



Global Banks: Our Credit Loss Forecasts

Asset Quality Is Normalizing

S&P Global
Ratings

Osman Sattar

Brendan Browne

Mohamed Damak

Cynthia Cohen Freue

Gavin Gunning

Elena Iparraguirre

Ming Tan

Natalia Yalovskaya

July 11, 2024

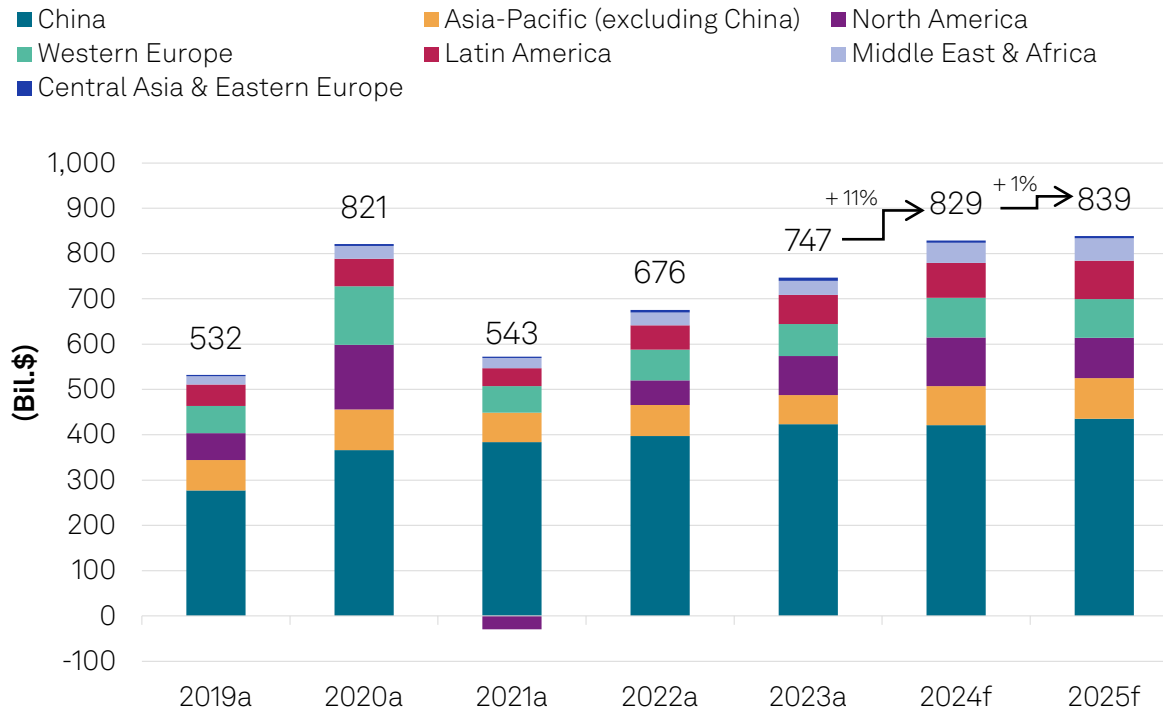
This report does not constitute a rating action

Contents

Global Bank Credit Losses	3
Loan Growth	4
Credit Cost Ratios	5
Major Banks' Headroom For Credit Losses	6
Base-Case Economic Forecasts	7
The Downside Risks To Our Forecast	8
Focus On Real Estate	9
What's On The Horizon For Bank Credit Losses?	10
Asia-Pacific (Excluding China)	11
China	12
North America	13
Latin America	14
Western Europe	15
Central Asia And Eastern Europe	16
Middle East And Africa	17
Credit Loss Forecasts: Top Global 200 Banks	18
Related Research	30
Contacts	31

Credit Losses Continue To Rise In Monetary Terms...

Domestic credit losses by region, 2019a-2025f

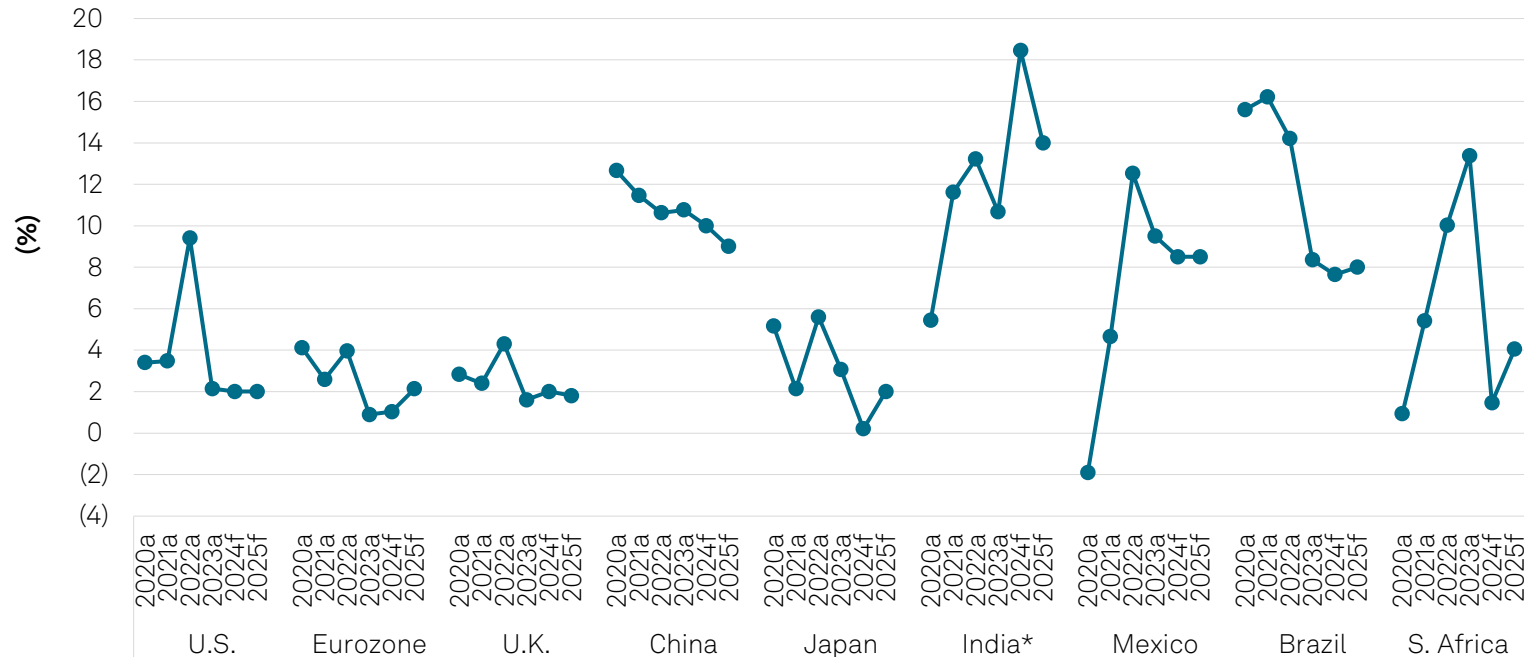


Data shown on a constant currency basis, based on 2023 year-end exchange rates. Data for China relates to commercial banks. a--Actual. f--Forecast. Source: S&P Global Ratings.

- Across the 87 banking systems that S&P Global Ratings covers, we expect credit losses of more than \$1,667 billion over the two years to end-2025. This represents an annual rise in losses of \$82 billion (11%) in 2024, and a further, more modest rise of \$10 billion (1%) in 2025.
- More than half of these losses--about \$857 billion over 2024-2025--are from China's banking system, reflecting its sheer size in a global context. In terms of customer loans, the Chinese banking system is about 95% of the size of the G7 banking systems combined.
- Over the same period, losses in North America, Western Europe, and Asia-Pacific (excluding China) together amount to about \$545 billion, one-third of the global total.
- While losses are rising in monetary terms, still-positive loan growth means that we don't expect a huge upsurge in credit losses as a proportion of customer loans.

...While Our Forecasts Indicate Modest Loan Growth Across Much Of The World...

Annual loan growth, 2020a-2025f

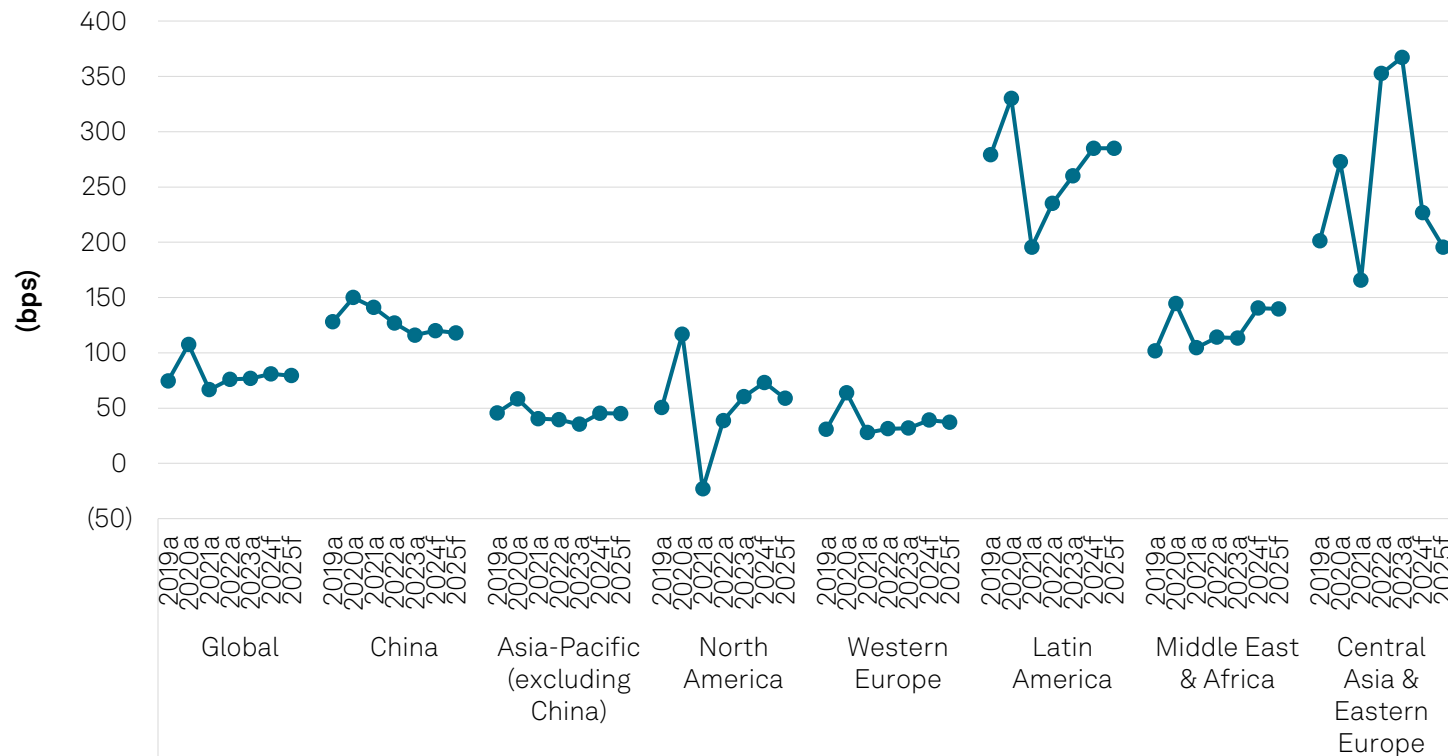


*Fiscal year beginning April 1 in the reference calendar year. Growth rates based on local currency amounts. a--Actual. f--Forecast. Source: S&P Global Ratings.

- Following a strong pick-up in 2022, we continue to see subdued loan growth across much of the world over the period to end-2025.
- This primarily reflects a slowing in credit demand and a moderate tightening of credit supply.
- We have seen lower demand for credit from households-- particularly for property lending, as mortgage rates rose across many developed economies--and from corporates as economies slowed.
- Some slowdown in loan supply arises from tighter lending standards, with banks being more selective in lending to weaker sectors such as commercial real estate (CRE).

...Meaning That We Don't Expect A Spike In The Proportion Of Credit Losses To Loans

Evolution of credit cost ratios by region, 2019a-2025f

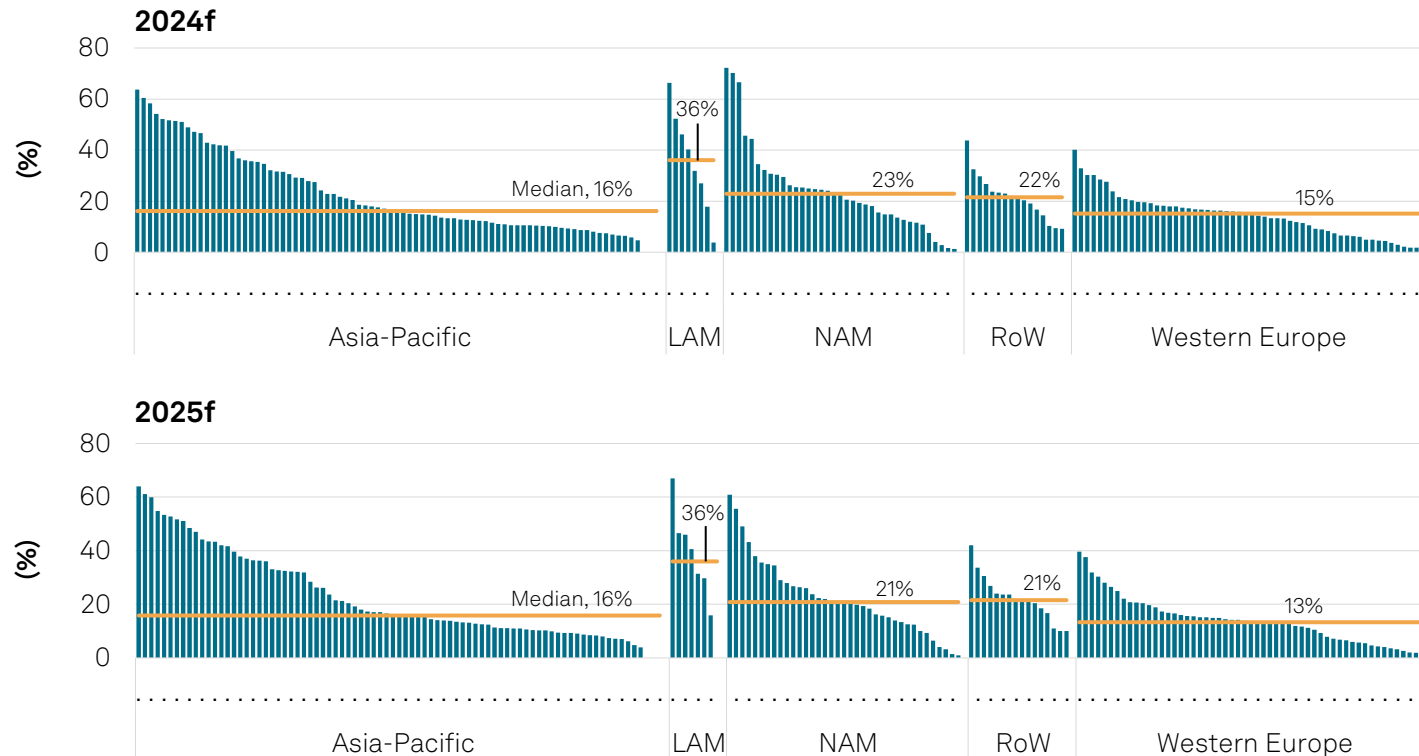


Data for China relates to commercial banks. a--Actual. APAC--Asia-Pacific. bps--Basis points. f--Forecast. RoW--Rest of the world. Source: S&P Global Ratings.

- We estimate banks' credit cost ratios-- credit losses as a proportion of customer loans--will average around 80 basis points (bps) a year over the two years to end-2025.
- While that represents a deterioration in the ratio compared with the average of 73 bps over the last three years (to end-2023), we see this as a normalization of credit costs rather than an indicator of significant or widespread asset quality problems.
- Under our base case, we don't expect credit losses to rise to levels reached in the 2008-2009 global financial crisis of about 100 bps-120 bps. Moreover, comparison with those losses is not like-for-like, due to factors such as enhanced accounting rules for credit losses and changes in the composition of global bank lending.

Most Major Banks' Earnings Will Be Able To Absorb Credit Losses Over 5x Higher Than We Forecast

Forecast credit losses to pre-provision earnings for the top global 200 rated banks, 2024f-2025f, by region



f--Forecast. LAM--Latin America. NAM--North America. RoW--Rest of the world. Source: S&P Global Ratings.

- We estimate that the top-200 rated banks represent about two-thirds of global bank lending, and our base-case forecasts show median credit losses of about 16%-17% of pre-provision earnings for 2024 and in 2025. This indicates that credit losses would need to be more than 5x higher than we forecast before such losses would deplete bank capital rather than earnings.
- Regionally, over the two years to end-2025, we estimate that median credit losses will range between 13% and 16% of earnings in Asia-Pacific and Western Europe; around 21%-23% in North America, 36% in Latin America; and around 22% in the rest of the world.
- These figures illustrate relatively healthy capacity across the top 200 banks in aggregate to absorb further losses without depleting capital.

Our Base-Case Economic Forecasts Underpin Our View Of Credit Losses

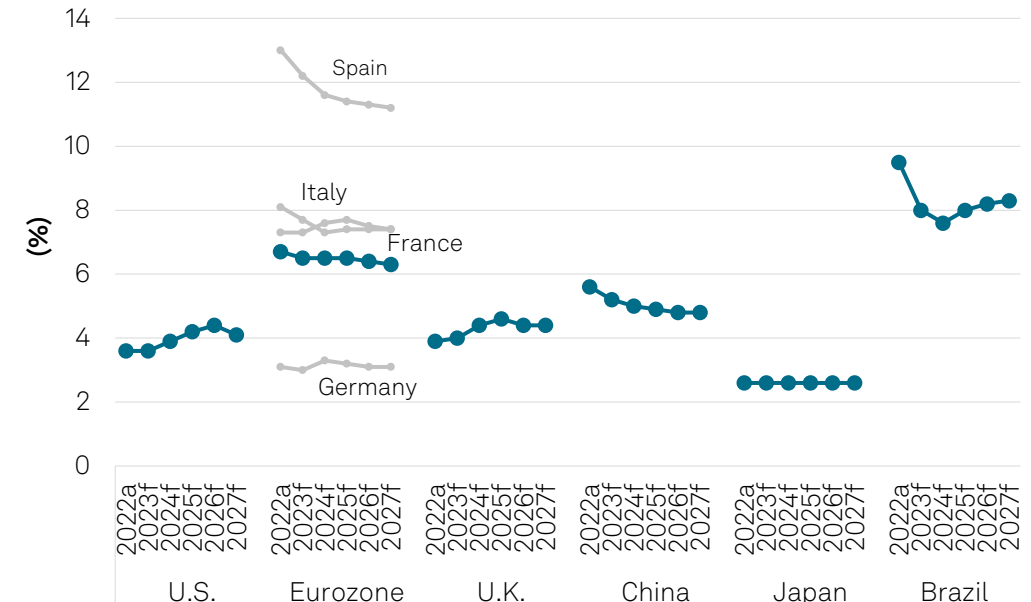
Our credit loss estimates are grounded in our base-case economic forecasts, which continue to show positive GDP growth, and unemployment--historically a key driver for bank credit losses--remaining contained.

GDP: Positive growth in 2024 and receding recession risk

	2023f	2024f	2025f	2026f	2027f
U.S.	2.5	2.5	1.7	1.8	1.9
Eurozone	0.6	0.7	1.4	1.4	1.3
Germany	0.0	0.3	1.2	1.2	1.1
France	1.1	0.9	1.4	1.4	1.3
Italy	1.0	0.6	1.1	1.1	1.0
Spain	2.5	2.2	1.9	2.0	2.0
U.K.	0.1	0.6	1.2	1.7	1.7
China	5.2	4.8	4.6	4.6	4.4
Japan	1.8	0.7	1.1	0.9	0.9
India*	7.7	7.2	6.7	7.2	7.0
Mexico	3.2	2.2	1.7	2.1	2.2
Brazil	2.9	2.0	2.0	2.1	2.2
South Africa	0.7	0.9	1.4	1.3	1.2
World	3.4	3.3	3.2	3.3	3.3

GDP growth, annual percentage change. f--Forecast. *Fiscal year beginning April 1 in the reference calendar year.
Source: S&P Global Ratings.

Unemployment: Remaining close to multiyear lows



a--Actual. f--Forecast. Source: S&P Global Ratings.

The Downside Risks To Our Forecasts Have Receded, But Remain Significant



Our macroeconomic base case forecasts a soft landing for most economies over the next two years, with solid growth so far in 2024.



Still, a number of factors could derail this broadly benign macroeconomic base case, including in particular lower resilience in labor markets than we expect; stubbornness in inflation expectations, forcing central banks to keep rates higher for longer; and worsening financial conditions if real interest rates continue to rise.



The Russia-Ukraine and Israel-Hamas wars continue to bring spillover risks, and more broadly a deteriorating geopolitical landscape--whether through domestic polarization in some jurisdictions or growing protectionism impacting trade--could in turn lead to weaker economic performances and result in higher corporate insolvencies, fuelling higher credit losses.



The still-high levels of many sovereigns' indebtedness diminish their capacity to provide support to their economies, exposing banks more directly to borrowers facing repayment stresses.



Falling commercial real estate prices across much of the world could further expose banks to losses--both directly, from their exposure to these segments, or indirectly, through lower household or corporate confidence further slowing economic activity.



Under stress, we see credit losses as more likely in CRE, unsecured retail, and small and mid-sized enterprises (SME) portfolios. That said, banks seem well positioned to limit credit losses thanks to a selective lending approach and good credit protection.

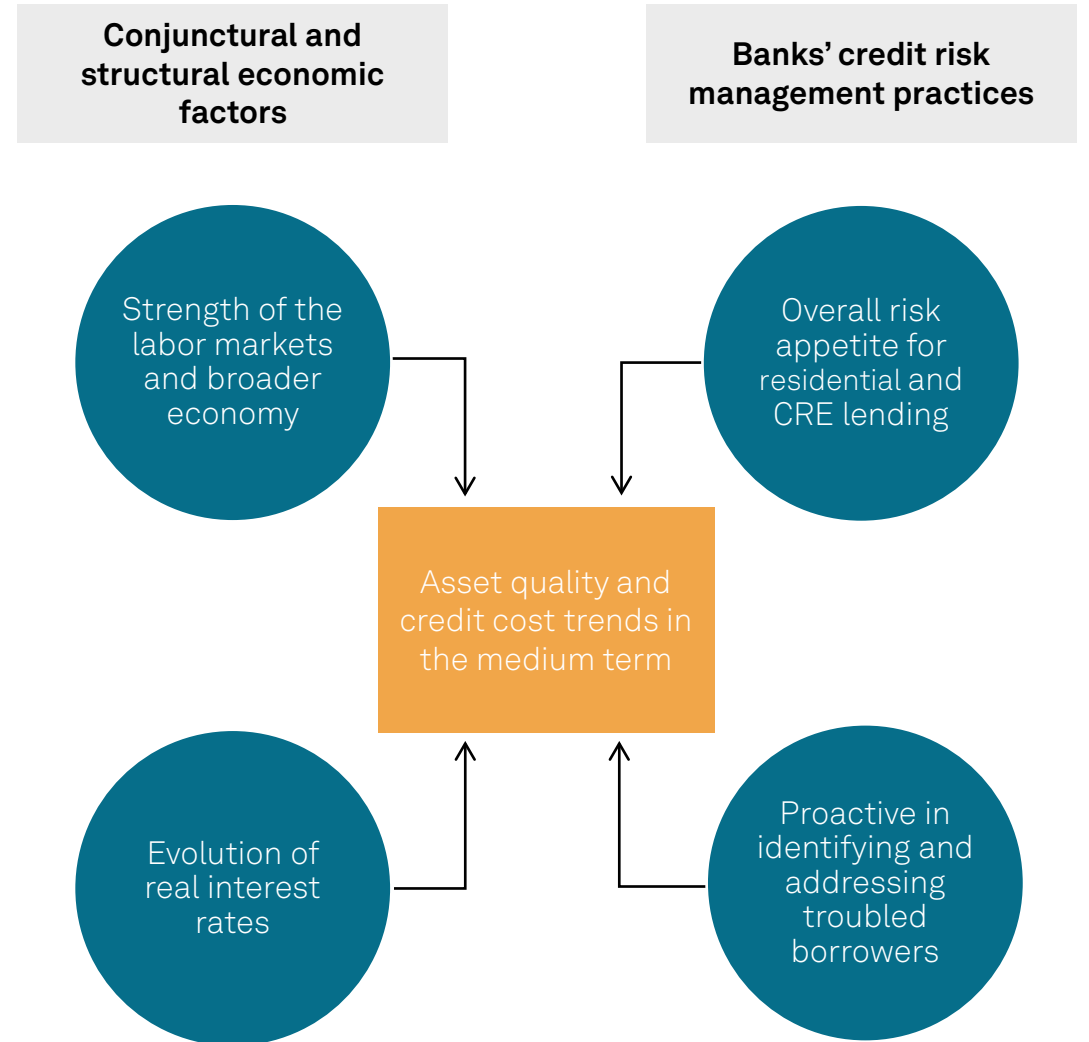
Focus On Real Estate

Key drivers to watch

The pace and extent of potential asset quality deterioration for banks' commercial and residential real estate exposures will depend on multiple factors (see graphic) – some, but not all, are under banks' control.

Banks most vulnerable to negative implications from credit losses from real estate exposures are those with:

- A narrow lending focus, for example, monoline CRE lenders.
- Greater reliance on rate-sensitive funding, such as market funding or term deposits.
- Other perceived business model challenges--for example, poor efficiency, weak competitive position, or major restructuring challenges.



What's On The Horizon For Bank Credit Losses?

An overview of credit loss forecasts by region

Asia-Pacific (Excluding China)

- The rating outlooks for most banks across Asia-Pacific are stable. This indicates that at current rating levels most banks can contend with our forecast credit losses of about US\$86 billion in 2024, which is an increase of about 34% compared with 2023. We anticipate a further 5% increase in credit losses in 2025.
- Furthermore, we estimate that major banks in advanced Asia-Pacific economies can comfortably absorb a hypothetical additional 200 basis points in credit losses on commercial real estate (CRE) exposures. This is in addition to our current base-case credit losses across their entire loan portfolios (including CRE).
- Helping to buffer higher credit losses at the current rating levels are sound provisioning and revenue generation for most banks, especially in developed markets. These banks also continue to have sound capitalization.
- We anticipate risks to remain on the downside heading towards 2025. Materially higher-for-longer interest rates and much lower economic growth--i.e., outside our current base case--will hit an already-vulnerable property sector harder than we anticipate. This would drive credit losses higher and could contribute to negative rating momentum.

China

- For commercial banks, we forecast that credit losses will average about Chinese renminbi (RMB) 2.8 trillion a year over 2024-2026. We expect credit costs to rise modestly to about 1.3% of average loans in 2026, from our estimate of about 1.2% in 2023, due to uneven economic recovery in China.
- Our broader gauge of nonperforming assets (NPAs) will fluctuate modestly between 5.5% and 5.9% of loans over 2024-2026, versus our 5.6% estimate in 2023. Modest macro policy support and a decent post-moratorium performance of micro and small enterprise loans are helping to counter stresses from the mainland's property market.
- Within NPAs, which include nonperforming loans (NPLs), special-mention loans (SMLs) and our estimates of problem loans, NPL and SML ratios will rise as banks need to comply with stricter asset classification rules by end-2025.
- Property stress likely won't peak until 2025, with the NPL ratio for this segment rising to 6.4% as weak property sales delay the recovery of developers' loan quality.
- Small-business NPL ratio will remain broadly stable at 3.1%-3.2% over 2024-2026 as inclusive lending policies and beneficial capital rules support loan performance.
- The next few years could uncover distress in debt-laden regions. More debt restructuring of local government financing vehicles (LGFVs) will weigh on the capital and earnings of local banks in these regions.

North America

- For banks in North America, we expect credit losses to rise this year, following last year's jump, amid a potential slowing of the economy, still high interest rates, and continued deterioration in the asset quality of certain loan types. Banks are likely to boost their allowance coverage relative to loans this year in anticipation of later charge-offs.
- We expect credit losses to abate somewhat next year due in part to continued modest loan growth, particularly in the U.S.
- Asset quality will probably worsen most notably in areas like commercial real estate and near- and subprime consumer lending. Losses on credit card loans have already climbed and likely will flatten at somewhat elevated levels.
- Our economists forecast GDP growth to slow in the U.S. next year and to remain fairly sluggish in Canada. However, they expect inflation to abate, allowing the Federal Reserve to begin cutting rates in December 2024 with further rate cuts in 2025. Canada has already begun to lower rates and should cut them further next year.
- We view the rise in credit losses this year as manageable for banks in North America, particularly since most banks in the U.S. and Canada continue to generate healthy profits. Still, we think the risks are on the downside. If inflation does not abate as much as expected, rates may stay higher for longer and further pressure the economy and asset quality.

Latin America

- We forecast credit losses of \$161 billion for the two years to the end of 2025 for banking systems in Latin America, with the bulk of these in the region's largest economies: Brazil (\$96 billion) and Mexico (\$23 billion).
- Credit losses in Latin America tend to be higher relative to other regions. This is driven by a relatively lower share of mortgage loans and higher share of retail unsecured lending and SME lending; lower per capita GDP; and a weaker payment culture. However, higher margins allow banks to cope with higher losses. In addition, regulators require banks to have higher provisioning coverage.
- Asset quality metrics have deteriorated across the region due to soft economic performance, low credit growth, still-high interest rates, and pressure on the consumer and SME lending segments. We expect asset quality metrics to stabilize by the end of this year and start improving in 2025.
- Provisions will likely remain high, denting profitability. However, operating performance will likely remain solid thanks to banks' higher margins relative to international peers. Banks will continue to operate with solid capitalization and sound liquidity.
- We expect lending growth to remain at modest, single-digit levels. We anticipate a pick-up in credit demand in the corporate sector once interest rates fall to more affordable levels. Stronger credit growth from the corporate sector will contribute to stabilize the level of nonperforming loans to customer loans.

Western Europe

- We forecast that annual credit losses for Western European banking systems will amount to \$88 billion in 2024 and \$85 billion in 2025. Compared with actual losses of \$70 billion in 2023, these forecasts represent an annual rise of 25% in 2024, and then a slight decline of 3% in 2025 as economic recovery continues.
- We see this increase as a normalization of credit losses rather than an abnormal spike. Overall asset quality continues to show remarkable resilience, and our forecast reflects our expectation of a moderate deterioration in more vulnerable segments – specifically, SMEs, unsecured consumer credit, and CRE exposures. We expect European labor markets to remain robust, which should mean that the quality of banks' secured exposures to households, particularly mortgage exposures, should remain broadly resilient.
- Overall, we expect the higher losses we forecast to be manageable for banks, largely thanks to rising interest rates benefitting net interest margins, and robust capital positions.
- Banks' credit-risk management will be key to their overall asset quality and cost of risk over the next two years.
- Any asset quality weakness may be felt more acutely by nonbank financial institutions, given the differences in lending portfolios relative to the more highly regulated bank sector.

Central Asia And Eastern Europe

- We expect the banking sectors of Azerbaijan, Armenia, Georgia, Kazakhstan, and Uzbekistan will continue their resilient performance, backed by supportive economic conditions. Our GDP forecast for the region is on average above 4.5% for 2024 and about 4.4% for 2024, after about 5.7% in 2023, supporting new business growth and improving credit quality in most of these markets. We expect credit costs will continue normalizing toward 1.3%-1.6% on average, from about 1.5% in 2023.
- These economies continue to show good growth, helped by public and private investment, strong consumption, and growth of international trade. They weather the spillover effects from the Russia-Ukraine war reasonably well, even as remittance inflows and money transfers from Russia have been normalizing from the highs of 2022.
- Ukraine's economy and banking system face unprecedented disruption from the war, with continuous pressure on bank earnings, asset quality, funding, and liquidity. Still, bank resilience is supported by our expectation of GDP growth of 3.9%-5% in 2024-2025, falls in inflation and the key policy rate, and a gradual easing of currency controls. Digitalization and central bank support measures, including available liquidity support, enable banks to continue serving customers.
- Belarus faces persistently high economic, balance-of-payments, and financial stability risks, from prolonged economic and political turmoil and international sanctions on Belarus and Russia, its key trading partner. While banks have been more resilient than we expected, financial system stability remains under pressure, while the government's ability to provide support is limited in our view.

Middle East And Africa

- Despite higher geopolitical risk, the banking systems of Gulf Cooperation Council (GCC) countries continued to display resilience thanks to supportive economies, particularly in Saudi Arabia and the UAE, and relatively low inflation. However, with higher-for-longer rates, we anticipate modestly higher credit losses. Risks related to the exposure to Egypt and Turkiye are receding thanks to the progressive stabilization of these countries.
- Economic and operating conditions for Egyptian banks will likely remain challenging over the next couple of years. Given the protracted poor economic performance, high inflation, tight monetary policy, and the depreciating Egyptian pound, we expect domestic borrowers will struggle, leading to growing credit losses of about 1.8% in 2024 and 2025.
- In Turkiye, our base-case scenario assumes economic imbalances to gradually unwind, curbing demand for credit and slowing the economy, amid rising portfolio inflows, narrowing current account deficits and a depreciating lira. As a result, we anticipate Turkish banks will face elevated, but manageable, credit losses with impairment charges (net of provisions reversal) reaching 190 bps in 2024, from our estimated 140 bps in 2023.
- South Africa's structural economic issues and infrastructure gaps are undermining the country's short- and medium-term growth prospects. We expect that the banking sector's credit loss ratio will be above historical levels, at 1% of total loans through 2024. The performance of the commercial real estate sector is likely to improve as funding conditions get better and vacancy rates continue to decline, supported by a return to office because of electricity supply issues.

Credit Loss Forecasts: Top Global 200 Banks

Our forecasts for credit losses to average loans (cost of risk; %) for the top 200 rated banks globally, by region

Cost Of Risk: Top Global 200 Banks By Region (1 of 11)

Region and bank	Country	2019a	2020a	2021a	2022a	2023a	2024f	2025f
Asia-Pacific								
Agricultural Bank of China Ltd.	China	1.1	1.1	1.0	0.8	0.6	0.6-0.7	0.6-0.7
Australia and New Zealand Banking Group Ltd.	Australia	0.1	0.4	(0.1)	(0.0)	0.0	0.1-0.2	0.1-0.2
Axis Bank Ltd.	India	2.6	2.3	0.6	0.0	0.2	0.5-0.6	0.5-0.6
Bangkok Bank Public Co. Ltd.	Thailand	1.6	1.4	1.4	1.2	1.3	1.2-1.5	1.2-1.5
Bank Mandiri (Persero) PT	Indonesia	0.8	2.0	1.4	0.7	(0.2)	0.7-0.9	0.6-0.8
Bank Negara Indonesia (Persero) Tbk. PT	Indonesia	1.2	3.6	2.6	1.2	0.6	1.0-1.2	1.0-1.2
Bank of China Ltd.	China	0.8	0.9	0.7	0.6	0.6	0.6-0.7	0.6-0.7
Bank of Chongqing Co. Ltd.	China	1.6	1.6	1.7	1.1	0.9	0.7-0.9	0.7-0.9
Bank of Communications Co. Ltd.	China	1.0	1.1	1.1	0.9	0.7	0.6-0.7	0.6-0.7
Bank of East Asia Ltd. (The)	Hong Kong	1.4	1.0	0.3	1.1	1.0	0.9-1.1	0.9-1.0
Bank of Taiwan	Taiwan	0.3	0.0	0.0	0.0	0.2 §	0.2-0.2	0.2-0.2
Bank of the Philippine Islands	Philippines	0.4	1.9	0.9	0.6	0.2	0.3-0.4	0.3-0.4
Bank Rakyat Indonesia (Persero) Tbk. PT	Indonesia	1.8	2.7	3.0	1.3	1.1	1.2-1.5	1.1-1.4
Bank SinoPac	Taiwan	0.1	0.2	0.2	0.2	0.1	0.2-0.2	0.2-0.2
Cathay United Bank Co. Ltd.	Taiwan	0.2	0.2	0.2	0.2	0.1	0.1-0.1	0.1-0.1
Chang Hwa Commercial Bank Ltd.	Taiwan	0.2	0.2	0.1	0.2	0.2	0.1-0.2	0.1-0.2
Chiba Bank Ltd.	Japan	0.1	0.1	0.1	0.0	0.1	0.1-0.1	0.1-0.1
China Bohai Bank Co. Ltd.	China	1.5	1.7	0.9	1.0	1.0	0.8-0.9	0.8-1.0
China Citic Bank Corp. Ltd.	China	2.0	2.0	1.7	1.4	1.2	0.9-1.1	0.9-1.0

Cost Of Risk: Top Global 200 Banks By Region (2 of 11)

Region and bank	Country	2019a	2020a	2021a	2022a	2023a	2024f	2025f
Asia-Pacific (continued)								
China Construction Bank Corp.	China	1.1	1.2	1.0	0.8	0.6	0.7-0.8	0.7-0.8
China Everbright Bank Co. Ltd.	China	1.9	2.0	1.7	1.5	1.4	1.1-1.4	1.1-1.4
China Guangfa Bank Co. Ltd.	China	2.5	2.3	1.3	1.4	1.1	1.3-1.6	1.3-1.6
China Merchants Bank Co. Ltd.	China	1.5	1.4	1.1	1.1	0.7	0.6-0.8	0.6-0.7
China Minsheng Banking Corp. Ltd.	China	1.9	2.5	1.9	1.2	1.1	0.9-1.1	0.9-1.1
China Zheshang Bank Co. Ltd.	China	2.0	1.8	1.9	1.9	1.6	1.6-1.9	1.5-1.9
CIMB Bank Bhd.	Malaysia	0.2	1.7	0.7	0.4	0.3	0.3-0.4	0.3-0.4
Commonwealth Bank of Australia	Australia	0.2	0.3	0.1	(0.0)	0.1	0.1-0.2	0.1-0.2
CTBC Bank Co. Ltd.	Taiwan	0.2	0.4	0.3	0.3	0.2 §	0.2-0.2	0.2-0.2
DBS Bank Ltd.	Singapore	0.2	0.8	0.0	0.1	0.1	0.2-0.2	0.2-0.2
Development Bank of Japan Inc.	Japan	(0.0)	0.2	0.2	0.3	0.1	0.1-0.2	0.1-0.2
E.SUN Commercial Bank Ltd.	Taiwan	0.1	0.2	0.1	0.1	0.1	0.1-0.2	0.1-0.2
First Commercial Bank Ltd.	Taiwan	0.2	0.2	0.2	0.3	0.2	0.2-0.2	0.2-0.2
Hachijuni Bank Ltd.	Japan	0.0	0.2	0.0	0.1	0.0	0.1-0.1	0.1-0.1
HDFC Bank Ltd.	India	1.2	1.5	1.2	0.7	0.6 §	0.6-0.7	0.6-0.7
Hua Nan Commercial Bank Ltd.	Taiwan	0.1	0.1	0.1	0.2	0.1	0.1-0.1	0.1-0.1
Hua Xia Bank Co. Ltd.	China	1.7	2.0	1.6	1.4	1.1	1.2-1.5	1.2-1.5
ICICI Bank Ltd.	India	2.1	2.1	0.9	0.5	0.3	0.5-0.6	0.5-0.6
Indian Bank	India	2.3	2.3	1.8	1.4	0.8 §	0.8-0.9	0.8-1.0

Cost Of Risk: Top Global 200 Banks By Region (3 of 11)

Region and bank	Country	2019a	2020a	2021a	2022a	2023a	2024f	2025f
Asia-Pacific (continued)								
Industrial and Commercial Bank of China Ltd.	China	1.1	1.2	1.0	0.8	0.6	0.6-0.7	0.6-0.7
Industrial Bank of Korea	Korea	0.7	0.6	0.4	0.5	0.7	0.7-0.8	0.7-0.8
Iyo Bank Ltd.	Japan	0.2	0.3	0.1	(0.1)	0.1	0.1-0.2	0.1-0.2
Japan Post Bank Co. Ltd.	Japan	0.0	0.0	0.0	0.0	0.0	0.0-0.0	0.0-0.0
KASIKORNBANK PCL	Thailand	1.7	2.0	1.7	2.1	2.1	1.8-2.1	1.6-1.9
KEB Hana Bank	Korea	0.1	0.2	0.1	0.2	0.2	0.2-0.3	0.2-0.2
Kookmin Bank	Korea	0.0	0.2	0.2	0.3	0.4	0.4-0.5	0.4-0.4
Kotak Mahindra Bank	India	0.9	1.1	0.2	0.0	0.5	0.5-0.6	0.5-0.6
Krung Thai Bank Public Co. Ltd.	Thailand	1.1	2.0	1.3	0.9	1.4	1.3-1.6	1.3-1.5
Land Bank of Taiwan	Taiwan	0.1	0.1	0.1	0.1	0.0	0.1-0.1	0.1-0.1
Macquarie Bank Ltd.	Australia	0.6	0.3	0.0	0.1	(0.0)	0.1-0.2	0.1-0.2
Malayan Banking Bhd.	Malaysia	0.5	1.0	0.6	0.5	0.3	0.3-0.3	0.3-0.3
Mega International Commercial Bank Co. Ltd.	Taiwan	0.0	0.1	0.1	0.1	0.3	0.1-0.2	0.1-0.1
Mitsubishi UFJ Financial Group Inc.	Japan	0.2	0.5	0.3	0.6	0.4	0.2-0.3	0.2-0.2
Mizuho Financial Group Inc.	Japan	0.2	0.3	0.3	0.1	0.1	0.1-0.1	0.1-0.1
National Australia Bank Ltd.	Australia	0.2	0.5	(0.0)	0.0	0.1	0.1-0.2	0.1-0.2
Nomura Holdings Inc.	Japan	N.M.	N.M.	N.M.	N.M.	N.M.	N.M.	N.M.
NongHyup Bank	Korea	0.1	0.2	0.1	0.2	0.6	0.5-0.6	0.4-0.5
Norinchukin Bank	Japan	0.0	0.4	0.1	0.0	0.0	0.1-0.2	0.1-0.2

Cost Of Risk: Top Global 200 Banks By Region (4 of 11)

Region and bank	Country	2019a	2020a	2021a	2022a	2023a	2024f	2025f
Asia-Pacific (continued)								
Oversea-Chinese Banking Corp. Ltd.	Singapore	0.4	0.8	0.3	0.2	0.3	0.2-0.3	0.2-0.3
Ping An Bank Co. Ltd.	China	2.7	2.8	2.6	2.2	1.8	1.2-1.5	1.2-1.5
Postal Savings Bank of China Co. Ltd.	China	1.2	1.0	0.8	0.5	0.3	0.3-0.4	0.3-0.4
Public Bank Bhd.	Malaysia	0.1	0.3	0.3	0.1	0.0	0.1-0.1	0.1-0.1
Resona Bank Ltd.	Japan	0.1	0.2	0.2	0.0	0.1	0.1-0.1	0.1-0.1
RHB Bank Bhd.	Malaysia	0.2	0.6	0.4	0.2	0.1	0.2-0.3	0.2-0.3
SBI Shinsei Bank Ltd.	Japan	0.6	0.5	0.5	0.3	0.4	0.4-0.5	0.4-0.5
Shanghai Commercial & Savings Bank Ltd. (The)	Taiwan	0.1	0.2	0.1	0.4	1.1	0.2-0.2	0.2-0.2
Shanghai Pudong Development Bank Co. Ltd.	China	2.0	1.9	1.7	1.6	1.5	1.2-1.5	1.2-1.5
Shanghai Rural Commercial Bank Co. Ltd.	China	0.9	1.1	0.8	0.6	0.5	0.5-0.6	0.5-0.6
Shinhan Bank	Korea	0.2	0.2	0.1	0.2	0.3	0.3-0.3	0.2-0.3
Shinkin Central Bank	Japan	0.0	(0.0)	(0.1)	(0.0)	0.0	0.0-0.0	0.0-0.0
Shizuoka Bank Ltd.	Japan	0.1	0.1	0.1	0.1	0.1	0.0-0.1	0.1-0.1
Siam Commercial Bank Public Co. Ltd.	Thailand	1.7	2.1	1.8	1.4	1.2	1.3-1.6	1.3-1.6
State Bank of India	India	1.5	1.5	0.7	0.4	0.0	0.5-0.6	0.5-0.6
Sumitomo Mitsui Financial Group Inc.	Japan	0.2	0.4	0.3	0.2	0.3	0.2-0.3	0.2-0.3
Sumitomo Mitsui Trust Holdings	Japan	0.2	0.0	0.1	0.0	0.0	0.1-0.1	0.1-0.1
Taipei Fubon Commercial Bank Co. Ltd.	Taiwan	0.2	0.2	0.2	0.2	0.3	0.2-0.2	0.1-0.2
Taishin International Bank Co. Ltd.	Taiwan	0.2	0.1	0.0	0.1	0.1	0.1-0.2	0.1-0.2

Cost Of Risk: Top Global 200 Banks By Region (5 of 11)

Region and bank	Country	2019a	2020a	2021a	2022a	2023a	2024f	2025f
Asia-Pacific (continued)								
Taiwan Cooperative Bank Ltd.	Taiwan	0.2	0.3	0.1	0.1	0.3	0.1-0.2	0.1-0.2
TMBThanachart Bank Public Co. Ltd.	Thailand	1.1	1.8	1.6	1.3	1.6	1.3-1.6	1.3-1.6
Union Bank of India	India	3.6	2.8	1.5	0.8	0.3 §	0.7-0.8	0.7-0.9
United Overseas Bank Ltd.	Singapore	0.2	0.6	0.2	0.2	0.3	0.2-0.3	0.2-0.3
Westpac Banking Corp.	Australia	0.1	0.5	(0.1)	0.1	0.1	0.1-0.2	0.1-0.2
Woori Bank	Korea	0.1	0.2	0.1	0.2	0.3	0.3-0.4	0.2-0.3
Latin America								
Banco Bradesco S.A.	Brazil	3.8	5.3	2.8	5.1	5.8	4.2-5.2	3.9-4.7
Banco BTG Pactual S.A.	Brazil	1.5	0.9	1.1	3.9	2.0	2.0-2.4	1.8-2.2
Banco de Credito e Inversiones	Chile	1.3	1.9	1.1	1.1	0.8	0.8-0.9	0.8-0.9
Banco do Brasil S.A.	Brazil	3.1	4.0	2.5	2.8	3.5	2.8-3.4	2.6-3.2
Banco Mercantil del Norte S.A. Institucion de Banca Multiple Grupo Financiero Banorte	Mexico	2.0	2.8	1.4	1.4	1.6	1.7-2.1	1.9-2.3
Banco Nacional de Desenvolvimento Economico e Social	Brazil	0.5	2.1	(0.0)	0.2	(0.8)	0.2-0.2	0.2-0.3
Bancolombia S.A. y Companias Subordinadas	Colombia	1.9	4.0	1.2	1.6	2.9	2.2-2.7	2.1-2.6
Caixa Economica Federal	Brazil	1.6	1.5	1.3	1.7	1.8	1.5-1.9	1.5-1.8
Middle East and Africa								
Abu Dhabi Commercial Bank PJSC	U.A.E.	1.1	1.6	1.1	1.1	1.2	1.0-1.2	0.9-1.1
Al Rajhi Bank	Saudi Arabia	0.7	0.8	0.6	0.4	0.3	0.3-0.4	0.3-0.4
Arab National Bank	Saudi Arabia	0.8	1.1	0.8	0.6	0.7	0.5-0.7	0.6-0.7

Cost Of Risk: Top Global 200 Banks By Region (6 of 11)

Region and bank	Country	2019a	2020a	2021a	2022a	2023a	2024f	2025f
Middle East and Africa (continued)								
BankMuscat S.A.O.G.	Oman	0.6	0.9	0.6	0.6	0.6	0.6-0.7	0.5-0.7
Banque Misr	Egypt	0.3	0.5	2.1	1.2	2.1 §	1.5-1.9	1.2-1.5
Banque Saudi Fransi	Saudi Arabia	0.7	2.0	0.6	0.9	0.9	0.8-0.9	0.8-0.9
Commercial Bank (P.S.Q.C.) (The)	Qatar	1.2	1.7	1.4	1.2	0.9	1.0-1.2	1.1-1.3
First Abu Dhabi Bank PJSC	U.A.E	0.5	0.6	0.6	0.6	0.6	0.7-0.8	0.7-0.9
FirstRand Ltd.	South Africa	0.9	1.9	1.1	0.6	0.8	0.8-1.0	0.8-1.0
Mashreqbank	U.A.E	1.5	4.2	2.5	0.5	(1.3)	0.5-0.6	0.5-0.6
National Bank of Egypt	Egypt	2.2	0.8	1.4	1.3	1.6 §	1.7-2.1	1.2-1.5
National Bank of Kuwait S.A.K.	Kuwait	0.8	1.4	0.7	0.2	0.5	0.5-0.6	0.5-0.6
Nedbank Group Ltd.	South Africa	0.8	1.6	0.8	0.9	1.1	0.9-1.1	0.8-0.9
Qatar National Bank (Q.P.S.C.)	Qatar	0.5	0.8	1.0	1.1	1.1	1.1-1.2	1.1-1.2
Riyad Bank	Saudi Arabia	0.6	1.1	0.4	0.6	0.8	0.7-0.8	0.7-0.8
Saudi National Bank	Saudi Arabia	0.5	0.6	0.9	0.3	0.2	0.3-0.4	0.4-0.4
North America								
Ally Financial Inc.	U.S.	0.8	1.2	0.2	1.1	1.4	0.9-1.1	0.7-0.9
American Express Co.	U.S.	2.4	3.5	(1.1)	1.4	2.7	2.0-2.5	1.8-2.2
Bank of America Corp.	U.S.	0.4	1.1	(0.5)	0.2	0.4	0.5-0.6	0.5-0.6
Bank of Montreal	Canada	0.2	0.7	0.0	0.1	0.4	0.5-0.6	0.7-0.8
Bank of New York Mellon Corp.	U.S.	(0.0)	0.6	(0.4)	0.1	0.2	0.1-0.1	0.1-0.1

Cost Of Risk: Top Global 200 Banks By Region (7 of 11)

Region and bank	Country	2019a	2020a	2021a	2022a	2023a	2024f	2025f
North America (continued)								
Bank of Nova Scotia (The)	Canada	0.5	1.0	0.3	0.2	0.4	0.5-0.6	0.5-0.6
Canadian Imperial Bank of Commerce	Canada	0.3	0.6	0.0	0.2	0.4	0.4-0.5	0.3-0.4
Capital One Financial Corp.	U.S.	2.4	3.9	(0.7)	2.0	3.3	3.1-3.7	2.4-3.0
Citigroup Inc.	U.S.	1.2	2.3	(0.6)	0.8	1.3	1.2-1.5	1.0-1.2
Citizens Financial Group Inc.	U.S.	0.4	1.1	(0.3)	0.3	0.5	0.4-0.5	0.4-0.5
Comerica Inc.	U.S.	0.2	1.0	(0.8)	0.1	0.2	0.3-0.4	0.4-0.5
Desjardins Group	Canada	0.2	0.4	0.0	0.1	0.2	0.1-0.2	0.1-0.2
Discover Financial Services	U.S.	3.5	5.5	0.2	2.3	5.0	4.6-5.6	2.8-3.5
East West Bancorp Inc.	U.S.	0.3	0.5	(0.1)	0.2	0.3	0.3-0.3	0.2-0.3
Fifth Third Bancorp	U.S.	0.5	1.0	(0.3)	0.5	0.4	0.4-0.5	0.4-0.4
First Citizens BancShares Inc.	U.S.	0.1	0.2	(0.1)	1.3	1.4	1.0-1.2	1.0-1.3
Goldman Sachs Group Inc. (The)	U.S.	0.7	1.7	0.2	1.1	0.4	0.5-0.6	0.4-0.5
Huntington Bancshares Inc.	U.S.	0.4	1.4	0.0	0.3	0.3	0.4-0.4	0.3-0.4
JPMorgan Chase & Co.	U.S.	0.6	1.6	(0.9)	0.6	0.7	0.6-0.7	0.5-0.6
KeyCorp	U.S.	0.5	1.0	(0.4)	0.4	0.4	0.4-0.5	0.4-0.5
M&T Bank Corp.	U.S.	0.2	0.8	(0.1)	0.5	0.5	0.5-0.6	0.5-0.6
Morgan Stanley	U.S.	0.1	0.3	0.0	0.2	0.2	0.2-0.2	0.2-0.2
National Bank of Canada	Canada	0.2	0.5	0.0	0.1	0.2	0.2-0.3	0.3-0.3
Northern Trust Corp.	U.S.	(0.0)	0.3	(0.2)	0.0	0.1	0.1-0.1	0.2-0.2

Cost Of Risk: Top Global 200 Banks By Region (8 of 11)

Region and bank	Country	2019a	2020a	2021a	2022a	2023a	2024f	2025f
North America (continued)								
PNC Financial Services Group Inc. (The)	U.S.	0.3	1.3	(0.3)	0.2	0.2	0.3-0.4	0.3-0.4
Popular Inc.	U.S.	0.6	1.0	(0.7)	0.3	0.6	0.8-1.0	0.8-1.0
Regions Financial Corp.	U.S.	0.5	1.6	(0.6)	0.3	0.6	0.5-0.6	0.5-0.6
Royal Bank of Canada	Canada	0.3	0.7	(0.1)	0.1	0.3	0.4-0.5	0.5-0.6
State Street Corp.	U.S.	0.0	0.3	(0.1)	0.1	0.1	0.2-0.2	0.1-0.1
Synchrony Financial	U.S.	4.7	6.3	0.9	3.8	6.1	5.1-6.2	4.0-4.9
Synovus Financial Corp.	U.S.	0.3	0.9	(0.3)	0.2	0.4	0.5-0.6	0.4-0.5
Toronto-Dominion Bank	Canada	0.4	1.0	(0.0)	0.1	0.3	0.4-0.5	0.5-0.6
Truist Financial Corp.	U.S.	0.3	0.8	(0.3)	0.3	0.7	0.6-0.8	0.6-0.8
U.S. Bancorp	U.S.	0.5	1.2	(0.4)	0.6	0.6	0.6-0.7	0.6-0.7
Webster Financial Corp.	U.S.	0.2	0.7	(0.3)	0.8	0.3	0.5-0.6	0.4-0.5
Wells Fargo & Co.	U.S.	0.3	1.4	(0.5)	0.2	0.6	0.4-0.5	0.4-0.5
Zions Bancorporation N.A.	U.S.	0.3	1.3	(0.3)	0.2	0.2	0.3-0.4	0.3-0.4
Western Europe								
ABN AMRO Bank N.V.	Netherlands	0.2	0.9	(0.0)	0.0	(0.1)	0.2-0.2	0.2-0.2
AIB Group PLC	Ireland	0.0	2.4	(0.4)	0.0	0.3	0.2-0.2	0.2-0.3
Banco Bilbao Vizcaya Argentaria S.A.	Spain	1.1	1.4	0.9	1.0	1.2	1.3-1.6	1.3-1.6
Banco Comercial Portugues S.A.	Portugal	0.9	1.2	0.9	0.9	0.8	0.6-0.8	0.6-0.7
Banco BPM SpA	Italy	0.7	1.3	0.8	0.7	0.5	0.6-0.7	0.6-0.7

Cost Of Risk: Top Global 200 Banks By Region (9 of 11)

Region and bank	Country	2019a	2020a	2021a	2022a	2023a	2024f	2025f
Western Europe (continued)								
Banco de Sabadell S.A.	Spain	0.5	1.2	0.7	0.6	0.5	0.6-0.7	0.5-0.6
Banco Santander S.A.	Spain	1.1	1.4	0.8	1.1	1.3	1.2-1.5	1.1-1.3
Bank Hapoalim B.M.	Israel	0.4	0.6	(0.4)	(0.0)	0.5	0.4-0.5	0.3-0.4
Bank Leumi le-Israel B.M.	Israel	0.2	0.9	(0.3)	0.1	0.6	0.5-0.7	0.4-0.4
Bank of Ireland Group PLC	Ireland	0.3	1.4	(0.3)	0.3	0.6	0.3-0.4	0.3-0.4
Banque et Caisse d'Epargne de l'Etat, Luxembourg	Luxembourg	(0.0)	0.2	(0.2)	0.2	0.5	0.4-0.5	0.3-0.4
Barclays PLC	U.K.	0.6	1.5	(0.2)	0.4	0.6	0.5-0.6	0.5-0.6
Belfius Bank SA/NV	Belgium	0.1	0.5	0.0	0.1	0.1	0.1-0.1	0.1-0.1
BNP Paribas	France	0.4	0.7	0.4	0.4	0.4	0.4-0.4	0.4-0.4
BPCE	France	0.2	0.4	0.2	0.3	0.2	0.2-0.3	0.2-0.3
Groupe Credit Mutuel	France	0.3	0.5	0.2	0.2	0.2	0.2-0.3	0.2-0.3
CaixaBank, S.A.	Spain	0.3	1.1	0.5	0.3	0.4	0.4-0.5	0.3-0.4
Commerzbank AG	Germany	0.3	0.7	0.2	0.3	0.2	0.2-0.3	0.2-0.4
Cooperatieve Rabobank U.A.	Netherlands	0.2	0.5	(0.1)	0.1	0.2	0.2-0.3	0.2-0.3
Groupe Credit Agricole	France	0.2	0.4	0.2	0.3	0.3	0.2-0.4	0.2-0.4
Danske Bank A/S	Denmark	0.1	0.4	0.0	0.1	0.0	0.1-0.1	0.1-0.1
DekaBank Deutsche Girozentrale	Germany	0.1	0.8	0.0	0.2	0.6	0.1-0.3	0.1-0.3
Deutsche Bank AG	Germany	0.2	0.4	0.1	0.3	0.3	0.3-0.4	0.2-0.3
DNB Bank ASA	Norway	0.1	0.6	(0.1)	(0.0)	0.1	0.2-0.2	0.1-0.1

Cost Of Risk: Top Global 200 Banks By Region (10 of 11)

Region and bank	Country	2019a	2020a	2021a	2022a	2023a	2024f	2025f
Western Europe (continued)								
DZ Bank AG Deutsche Zentral-Genossenschaftsbank Frankfurt am Main	Germany	0.2	0.4	(0.1)	0.1	0.2	0.1-0.1	0.1-0.2
Erste Group Bank AG	Austria	0.0	0.8	0.1	0.2	0.1	0.2-0.2	0.2-0.2
Eurobank S.A	Greece	1.5	5.0	1.3	1.0	1.3	0.7-0.9	0.6-0.7
HSBC Holdings PLC	U.K.	0.3	0.8	(0.1)	0.4	0.4	0.3-0.4	0.3-0.4
Iccrea Banca SpA	Italy	1.3	0.9	1.3	0.5	0.4	0.7-0.9	0.7-0.9
ING Groep N.V.	Netherlands	0.2	0.4	0.1	0.3	0.1	0.2-0.2	0.2-0.2
Intesa Sanpaolo SpA	Italy	0.6	1.0	0.6	0.7	0.4	0.5-0.6	0.5-0.6
Israel Discount Bank Ltd.	Israel	0.4	0.9	(0.3)	0.2	0.6	0.6-0.7	0.4-0.5
J. Safra Sarasin Holding Ltd.	Switzerland	0.5	0.1	(0.1)	0.4	0.2	0.0-0.2	0.0-0.2
KBC Group N.V.	Belgium	0.1	0.7	(0.2)	0.1	(0.0)	0.1-0.1	0.1-0.2
Lloyds Banking Group PLC	U.K.	0.3	0.9	(0.3)	0.3	0.1	0.2-0.3	0.2-0.3
Mediobanca SpA	Italy	0.5	0.9	0.4	0.6	0.5	0.5-0.7	0.5-0.6
Mizrahi Tefahot Bank Ltd.	Israel	0.2	0.5	(0.1)	0.2	0.5	0.4-0.4	0.3-0.3
National Bank of Greece S.A.	Greece	0.9	3.4	0.3	0.9	1.0	0.6-0.7	0.5-0.6
Nationwide Building Society	U.K.	0.1	0.1	(0.0)	0.1	0.1	0.1-0.1	0.1-0.1
NatWest Group PLC	U.K.	0.2	0.9	(0.3)	0.1	0.2	0.1-0.2	0.1-0.2
Nordea Bank Abp	Finland	0.2	0.3	0.0	0.0	0.1	0.1-0.1	0.1-0.1
Nykredit Realkredit A/S	Denmark	0.1	0.2	0.0	0.0	(0.0)	0.0-0.0	0.0-0.0
OP Financial Group	Finland	0.1	0.2	0.2	0.1	0.3	0.2-0.3	0.2-0.3

Cost Of Risk: Top Global 200 Banks By Region (11 of 11)

Region and bank	Country	2019a	2020a	2021a	2022a	2023a	2024f	2025f
Western Europe (continued)								
OTP Bank PLC	Hungary	0.5	1.6	0.3	1.2	0.4	0.2-0.3	0.2-0.2
PostFinance AG	Switzerland	0.1	0.3	(0.0)	0.3	0.1	0.0-0.1	0.0-0.1
Raiffeisen Bank International AG	Austria	0.5	0.8	0.2	1.1	0.4	0.6-0.7	0.7-0.9
Raiffeisen Schweiz Genossenschaft	Switzerland	0.0	0.0	0.0	0.0	0.0	0.0-0.0	0.0-0.0
RCI Banque	France	0.4	0.7	0.1	0.4	0.3	0.3-0.4	0.3-0.4
Skandinaviska Enskilda Banken AB (publ)	Sweden	0.2	0.4	0.0	0.1	0.1	0.1-0.1	0.1-0.1
Societe Generale	France	0.3	0.7	0.2	0.3	0.2	0.3-0.3	0.3-0.3
Standard Chartered PLC	U.K.	0.4	0.8	0.1	0.3	0.2	0.3-0.4	0.3-0.4
Svenska Handelsbanken AB	Sweden	0.1	0.0	0.0	0.0	0.0	0.0-0.0	0.0-0.0
Swedbank AB	Sweden	0.1	0.3	0.0	0.1	0.1	0.1-0.2	0.1-0.1
UBS Group AG	Switzerland	0.0	0.2	(0.0)	0.0	0.2	0.1-0.1	0.1-0.1
UniCredit SpA	Italy	0.7	1.1	0.4	0.4	0.1	0.4-0.5	0.4-0.5
Volkswagen Bank GmbH	Germany	0.2	0.4	(0.3)	0.3	0.3	*	*
Zuercher Kantonalbank	Switzerland	0.0	0.1	0.0	0.0	0.0	0.1-0.2	0.1-0.2

*On July 1, 2024, Volkswagen Bank GmbH's (VW Bank's) ultimate parent, Volkswagen AG, reorganized its financial services entities and VW Bank now owns a leasing entity, Volkswagen Leasing GmbH. In light of this reorganization, we are revising our cost of risk forecasts for this bank. §--forecast. The annual periods shown refer to the financial reporting year for each bank. For example, for the Indian banks in the table, the data in the column for 2023 refers to March 31, 2024. N.M.--Not meaningful. Source: S&P Global Ratings.

Related Research

Global:

- [Global Credit Conditions Q3 2024: Soft Landing, Fragmenting Trajectories](#), July 1, 2024

Asia-Pacific:

- [Asia-Pacific Financial Institutions Monitor 2Q 2024: As Good As It Gets](#), April 18, 2024

Americas:

- [Signs Of Stability Are Emerging Amid Challenging Conditions In Real Estate](#), July 2, 2024
- [LatAm Financial Institutions Monitor Q2 2024: Solid Profitability Despite Weakened Asset Quality](#), June 10, 2024

Europe, Middle East, and Africa:

- [EMEA Financial Institutions Monitor 2Q2024: Robust Profitability, Resilient Performance](#), May 31, 2024

Contacts

Osman Sattar

Director

osman.sattar@spglobal.com

Brendan Browne

Managing Director

brendan.browne@spglobal.com

Mohamed Damak

Managing Director

mohamed.damak@spglobal.com

Cynthia Cohen Freue

Managing Director

cynthia.cohenfreue@spglobal.com

Gavin Gunning

Managing Director

gavin.gunning@spglobal.com

Elena Iparraguirre

Director

elena.iparraguirre@spglobal.com

Ming Tan

Director

ming.tan@spglobal.com

Natalia Yalovskaya

Director

natalia.yalovskaya@spglobal.com

Research contributor

Mehdi El mrabet

Associate Director

mehdi.el-mrabet@spglobal.com

Copyright © 2024 by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED, OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses, and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw, or suspend such acknowledgement at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal, or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.spglobal.com/ratings (free of charge) and www.ratingsdirect.com (subscription) and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.spglobal.com/ratings/usratingsfees.

Australia: S&P Global Ratings Australia Pty Ltd holds Australian financial services license number 337565 under the Corporations Act 2001. S&P Global Ratings' credit ratings and related research are not intended for and must not be distributed to any person in Australia other than a wholesale client (as defined in Chapter 7 of the Corporations Act).

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.

spglobal.com/ratings

S&P Global
Ratings