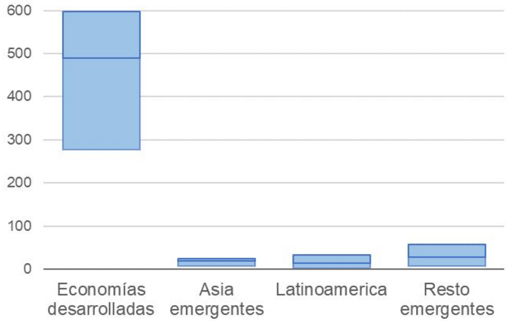
Source: BIS.

IRR management. Key features in Latam: low use of derivatives

GROSS MARKET VALUE OF DERIVATIVES, 2022 (% OF TOTAL ASSETS)



NOTIONAL VALUE OF DERIVATIVE CONTRACTS, 2022 (% OF TOTAL ASSETS)



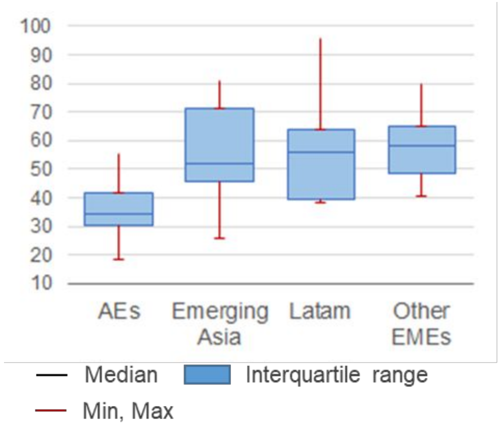
Median Interquartile range

- Latam banks' use of derivative contracts to hedge their IRR is very low. The use of interest rate derivatives is much greater among banks in AEs, particularly large complex entities.
- For the median AE banking system, the gross market value of interest rate derivatives was almost 7% of total assets in 2022, and their notional value was about five times larger than total assets. By contrast, derivatives were a much smaller proportion of EME banks' assets (and the market is less developed overall).

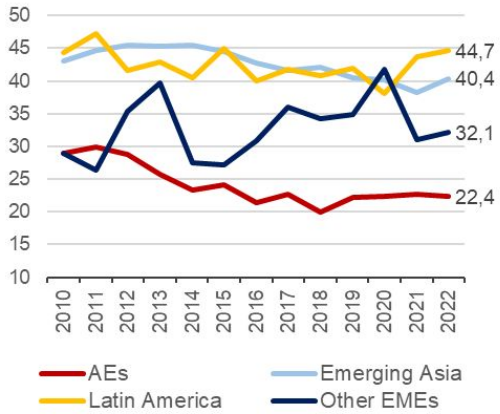
Source: BIS.

IRR management. Key features in Latam: ALM

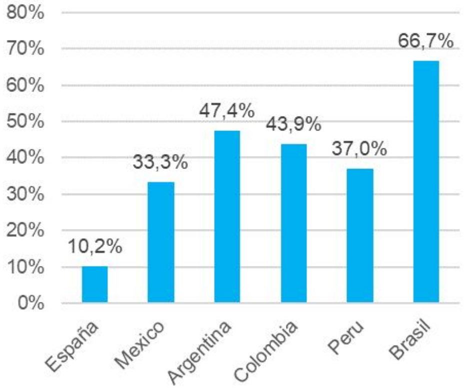
CORPORATE LOANS
(% OF TOTAL LOANS)



LOANS WITH MATURITY OF LESS THAN 1 YEAR (% OF TOTAL LOANS)



TERM DEPOSITS
(% OF TOTAL DEPOSITS)



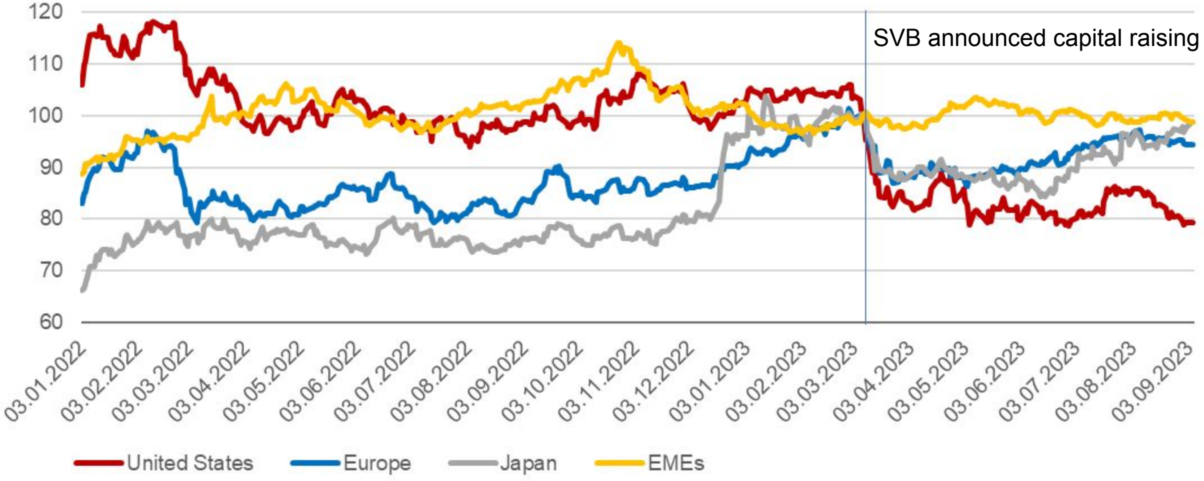
- Latam banks typically limit their IRR exposure through frequent repricing of both assets and liabilities.
- A high share of EME banks' loans have floating rates or short maturities (or both). According to the BIS, in most countries the overwhelming majority of loans to businesses had floating rates. In turn, business loans account for the largest share of EME banks' outstanding loans.
- On the liability side, EME banks rely heavily on term deposits, which bear interest and have a defined maturity date. Such deposits can be readily matched with assets in specific repricing or maturity buckets.

Source: BIS.

Share performance confirms investors' confidence in EME banks' IRR management

EQUITY PRICES

(PERFORMANCE OF BANKS' EQUITY PRICES RELATIVE TO THEIR CORRESPONDING BROAD MARKET INDEX)



Source: BIS.

- The banking stress in March 2023 led investors to reassess banks' vulnerability to higher interest rates.
- Stock prices of US, European and Japanese banks plunged. According to the BIS, those facing persistent market scepticism, as indicated by a lower P/BV ratio, were hit particularly hard.
- In contrast, the equity prices of EME banks continued to track the market. Even the prices of EME banks with low P/BV ratios held up well.
- Most bonds are already at fair value in Latam countries.

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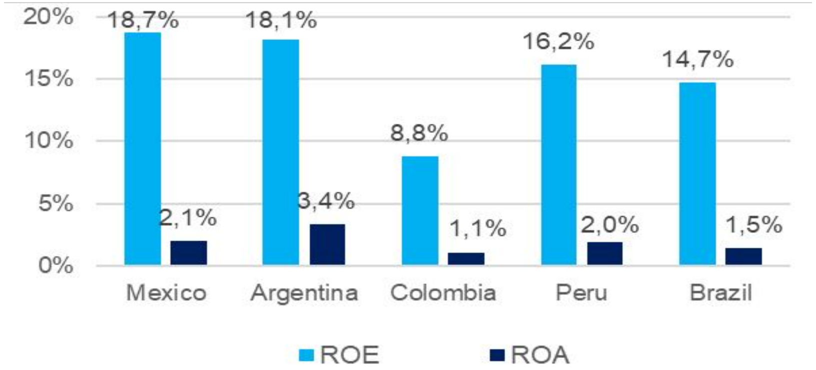
03

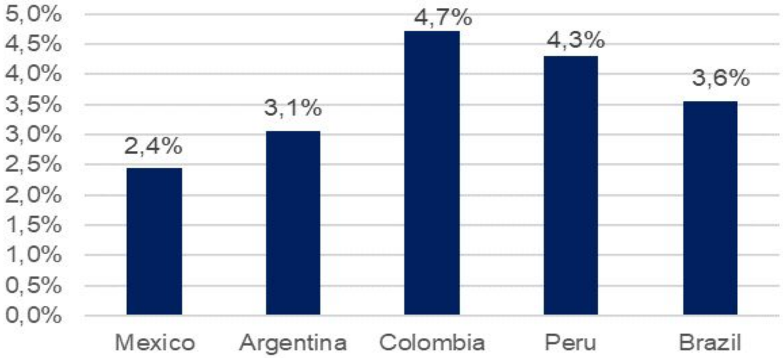
So far, so good. Current situation and risks

Good overall financial position, but lower asset quality and poor efficiency require attention

PROFITABILITY, JUNE 2023



NPL RATIO, JUNE 2023

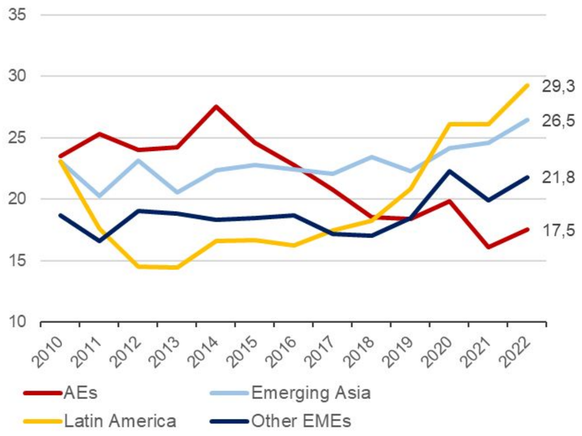


- Good levels of profitability in most cases, with different evolution across countries. This suggests that the overall situation of Latam banks is good, on average.
- However, there is still room for improvement regarding asset quality and operating expenses and efficiency levels.
  - As for asset quality, NPLs show small increases in almost all geographies but NPL ratios remain basically contained, with obvious national differences. The recent increase in interest rates may result in growing NPLs in the future.
  - Probably the biggest problem of Latam banks is cost control, with total opex accounting close to 4% of total assets on average in the region, iway higher than in almost all other areas.

Source: BBVA Research based on Central Banks.

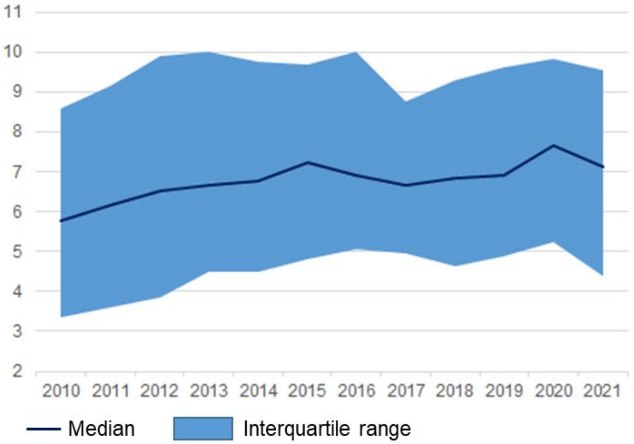
Additional sources of risk: high sovereign exposure

FIXED-INCOME SECURITIES / TOTAL ASSETS



- Until recently, valuation losses due to rate changes has not been a significant risk for Latam banks.
- Latam banks doubled the size of their fixed-income portfolio in 10 years.

REMAINING MATURITY OF EME GOVERNMENT



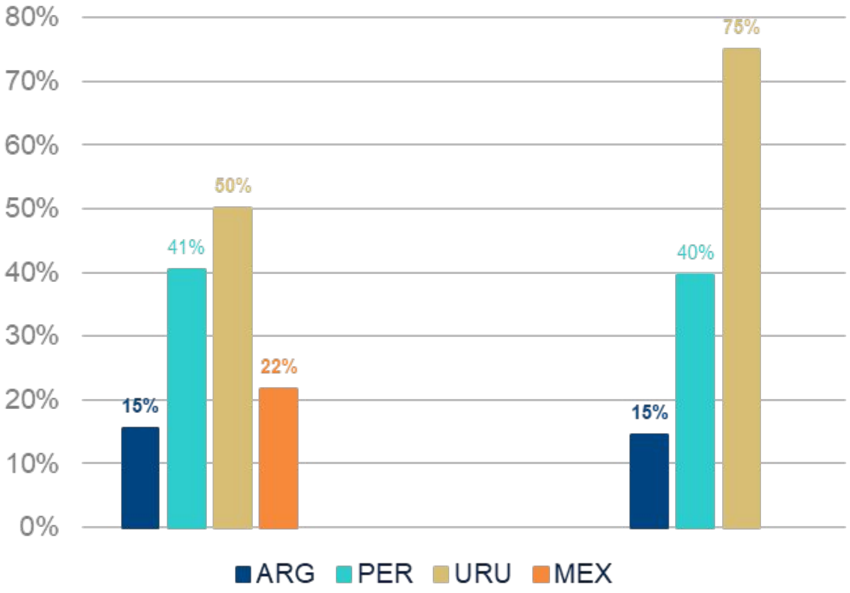
- Also, the duration of these portfolios increased which exposed banks to higher impacts from rate changes.
- This came hand in hand with an extension in the average maturity of government bonds in EME countries (from less than 6 years in 2010 to more than 7 in 2021).

Source: BIS

Additional sources of risk: foreign currency exposure

CORPORATE CREDIT IN FX
(% OF TOTAL CORPORATE CREDIT)
JUN-23

DEPOSITS IN FX
(% OF TOTAL DEPOSITS)
JUN-23

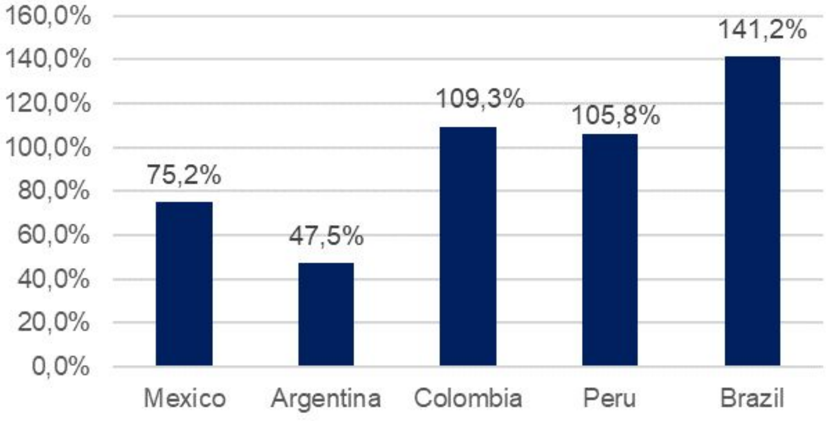


Source: BBVA Research.
URU*: source IMF data 2022. Credit in FX/Total credit

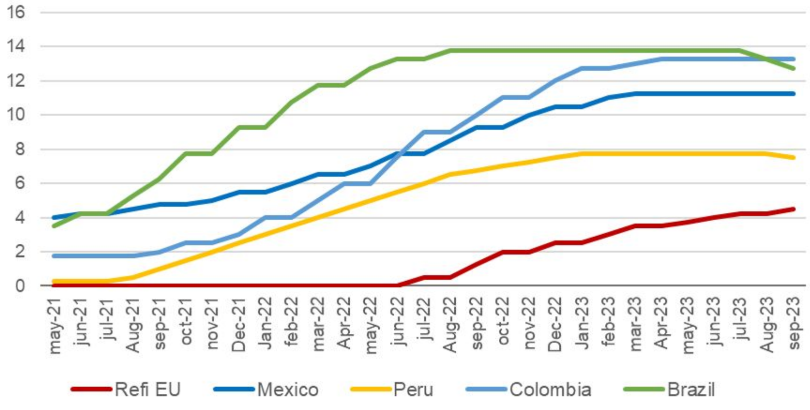
- Dollarization is always a source of vulnerability for some economies and a risk for their banking sectors.
- However, both banking regulation and banks' risk management policies limit the amount of open FX positions.
- And FX credit is usually granted to export companies.
- Considering the ongoing/expected policy rate cuts, these economies might face investment outflows and scarcer FX funding.

Additional sources of risk: liquidity and funding conditions

LOANS-TO-DEPOSITS RATIO, JUNE 2023



OFFICIAL INTEREST RATES, MAY 21 - SEP 23

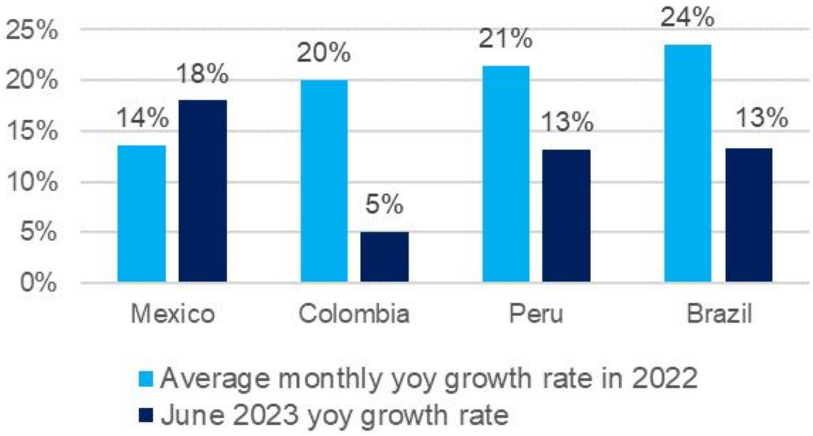


- Mixed data across countries, with some displaying very comfortable levels and others way above 100%.
- Banks with funding needs may face hard times in the future to fund their assets, especially in the current interest rates environment. This may put downward pressure on NIM, and therefore on revenue and income.
- On the other hand, if interest rates decline in the near future (inflation seems to be under control in most cases) there could be a capital outflow problem in some countries, which may lead to increased liquidity tensions.

Source: BBVA Research based on Central Banks.

Additional sources of risk: fast growth in certain loan portfolios

CONSUMER LOANS, GROWTH RATE



- Not the general picture, but growth rates have been quite high in certain loan portfolios.
- After the pandemic, consumer lending has jumped in 2022 in some countries like Brazil, Peru and Colombia, but in all three cases, there has been a strong deceleration.
- In Mexico, the recovery was slower and the growth in consumer lending is still at high levels.
- Fast growth prior to the increase in interest rates and / or at periods of very high interest rates can translate into asset quality problems.
- Moreover, if rates remain high for longer there could be a s increase in NPLs in these portfolios.

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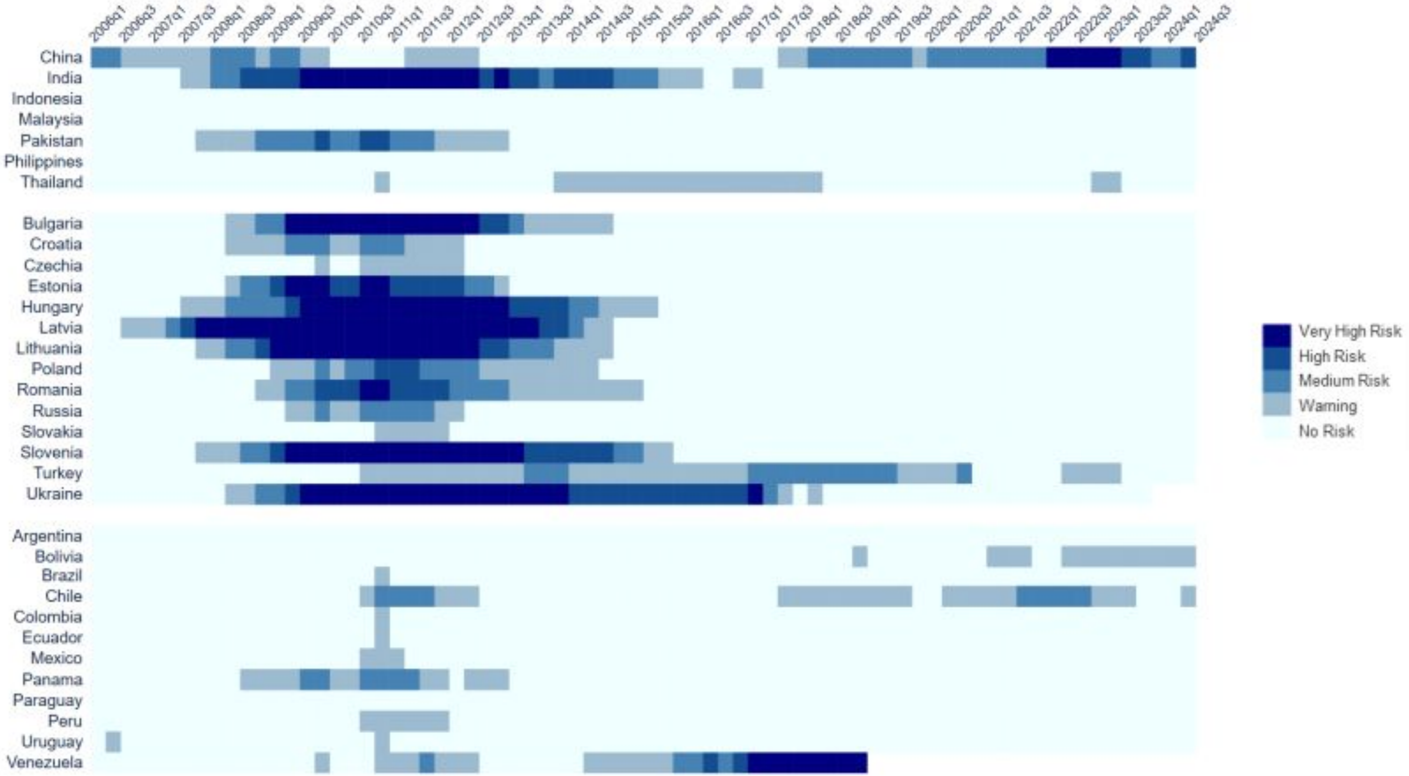
Annex

Banking Crises Early warning System: Emerging Economies



Vulnerability radar for Emerging markets

EMERGING ECONOMIES: VULNERABILITY RADAR 2022

(Relative position for the emerging countries. Risk equal to threshold=0.8, Min risk=0. Previous year data is shown as a dotted line)

EM Europe: Macroeconomic vulnerability is higher due to lower growth and very high inflation. Current Account balances has deteriorated mainly due to higher energy prices. Financial vulnerability is very low relative to other regions

LatAm: Macro vulnerabilities have worsened markedly due to low GDP growth and high inflation. Fiscal balances have improved. Real housing prices and equity markets have cooled down, decreasing financial vulnerability

EM Asia: Fiscal vulnerabilities continue to be at high risk levels. Housing prices gaps and household leverage vulnerabilities have relaxed significantly, but public debt remain high and without changes

High risk | Moderate Risk | Safe

Macro: (1) GDP (% YoY) (2) Prices (% YoY) (3) Unemployment (% LF).
Fiscal: (4) Government balance (% GDP) (5) Interest rate – GDP %YoY (6) Public debt (% GDP).
Liquidity: (7) Debt by non-residents (%total) (8) Financial needs (%GDP) (9) Reserves to ST Ext. Debt (%)
External: (10) External debt (%GDP) (11) Reserves to ARA Metric (%) (12) CAC balance (%GDP).
Private Debt: (13) Household (%GDP) (14) Corporate (%GDP) (15) Credit-to-deposit (%).
Assets: (16) Private Debt Gap (%GDP) (17) Housing Prices Gap (%GDP) (18) Equity gap (%).
Institutions*: (19) Political stability (20) Corruption (21) Rule of law. (*relative position of each group vis-à-vis the Developed/Emerging regions as a whole. **Institutional indicators are updated annually and last data corresponds to 2020**)

Vulnerability radar for some Latam countries

LATAM: VULNERABILITY RADAR 2022

(Relative position for the emerging countries. Risk equal to threshold=0,8, Min risk=0. Previous year data is shown as a dotted line)

Similarly, we include the ratio of Reserves to ARA Metric (IMF) instead of the appreciation of the REER

Source: BBVA Research

High Risk Moderate Risk Low Risk

Macro: (1) GDP (% YoY) (2) Prices (% YoY) (3) Unemployment (% LF)
Fiscal: (4) Government Balance (%GDP) (5) Interest rate – GDP %YoY (6) Public debt (% GDP)
Liquidity: (7) Debt by non-residents (%total) (8) Financial needs (%GDP) (9) Reserves to ST Ext. Debt (%)
External: (10) External Debt (%GDP) (11) Reserves to ARA Metric (%) (12) CAC Balance (% GDP)

Credit: (13) Household (%GDP) (14) Corporate (%GDP) (15) Credit-to-deposit (%)
Assets: (16) Private Debt to GDP gap (%) (17) Housing prices gap (%) (18) Equity gap (%)
Institutions(*): (19) Political stability (20) Corruption (21) Rule of law

(*) Relative position of each group vis-à-vis the Developed/Emerging regions as a whole

Vulnerability radar for some Latam countries

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Source: BBVA Research

High Risk | Moderate Risk | Low Risk

Macro: (1) GDP (% YoY) (2) Prices (% YoY) (3) Unemployment (% LF)
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