



CIO Special

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Global Banks: Complex challenges and compelling opportunities

Key takeaways

- Global banks: Heterogenous sector with some global features and many regional differences.
- European banks: Advantages due to years of tight regulation, a solid capital base, sound liquidity and strong earnings dynamics.
- Large U.S. banks: Strong balance sheets to weather challenging macro environment, muted outlook for earnings.
- Regional U.S. banks: Difficult environment largely in the price, low valuations reflecting limited secular earnings potential.
- APAC banks: An even more mixed bag, exciting opportunities in India, a special situation in Japan, limited upside potential in China and Australia.

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01 Introduction

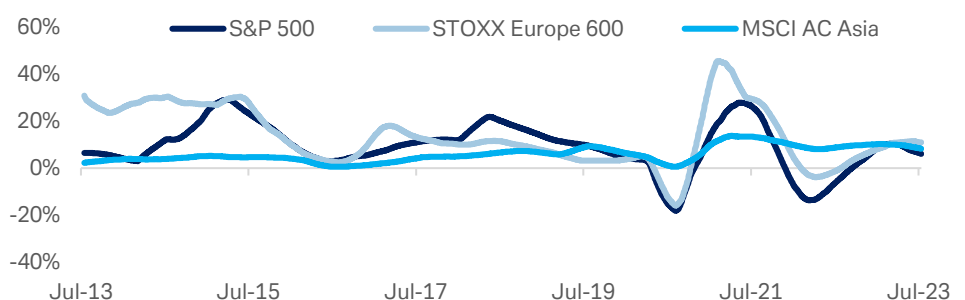
Following the turmoil in the financial sector in March this year, the banking sector has regained some of the confidence of investors. Since the end of Q1 STOXX Europe 600 banks (+18%) have outperformed the other regions in USD terms. However, S&P 500 banks (+16%) and APAC banks (represented by the Bloomberg APAC Banks Index, +11%) have also performed well.

Although they are sector peers, banks operate in contrasting economic and regulatory environments as well as in fundamentally different regions. It should also be noted that the relevant APAC banks are not only spread across more countries with more heterogeneous economic developments than their U.S. and European counterparts, but as a result the respective central bank policies sometimes diverge sharply, i.e. PBoC and BoJ in accommodative mode versus the rest of the APAC central banks in or at the end of their respective tightening cycles.

To provide a clearer picture of the underlying factors, we dissect the European, U.S. and APAC banking sectors in this Special.

In the medium term we continue to favour European banks over their U.S. peers but note that investors willing to look beyond the short-term headwinds may find interesting opportunities in the U.S. – given the advanced pricing of downside. We also highlight potentially rewarding diversification opportunities in APAC countries, such as India and Japan.

Figure 1: NTM EPS growth of banks in selected indices



Source: Refinitiv Datastream, Deutsche Bank AG. Data as of July 14, 2023.



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Our preference for European banks over U.S. banks is based on our assessment of better capitalisation; more favourable deposit, credit and earnings dynamics; established and extensive regulation, especially for small and mid-sized banks, which unlike in the U.S. are already subject to the same standards as their larger peers; and lower credit exposure to the commercial real estate sector, whose subsegments face structural headwinds.

Despite these attributes, European banks are trading at lower valuations. While European banks have price-to-earnings (P/E) ratios of 6.7x, as measured by expected earnings over the next 12 months, their U.S. and Asian peers are valued at earnings multiples of 9.6x and 7.3x respectively. In addition, STOXX 600 banks offer the most attractive dividend yield of 7.2%, complemented by a 4% buyback yield.

02 European Banks: Our favourites

In recent years, European banks and regulators have made great efforts to increase financial stability. Banks have built capital, deleveraged, reduced credit risk, and improved liquidity. In addition, earnings dynamics have strengthened, fuelled by the end of the zero-interest rate environment. Accordingly, European banks may have the best fundamentals in their history. It is little surprise then that European institutions have performed well in the Fed's and the European Banking Authority's (EBA) recent stress tests (UK banks also showed strong resilience in the BoE stress test) and enter the upcoming final stages of Basel III implementation (also known as Basel IV) on a strong footing. The new regime, which involves standardising the determination of capital and liquidity requirements, will take effect in 2025, with the phase-in period lasting until the end of 2030. Although the tightening of standards is expected to reduce Common Equity Tier 1 (CET1) capital by nearly 100 bps by 2025, according to banks, and by 250 bps by 2028, according to the EBA, the changes appear to be quite feasible for European banks. Listed institutions have large capital buffers, averaging more than 400 bps above the minimum requirements. These are well supported by earnings, which are expected to generate more than 200 bps of capital annually in 2023 and 2024. Hence, increasingly stringent requirements are unlikely to affect banks' ability to return capital to shareholders in the coming years.

In addition, commercial real estate (CRE), whose office and retail segments have come under pressure due to the digitisation trends of e-commerce and working-from-home as well as higher interest rates, represents only a low risk for European banks. CRE loans account for less than 10% of loan books and are evenly distributed across all banks – in contrast to the U.S., where CRE loans are mainly found at small and medium-sized institutions.

Last but not least, this year marks the end of the eight-year build-up phase of the Single Resolution Fund (SRF), an emergency fund designed to finance restructuring in the event of a bank failure. The SRF is part of the Single Resolution

Mechanism (SRM) and contributes to the financial stability of the Banking Union. In 2023, European banks will pay EUR11.3bn into the SRF, which will then reach its target size of just under EUR78bn, or 1% of covered deposits. Conversely, the end of the build-up phase also means that credit institutions will incur a good EUR10bn less in costs from 2024, which should benefit earnings in the coming year.

In terms of the broader earnings backdrop, recent data painted a favourable picture for Q2. Net interest income (NII) is on track to grow slightly more than 3% in Q2 2023 compared to the previous quarter. Compared to the same month last year, margins on existing loans increased by an average of 36% in April due to higher interest rates. Given the more expensive financing conditions for customers, loan growth weakened but remained solid, increasing 3.5% YoY in April. Deposits grew moderately by 1.6% YoY. However, the increase was mainly due to rising time deposits, which entail higher funding costs for banks. Overall, however, the pass-through of higher policy rates to customers (deposit beta) has not yet accelerated significantly, indicating that there is sufficient liquidity in the system as banks have not entered a bidding war. Currently, banks pass on about 30% of the key interest rate to their customers, while the historical average is about 40%. While there may be some headwinds to banks' funding costs following the repayment of targeted longer-term refinancing operations (TLTROs) on June 28, the liquidity coverage ratio (LCR), which measures the extent to which estimated outflows in a 30-day stress scenario are covered by high-quality liquid assets, is expected to be more than 35 ppts above the minimum requirement of 100%, providing little evidence of urgent and thus costly liquidity building needs. Given our expectations of a robust economy and the absence of a recession, credit growth should continue at moderate levels while deposits stagnate, and loan loss provisions decline in 2024 as headwinds from inflation and higher interest rates ease. In addition, the ECB is likely to raise its deposit rate to 4% towards the end of this year, providing ample headroom for NII growth. NII may therefore peak only later this year, with aggregate NII in 2024 exceeding the current year's level. On a less encouraging note, investment banking revenues are expected to remain subdued due to a normalisation of the strong trading segment, which had benefited from increased volatility in previous quarters.

The P/E of 6.7x based on expected next-twelve-month (NTM) earnings and its discount of almost 50% to the overall market seems attractive. STOXX 600 banks offer the highest expected dividend yield among all European sectors at 7.2%, complemented by a buyback yield of around 4%. Given the stable fundamentals and economic environment, shareholder returns should remain in double digits, totaling more than 30% for the period from 2023 to 2025. In addition, given the low share prices, the buybacks are likely to lead to a significant reduction in the number of shares, which should have a noticeable impact on future EPS.



03 Uncertainty weighing on the large U.S. Banks

There seems to be little wrong with the current fundamentals of the major U.S. banks. On June 28, the Fed announced the results of its annual bank stress tests. All 23 participating lenders passed the test, which exposed banks' balance sheets to a simulated severe recession. The negative shock included unemployment rising to 10% and commercial and residential real estate prices falling 40% and 38% respectively. Potential losses totalled USD541bn, with the bulk coming from defaults on credit cards, commercial and industrial loans, and mortgages. Commercial real estate (CRE) losses totalled 12%, illustrating their relatively low significance for large U.S. banks. Despite the large aggregate losses, the average common equity tier 1 (CET1) ratio would fall only 2.3 ppts to 10.1%, 0.4, 0.1, and 0.3 ppt less than in the previous 3 years. The smaller decline is due in part to higher interest rates, which, unlike in the preceding years, leaving room for policy rate cuts that would in turn support banks' securities portfolios. Despite the encouraging results, which imply lower capital requirements and could free up capacity for buybacks and dividends, the major banks may decide to remain disciplined and continue to expand their capital ratios, much to the chagrin of shareholders.

Currently, the capital requirement for large banks consists of several components: of a minimum CET1 of 4.5% which is identical for all banks, supplemented by the Stress Capital Buffer (SCB) and a surcharge for Global Systemically Important Banks (G-SIB). While the SCB is equal to the annual stress test capital requirement but at least 2.5%, some banks are close to moving up into the G-SIB category as their balance sheets have grown, leading to higher surcharges.

In addition, the so-called Basel III endgame, the final implementation of the Basel III standards was proposed by bank regulators this July. It includes standardized and more extensive approaches for determining risk-weighted assets (RWA), which indicate how much capital banks must back various transactions with to reflect or absorb the respective risk. The result: rising capital requirements. According to estimates, these are set to rise by an average of 16% for U.S. banks, whereby large banks could be more affected with an increase of 19% than small and medium-sized institutions. This corresponds to higher CET1 requirements of up to about 250 bps for large banks. While large banks have added an average of about 100 bps of CET1 annually over the past 5 years, the routine appears to be more challenging given the current economic slowdown and could lead to lower or even temporary suspension of buybacks. In addition to mitigation risk and building capital, banks could also reduce RWAs by shedding less profitable businesses, which in turn would weigh on overall revenues and earnings. This proposal is still being discussed in the financial industry until the end of November, before being successively implemented between July 2025 and July 2028.

Last but not least, according to a proposal made in May, the Federal Deposit Insurance Corp (FDIC) intends to recoup

USD15.8bn in losses incurred due to the March bank run by charging an additional 0.125% annually for two years on uninsured deposits of more than USD5bn. If the proposed rule goes into effect, it could create a low-single-digit EPS headwind for large banks starting in June 2024.

In terms of the operating environment, competition for deposits has increased and is likely to continue as large amounts of Treasury bills are issued, related to the replenishment of the Treasury General Account (TGA), and money market funds keep absorbing liquidity. Since the end of Q1 2023, total deposits at large U.S. banks have declined by about 2%. To maintain liquidity, banks are raising deposit rates. However, as the Fed nears the end of its rate hike cycle and loan growth slows, banks are losing their ability to offset the rising funding costs, which ultimately impacts their net interest margins (NIM). Net interest income (NII) may have contracted by nearly 5% from the previous quarter, with downside risks if deposit betas, the share of the policy rate that banks pass on to customers, have increased more than expected. Estimates point to a nearly 10% decline in EPS if the cumulative deposit beta for 2023 were to rise to 50% from the current expectation of about 40%. Non-interest-bearing deposits, which have already declined in recent quarters but remain at high levels, point to further room for outflows and/or rising funding costs for banks. Furthermore, loan growth is levelling off with only credit card volumes standing in the way of a decline as loan demand slows and banks become more selective in choosing their borrowers due to more expensive funding and default probabilities that are normalising from low levels along with non-performing loans and loan loss provisions. Last but not least, investment banking (IB) revenues and fees remain strained by the high interest rate environment and subsiding volatility which harms trading. Median revenues across IB segments (equity trading, FICC and fees) are expected to be down 20% YoY in Q2.

Valuations are attractive but may be deceptive. The S&P 500 Banks Index trades at 9.6x expected next-twelve-months (NTM) earnings, nearly 17% below the median valuation of the sector over the past 20 years. The discount to the broader market is a whopping 48%, nearly 25 ppts higher than has been typical in the past. However, given the macroeconomic as well as regulatory headwinds, and eroding fundamentals, large U.S. banks may lack a catalyst for a quick recovery. Instead, the road to new highs could be slow and bumpy, as hurdles will (probably) have to be overcome step by step.



04 Regional U.S. banks: Difficult environment largely in the price

In March stress in the U.S. regional banking sector sent the KWB Regional Bank Index tumbling to a YTD-low of -31% in mid-May. Since then, the index has bounced but it still trades significantly below pre-March levels. From here we think that the sector should continue to trade sideways as there are no positive catalysts in sight and investors remain concerned about higher deposit costs, the banks' exposure to commercial real estate (CRE) as well as stricter regulation. Against the backdrop of rock-bottom valuations, the sector looks attractive, though.

Deposit runs were the biggest concerns for investors in March following reports about deposit rotations from regional to systemically important financial institutions (SIFI), which are generally perceived as less risky. Indeed, initially Fed data showed large deposit outflows at smaller banks. However, in recent weeks outflows have slowed significantly and regional banks say that they have turned out to be lower than feared.

Still, regional banks have found it more difficult to retain deposits as the environment has become much more competitive. Hence the regionals are paying higher interest rates and offering more attractive service fees, which weighs on profitability. During Q1 earnings calls and intra-quarter updates almost all regional banks guided to higher deposit betas and analysts expect the average bank to report a beta in the low 50% region in the upcoming earnings season. This compares to only 35% in Q1. Together with higher cost promotions the rise in deposit betas could lead to the largest quarterly increase in deposit costs to date at 80 bps for the average bank. Net interest margins (NIM) are consequently expected to decline by roughly 20-25 bps to 3.25-3.2% in Q2 from 3.45% in Q1 and 3.55% in Q4 2022.

There are certainly risks that banks could guide to even higher deposit betas during Q2 reporting calls as some companies want to showcase their ability to grow deposits and try to attract asset inflows via aggressive promotions. Hence it is unlikely that the upcoming reporting season will provide a meaningful boost to investor sentiment. However, we think that the worst could be over for the decline in NIMs. While deposit costs should rise further through 2023, the pace of increases will decline from here and consequently the quarterly decline in NIMs should peak in Q2 too.

This is based on the assumptions that the Fed is nearing the end of its hiking cycle and that the largest part of the rotation from non-interest-bearing deposits (NIB) to higher rate products/accounts has already taken place. Since the beginning of the year assets in NIB deposits at U.S. banks (including large caps) have declined by almost 20% to USD4tn. Most of the companies and private clients that were looking to move to interest-bearing deposits have done so by now.

Along with higher deposit costs another headwind for regional banks comes from moderating loan demand. However, Fed data shows that demand is holding up so far. During the second quarter loans given out by small banks increased at an annualised rate of almost 9% YoY, which is higher than the 6%

reported in Q1. By contrast, loan growth at large banks has decreased at a rate of -0.3% so far during Q2, driven by a decline in commercial & industrial (-3.7%) and commercial real estate loans (-3.1%). With the growth cycle slowing we expect the banks to improve credit quality and reduce bank lending to build liquidity. Banks have guided for loan growth in the mid-single-digit range, which could be a touch too high.

The banks' lending to commercial real estate has been an increasing focus of investors, who have become more concerned about the segment, and these banks have begun to provide more detailed disclosure on CRE exposure. Investors' interest is understandable as the CRE segment is challenged by higher interest rates and borrowing costs and higher vacancy rates following a structural shift towards remote working. Concerns have been fuelled by headlines about defaults of large real estate firms and fire sales at large discounts to appraisals. Small and medium-sized banks are disproportionately exposed to the CRE sector. Out of the USD3.6tn of CRE loans outstanding, banks account for USD2.2tn. Banks with assets of less than USD250bn are responsible for 80% and banks with assets of less than USD100bn hold 43% of these loans.

So far, however, regional banks have said that losses from CRE have been limited. Nevertheless, banks expect headwinds to build and plan to reduce exposure to the segment, particularly to offices. For investors it should be a relief to see that on average only 4% of total CRE loans are due within the next 9 months. Debtors of these loans are particularly challenged amid the rise in interest rates and with many banks less willing to make new CRE loans. We also highlight that delinquency rates on CRE loans have remained very low so far at 0.7%. This compares to a long-term average of 3.3% and peak rates of almost 9% during the GFC. However, we do not want to downplay the risks around CRE which are certainly real, but we argue that the risks are concentrated at specific banks and depend on office and regional factors. For example, high-rise office buildings in San Francisco, Los Angeles or Manhattan have higher vacancy rates because these cities are more affected by working-from-home trends and layoffs in the IT sector. Meanwhile, the same office segment is doing well in cities like Miami or Tampa which have seen their populations grow over the past years.

Additionally, regulation is expected to become stricter for larger regional banks in the foreseeable future as regulators propose to broaden some capital rules making them also mandatory for banks that have assets of USD100bn and more. Importantly, the proposal does not change any requirements for banks with fewer assets.

For banks that would become subject to the new regulation there are two key changes:

- 1) They must consider unrealized gains and losses from available-for-sale securities when calculating their regulatory capital ratios. So far, this is only mandatory for the largest banks with assets of more than USD700bn or an international business.



2) Banks would need to expand the calculations of risk weighted assets by a second method that also considers banks' operational risks.

While it is early days to estimate the effects for regional banks it seems clear that they will build capital in the coming years. This could weigh on profitability. However, given the reform is not becoming fully effective in the next couple of years, the immediate impact should be limited.

To be clear here, we think that tighter regulation will strengthen regional banks in the long term.

In summary, there is not much to get excited about in regional banks. On the flip side we think that at current valuations a lot of pessimism is already in the price. The median regional bank trades at 1.1x tangible book value. This compares to a historical valuation range of 1.8-2.0x. On average, the implied cost of equity, calculated by dividing the returns on tangible equity by P/B, stands at 14.4%, which is very elevated compared to typical levels of 8-9%. Hence although risks remain elevated, we think rather than underweighting the sector, a neutral stance is warranted due to its low valuation. However, we do not believe that the sector will outperform in H2.

05 APAC Banks

Since March 22, the trough of the recent banking turmoil, APAC banks have gained around 5% including dividends (in USD terms, as of July 11), led by Indian and Japanese institutions (around +13% each), while Australian banks have been almost flat at around 3% and Chinese banks lagging at -5%. On a historical comparison, the average valuation of APAC banking stocks looks undemanding, with both the next 12 months (NTM) P/E ratio of 7.3x and the NTM P/B ratio of 0.7x trading around 10% and 6% below their 10-year median, respectively. Furthermore, on average APAC banks offer investors an expected dividend yield of 4.2% – almost double the broad APAC equity average.

In terms of market capitalisation, the APAC banking sector is dominated by Chinese (37%), Indian (17%), Australian (14%), and Japanese (12%) banks, accounting for a combined 80% of the sector's total market cap and representing 70% of the current 55 listings. Thus, a differentiated look at the banking landscape in these major countries could provide investors with important clues for future investment decisions.

Since the beginning of the year, Chinese banks have been in the midst of the country's reopening of economic and social life. While significant loan growth in the first quarter was mainly driven by strong frontloaded financing of infrastructure projects and seasonality, loan and credit growth during the second quarter slowed to 9.3% YoY in June.

After the People's Bank of China (PBoC) cut its benchmark one- and five-year loan prime rates (LPRs) in June, many analysts expect another small LPR cut of 10 bps in the second half of the year. To create further room for lending rate cuts, going forward Beijing may allow its commercial banks to lower deposit rates, which are an important source of funding.

Recently, Chinese banks have been weighed down by concerns about growing risks from rising non-performing loans from the troubled real estate sector, shrinking NIMs, and their exposure to Local Government Financing Vehicles (LGFVs) – investment companies mainly financing infrastructure projects for local governments.

Against the backdrop of shrinking margins and subdued loan growth, earnings expectations for the sector have been revised down by -0.7% for 2023 and by -1% for 2024 during the last three months. The industry's NTM P/E ratio is now below 4x and the P/B ratio is below 0.5x, more than 30% and 45% below their respective 10-year medians. This makes the valuation of Chinese banks the lowest among major APAC banks. While low valuations are fuelling hopes for upside in Chinese bank stocks, some analysts warn of a further correction as high exposure to local government debt might further hurt earnings growth through shrinking profit margins, putting more pressure on capital formation and dividend payouts.

After a weak first quarter, Indian banks performed in line with the rally in Indian equities in the second quarter, fuelled by strong foreign investment inflows. In its latest June report, S&P Global Ratings upgraded its country risk assessment of the Indian banking industry from Group 6 to Group 5, with Group 1 representing the lowest risk and Group 10 the highest risk country banking systems. Going forward, the rating agency expects the Indian banking system to maintain its solid performance.

India's credit growth appears to have stabilised at a high 15.4% YoY in June, after posting a decade high of 17.4% as of mid-December last year. Going forward, credit growth is expected to remain strong, supported by improving macroeconomic developments and an investment cycle that is gaining momentum on the back of strong public infrastructure investment and both domestic and foreign private fixed asset investment as India is seen as one of the main beneficiaries of multinationals' supply chain diversification.

Supported by a faster pass-through of rising interest rates to lending versus deposit rates, Indian banks reported a significant improvement in NIMs as the higher proportion of floating rate loans against predominantly fixed rates deposits allowed them to efficiently price in RBI's rate hikes. With RBI's hiking cycle nearing its end and banks focusing on improving deposit mobilisation, NIMs are expected to compress to around 3% in the current fiscal year (FY) 2024, from an estimated average of around 3.2% in FY 2023. However, declining borrowing costs on the back of continued good asset quality should help support the overall profitability of the Indian banking sector.

Over the past three months, earnings estimates for Indian banks have been downgraded by -0.2% for 2023 and -0.6% for 2024, bringing expected NTM earnings growth to 14.2%, or 1.5 times the average of regional peers (9.0%). The valuation of Indian banks is significantly higher than the regional average on both NTM P/E (15.9x vs. 7.3x) and NTM P/B (2.4x vs. 0.7x). However, from a historical perspective, Indian bank valuations appear less



demanding, with both ratios around 13% and 7% below their respective 10-year medians. While the recent strong rally in Indian banks could trigger a near-term consolidation, we believe that they remain attractive for medium-term investors as they should benefit from India's strong structural growth potential.

In the second quarter, Japanese banks not only outperformed their regional peers in APAC (except for Indian banks), but also the broader Japanese equity market by more than four percentage points. Speculation that the Bank of Japan (BoJ) would widen or abolish its Yield Curve Control (YCC), the permissible range of long-term interest rate fluctuations, led to buying in anticipation of an improving earnings environment for Japanese banks. At its meeting in late July, the BoJ promised greater flexibility in its YCC by announcing that it would purchase 10-year Japanese government bonds at a yield of 1.0% each business day in fixed rate operations, effectively widening the tolerance band of the YCC by a further 50 basis points to 1.0%. In addition, preliminary lending and deposit trends for May showed that total lending by banks and credit unions increased by 3.4% YoY. This was not only the third consecutive month of growth, but also the highest level since March 2009 (excluding the Covid pandemic period). An increase in corporate demand for credit amid rising inflation and negative real interest rates raises expectations of rising bank profits going forward.

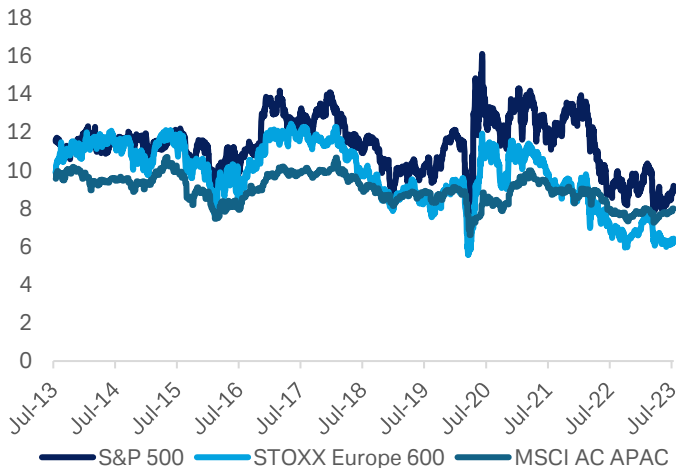
Accordingly, over the past three months, expected earnings for Japanese banks have been upgraded by 5.2% for 2023 and 3.9% for 2024, the largest upgrades among major APAC banks. With expected NTM earnings growth of 10.3%, Japanese banks currently trade at 9.8x their NTM earnings, which is around 10% above their 10-year median and above the APAC average of 7.3x, making Japanese bank stocks potentially less attractive. However, with domestic credit growth at the upper end of the 20-year range and the BoJ undertaking tiny steps of policy normalization, the business outlook for the Japanese banking sector looks favourable, underpinning earnings forecasts for the major banks, which analysts expect to be in line with a return on

equity of around 6%.

On the back of growing recession fears, expected earnings for Australian banks have been revised downwards over the past three months, by a good 6% for the fiscal year starting in July 2023 and almost 5% for FY2024. Though growth in housing loans jumped to almost 6% YoY in May, mortgages remain sensitive to interest rate rises, and low transaction levels suggest that homeowners are in no hurry to sell at lower prices, which are influenced by median household borrowing capacity. To be sure, Australian banks have largely removed rebates on mortgage refinancing, which has improved the overall profitability of the home loan business. However, according to analysts, after months of intense competition, interest margins on current new home loans are likely to be 20-35 basis points below those on older mortgages. With high levels of rollovers of existing mortgages expected in the future, pressure on Australian banks' funding margins may persist for the time being. Furthermore, annualised business loan growth fell to just over 5% in May from almost 13% in April, likely reflecting lower planned investments in anticipation of slowing growth momentum.

In the FY 2023, bank deposit growth of Australian banks rose by 6% year-on-year because of higher interest rates and a correspondingly higher demand for deposits. However, with the average peak deposit rate for Australia's larger banks rising to 4.5% in May (from 1.1% a year earlier), the pressure on their net interest margins and earnings expectations has increased markedly. Should expected NTM earnings growth – now at -4% – turn out to be still too elevated, upside potential for Australia's banking stocks might be limited going forward. With an NTM P/E ratio at 9.8x and an NTM P/B ratio at 1.4x, valuations of Australian banks are valued roughly in line with their 10y-median.

Figure 2: NTM P/E ratio of banks in selected indices



Source: Refinitiv Datastream, Deutsche Bank AG. Data as of July 14, 2023.



Glossary

Asia-Pacific (APAC) is the part of the world near the western Pacific Ocean. The Asia-Pacific region includes countries in East Asia, Southeast Asia, and Oceania that border the Pacific Ocean.

The **Bank of England (BoE)** is the UK central bank.

The **Bank of Japan (BoJ)** is the central bank of Japan.

Basel IV is a proposed standard on capital reserves for banks.

Common Equity Tier 1 (CET1) is a component of Tier 1 capital that is primarily common stock held by a bank or other financial institution.

Commercial real estate (CRE) are properties that is primarily used to conduct business and provide income to the property owner.

The **European Banking Authority (EBA)** is an independent EU Authority regulatory agency across the European banking sector.

Earnings per share (EPS) are calculated as a companies' net income minus dividends of preferred stock all divided by the total number of shares outstanding.

The **European Central Bank (ECB)** is the central bank for the Eurozone.

The **Eurozone** is formed of 20 European Union member states that have adopted the euro as their common currency and sole legal tender.

EUR is the currency code for the euro, the currency of the Eurozone.

The **Federal Deposit Insurance Corporation (FDIC)** is an independent agency created by Congress to maintain stability and public confidence in the nation's financial system.

A regulated clearing organization that deals with the confirmation, settlement, and delivery of fixed-income assets in the United States is known by the name **Fixed Income Clearing Corporation (FICC)**.

Banks above a cut-off score are identified as **G-SIBs** and are allocated to buckets that will be used to determine their higher loss absorbency requirement.

In order to guarantee that financial institutions can continue to meet short-term obligations, the **liquidity coverage ratio (LCR)** refers to the percentage of highly liquid assets held by those institutions.

NTM stands for next twelve months in the context of earnings and thus price/earnings ratios.

The **People's Bank of China (PBoC)** is the central bank of the People's Republic of China.

Price/book (P/B) ratios measure a company's share price relative to its tangible assets.

Price/earnings (P/E) ratios measure a company's current share price relative to its per-share earnings. In this context, LTM refers to last twelve months' earnings.

Recovery and Resilience Plan (RRP or in Italian PNRR) is Italy's investment and reform plan for recovery from the Covid-19 emergency approved by the EU.

Risk-weighted assets (RWA) is a term used to determine minimum capital bank need to keep as reserve to reduce the risk of insolvency.

The **Stoxx Europe 600** includes 600 companies across 18 European Union countries.

A **systemically important financial institution (SIFI)** is a bank, insurance company, or other financial institution whose failure might trigger a financial crisis.

The **Single Resolution Fund (SRF)** is an emergency fund that can be called upon in times of crisis.



Glossary

The **single resolution mechanism (SRM)** is a central institution for bank resolution in the EU, and one of the main components of the banking union.

Stress Capital Buffer (SCB) is the mandatory capital that financial institution needs to hold in addition to other minimum capital requirement.

Targeted long-term refinancing operations (TLTROs) are used by the ECB to provide financing to Eurozone banks.

The **Treasury General Account (TGA)** is the U.S. government's operating account that is maintained by designated depositories, primarily Federal Reserve Banks and their branches, to handle daily public money transactions.

The **yield curve** shows the different rates for bonds of differing maturities but the same credit quality.

Yield Curve Control (YCC) is a monetary policy action whereby a central bank purchases variable amounts of government bonds or other financial assets in order to target interest rates at a certain level



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