

A large, dark grey rectangular overlay with a white diagonal line. The word 'BANKING' is written in large, white, bold, sans-serif capital letters. To the left of the text is a small icon of a bar chart with blue and orange bars.

BANKING

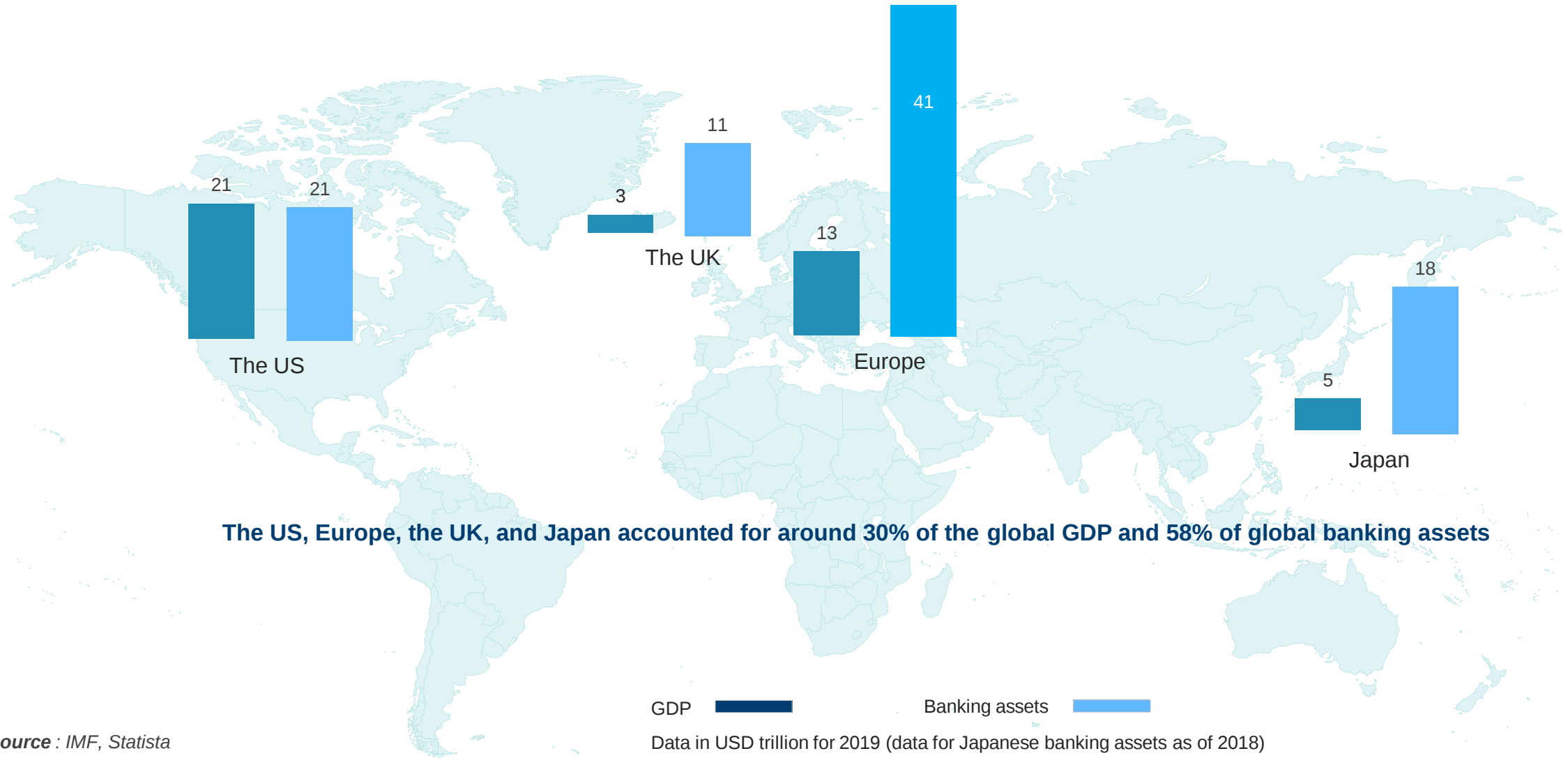
A dark grey rectangular overlay with a blue diagonal line. The word 'DATA' is written in white, bold, sans-serif capital letters. Below it, a blue progress bar is shown with the text 'downloading 70% c'. To the right is a blue folder icon. A finger is pointing at the bottom right of this overlay.

DATA
downloading 70% c

Banking Series: Testing Times Ahead for Global Banks

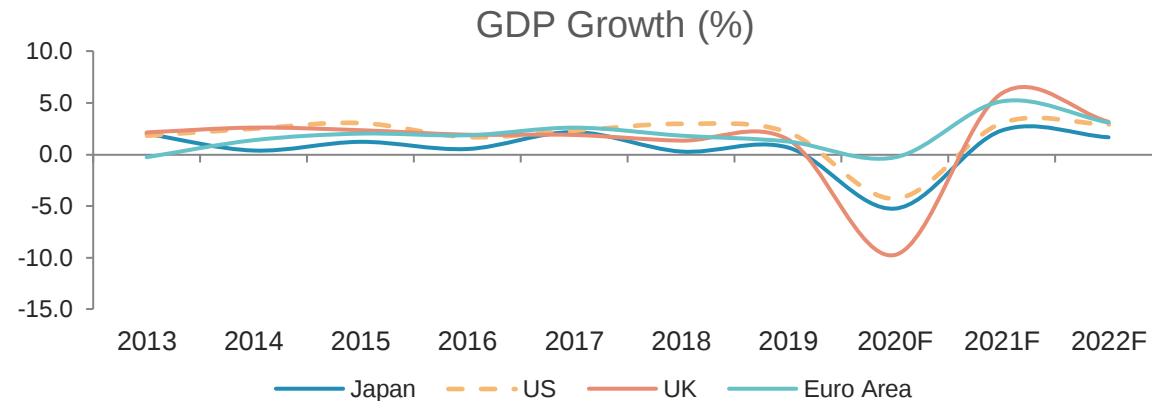
US - Europe - Japan Comparison

The US, Europe, and Japan – Most developed economies in the world, supported by strong banking systems

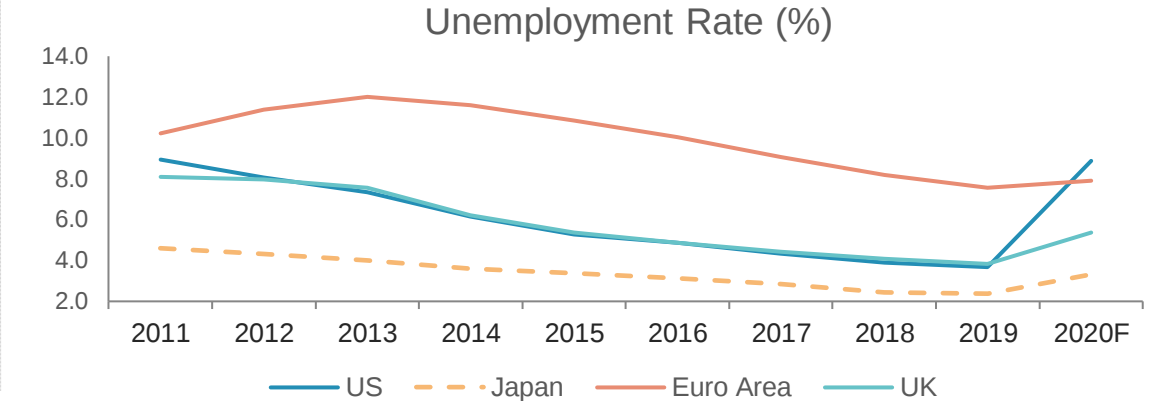


Macro indicators: GDP, unemployment, inflation, interest rates

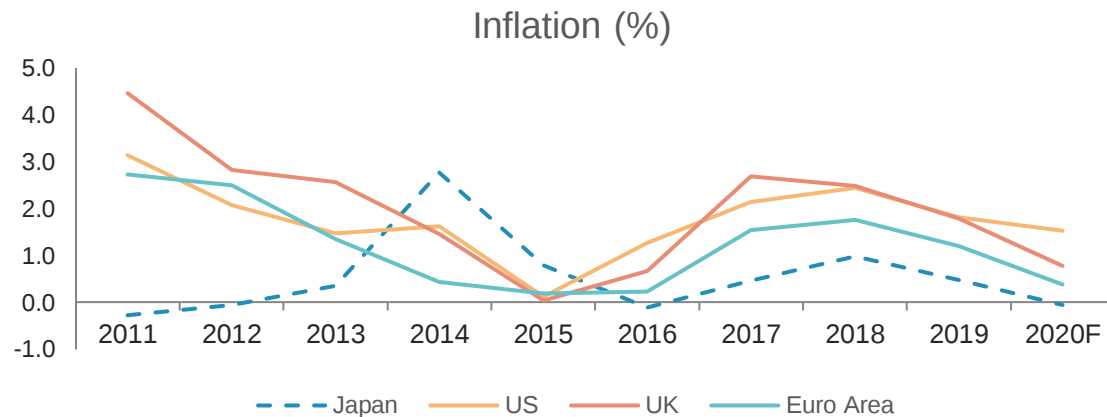
The US continues to grow faster compared with the UK, Europe, and Japan.



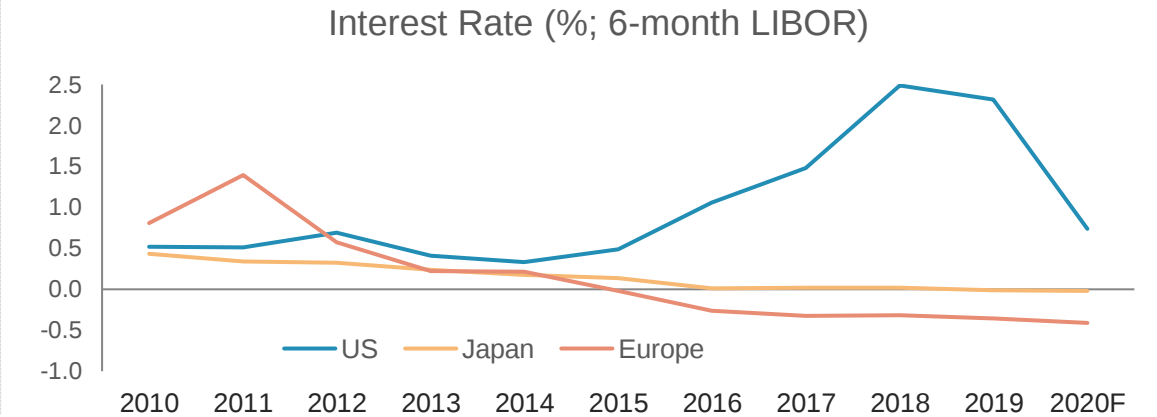
Japan leads with the lowest unemployment rate over 2010–19.



Japan persisted with low inflation over 2010–19.



Interest rates in Europe and Japan have been close to 0% or negative during the past few years.



Source: IMF

Key Takeaways

- **European banks** have the highest Non-performing Loans (NPL) ratios compared with US and Japanese banks. This is primarily attributed to riskier corporate loan books of European banks. However, after the 2008 financial crisis, due to stricter ECB measures to strengthen capital ratios, European banks were better capitalized than those in the other two regions to withstand the economic impact of the pandemic.
- **US banks** have been most aggressive in frontloading the provisions in 1H20, as indicated by the highest Cost of Risk (CoR) compared with European and Japanese banks. This was mainly due to the loan portfolio composition of the US banks being skewed toward unsecured consumer lending in the form of credit cards, while European and Japanese banks were backed by mortgages. This nature of the loan book is also indicated by the US banks having the highest reserve ratio (accumulated credit losses as a percentage of gross loans).
- **Japanese banks** have the lowest Net Interest Margin (NIM) due to negative interest rates since 2016. To mitigate the negative interest rate risk, Japanese banks have gradually shifted toward other sources of income (mainly including net fee and commission income), as indicated by the highest non-interest income as a percentage of total income. Japanese banks have the highest Cost to Income ratio (C/I), representing higher administrative expenses led by various services offered for free or at low costs compared with US and European banks.

***Note:** Analyses were based on three key parameters across the US, Japan, and Europe: Asset Quality, Capitalization, and Cost Efficiency. Average value of data points as on 1H20 was considered for analyses. The following banks were considered in each region: The US – JPMorgan Chase & Co., Citigroup, Bank of America, Wells Fargo; Japan – SMFG, MUFG, Mizuho FG; Europe – HSBC, Barclays, BNPP, CASA, Santander, Deutsche Bank, Societe Generale.*

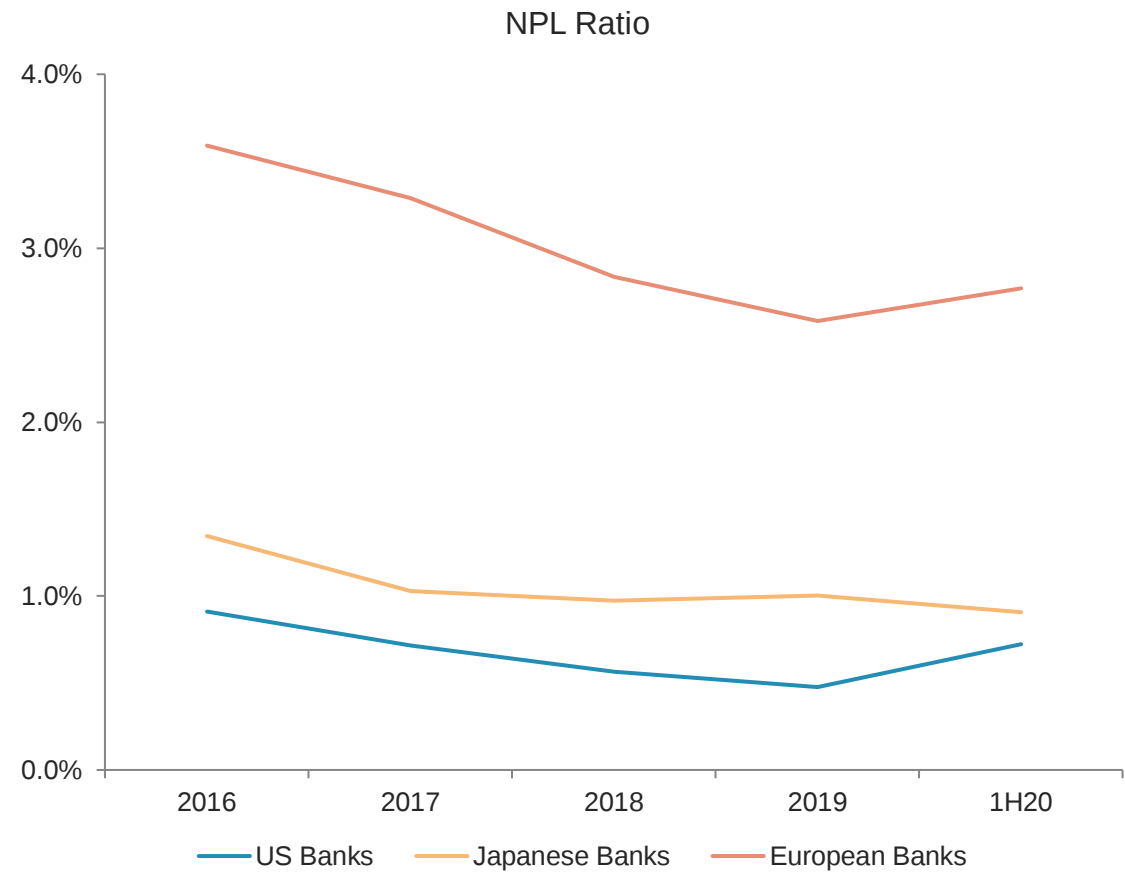
Asset Quality and Capitalization

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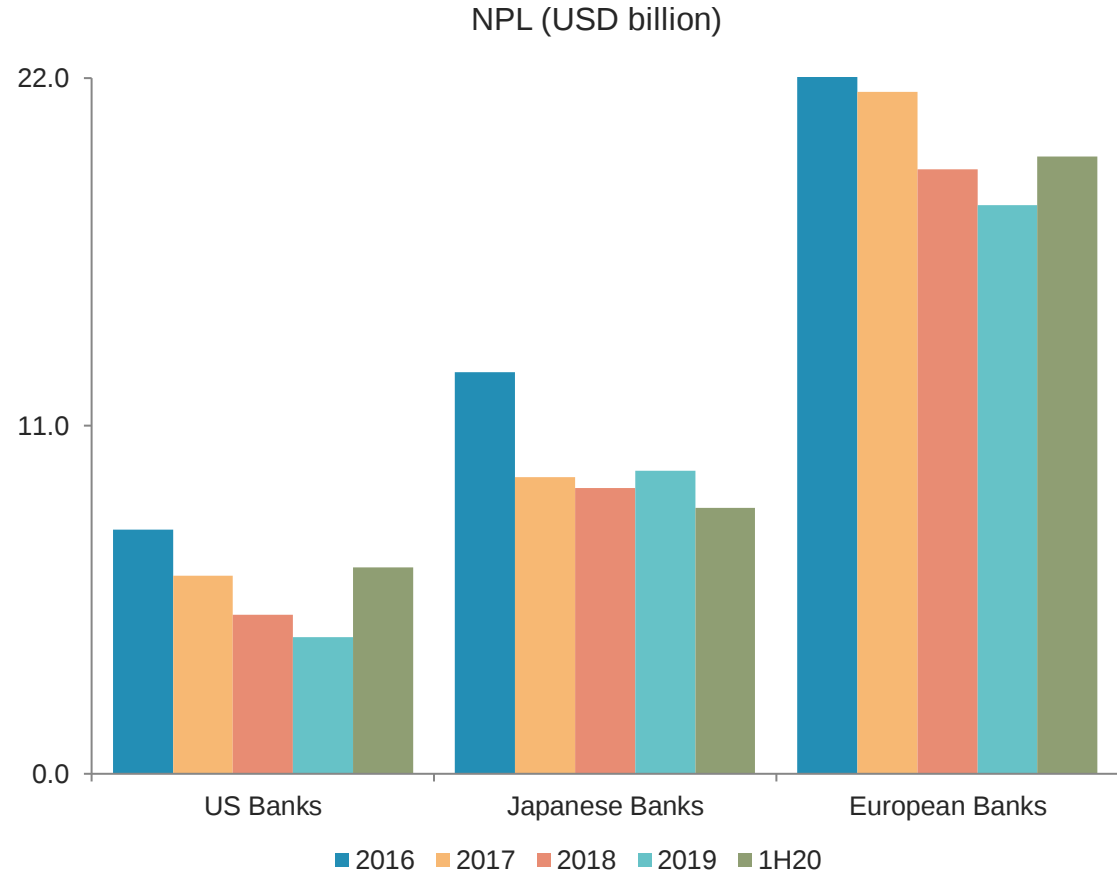
Historically higher NPL exposure of European banks compared with US and Japanese banks

Early signs of asset quality deterioration across the US and Europe, ascribed to the pandemic, are indicated by the reversal in the trend of the rising NPL ratio.



Source: Bank Filings, Aranca Research

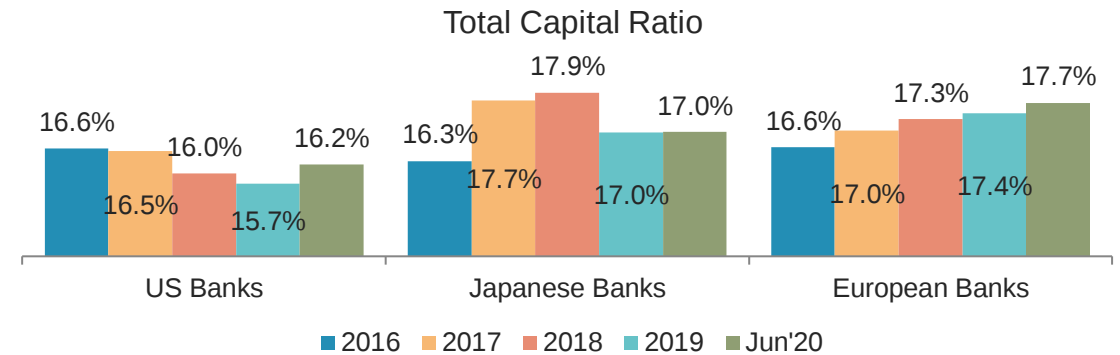
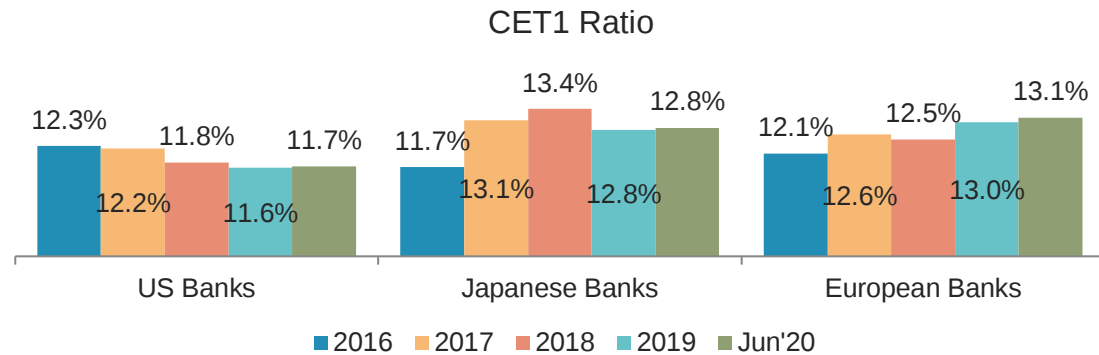
Historically, European banks have been the most prudent in recognizing NPLs.



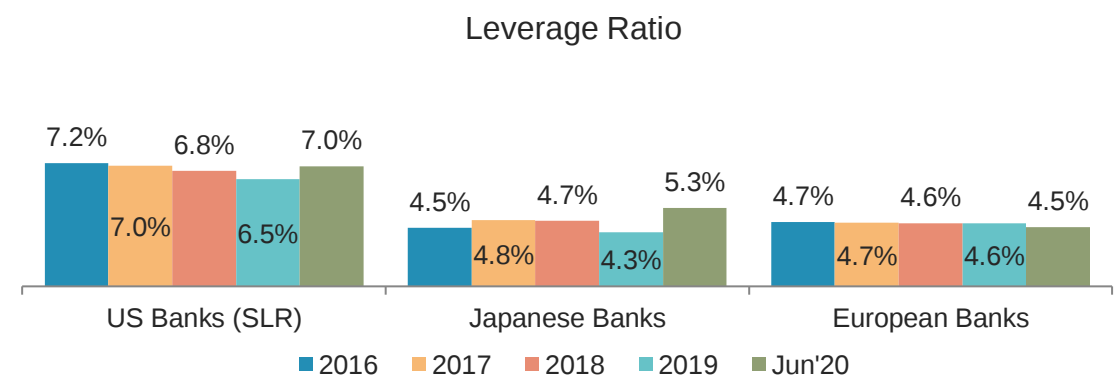
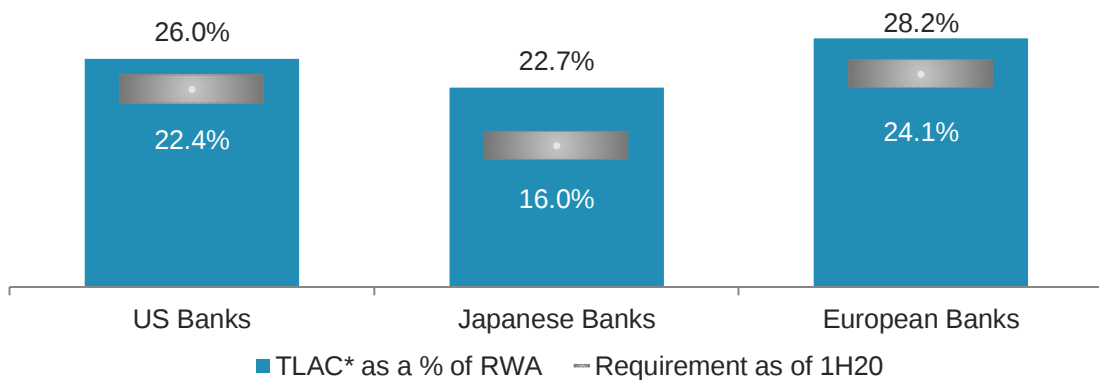
Source: Bank Filings, Aranca Research

European banks better capitalized to absorb higher NPLs than US and Japanese banks

European banks were better capitalized at the onset of the COVID-19 crisis. Capital ratios across all the regions improved in 1H20 due to measures from ECB, including restriction on dividend payments and regulatory reliefs on Risk Weighted Assets (RWA) recognition.



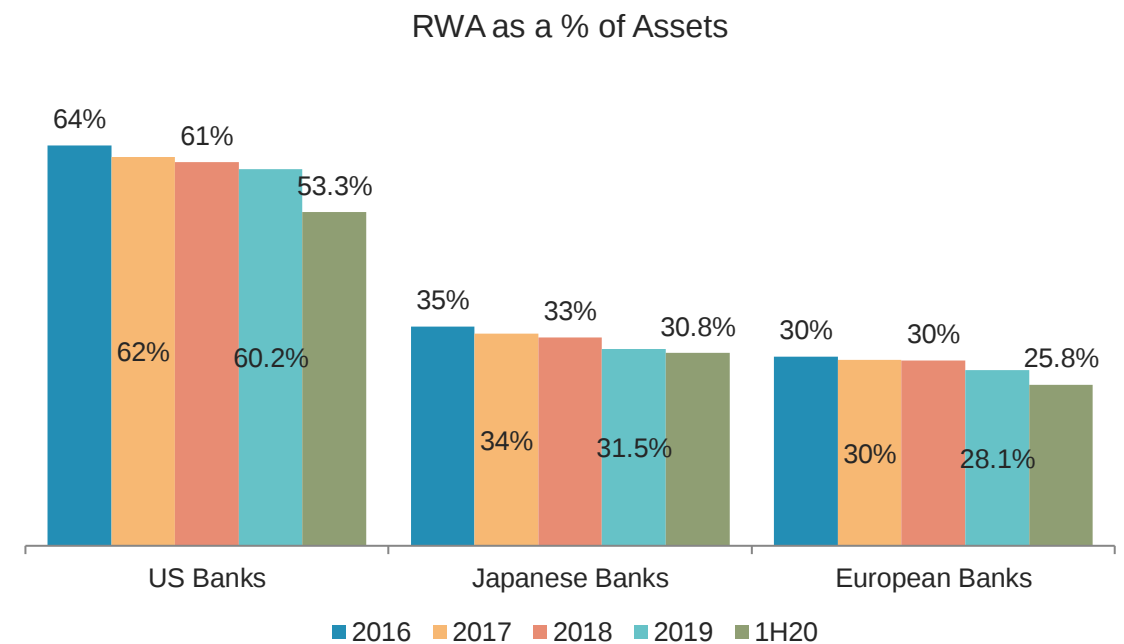
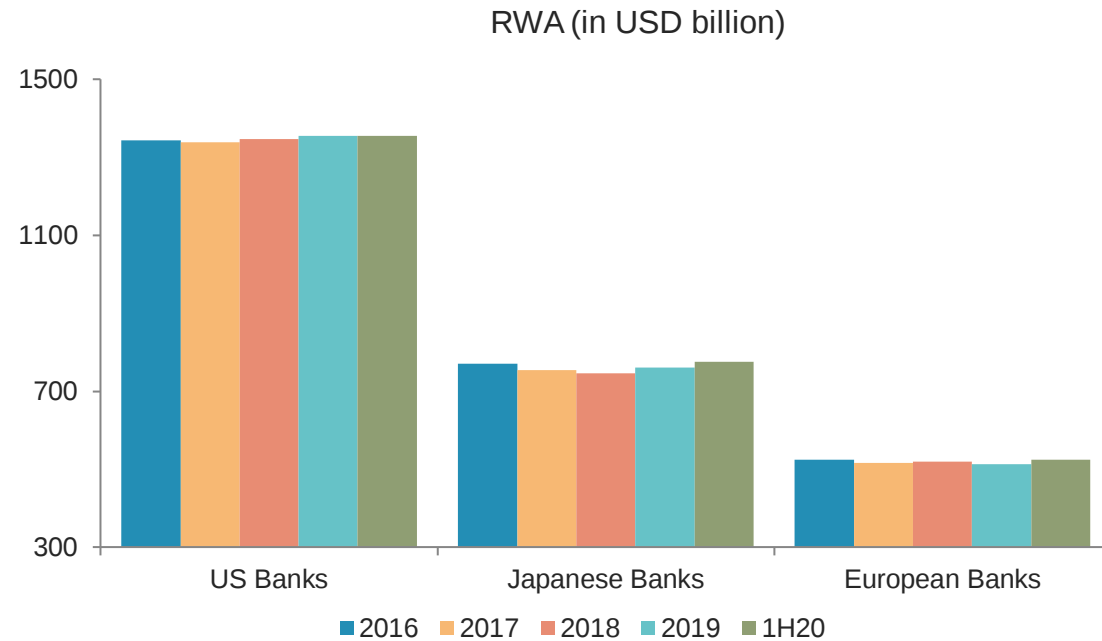
Due to stringent ECB capitalization requirements, capital ratios for European banks increased. In contrast, the capital ratios for US and Japanese banks deteriorated in the past couple of years.



*Total Loss Absorbing Capacity (TLAC)

Source: Bank Filings, Aranca Research

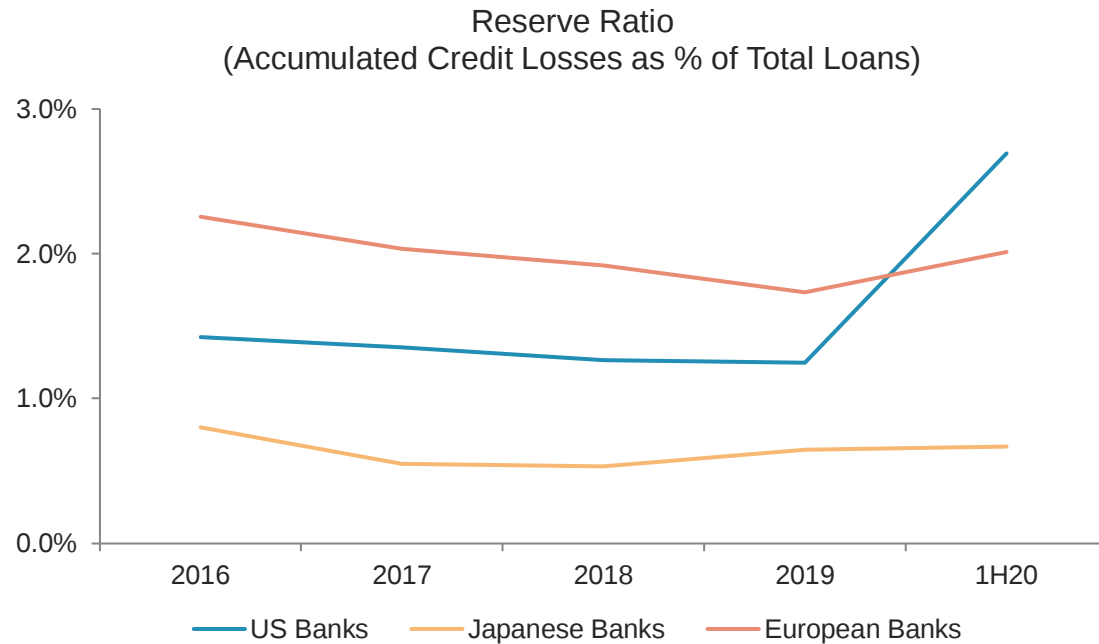
Highest unsecured consumer loan composition of US banks, indicated by highest RWA density



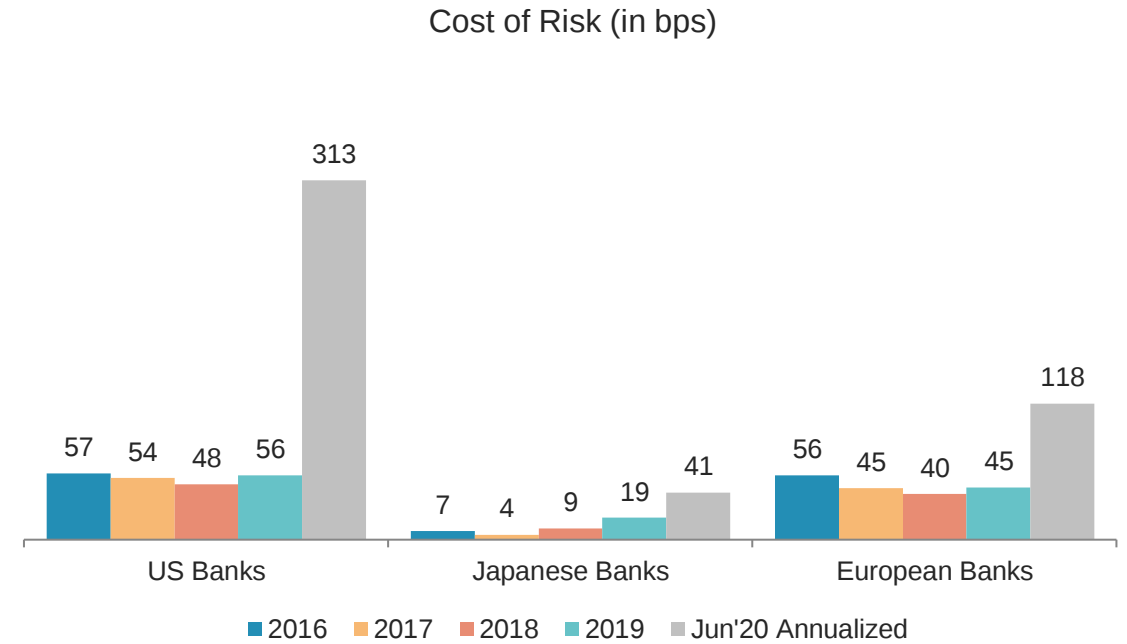
Source: Bank Filings, Aranca Research

- US banks have the highest RWA density, indicative of the nature of loan books being skewed toward unsecured consumer lending through credit cards.
- Half of the loan books of European banks comprised housing mortgages. Thus, European banks have the lowest RWA density.
- Japanese banks' loan books mainly comprised secured corporate loans on account of lending to established, high-quality corporate clients.

US banks most aggressive in frontloading bad loan provisions due to unsecured consumer loan books



Source: Bank Filings, Aranca Research



- Historically, the Reserve Ratio has been stable across the three regions. European banks have the highest Reserve Ratio, due to the highest number of NPLs.
- Despite the lower NPL ratio and Reserve Ratio compared with European banks, US banks have comparable CoR to European banks due to the tendency of incurring higher cash impact from loan loss provisions.
- During 1H20, provisioning increased significantly for European and US banks. US banks were the most aggressive in provisioning due to the nature of their loan books. In anticipation of future loan losses due to pandemic, US banks reported the highest CoR compared with European and Japanese banks. Japanese banks were the most resilient in recognizing loan loss provisions.

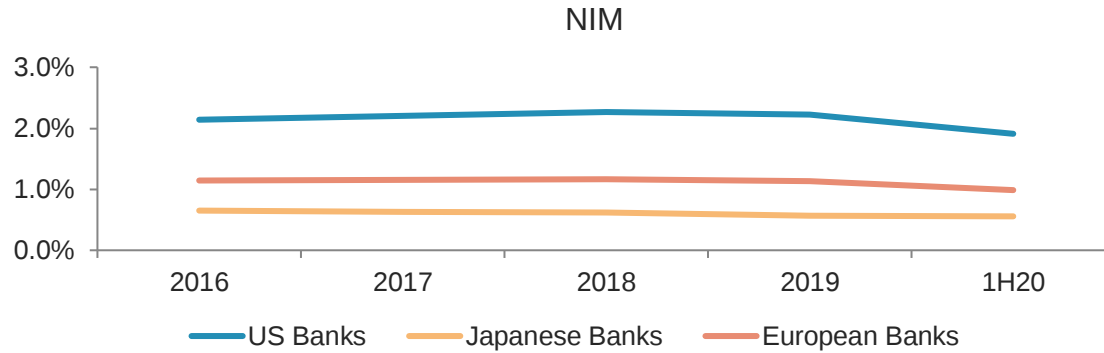
Cost Efficiency

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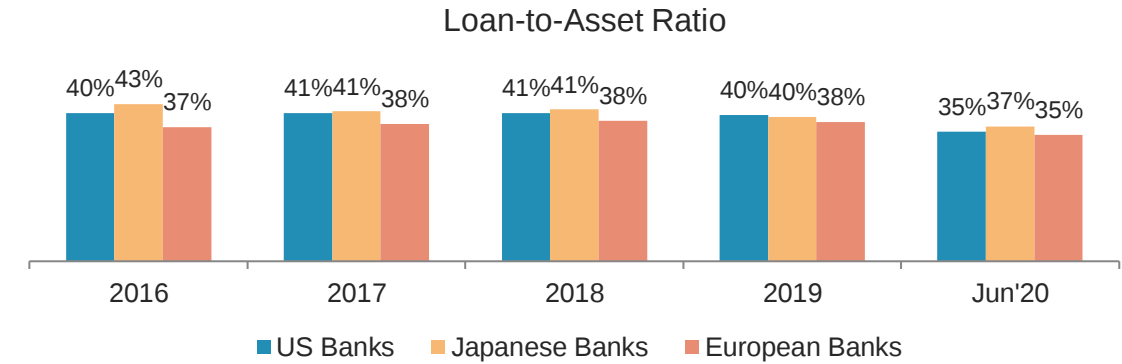


Lowest NIMs recorded by Japanese banks, impacted by prolonged negative interest rates

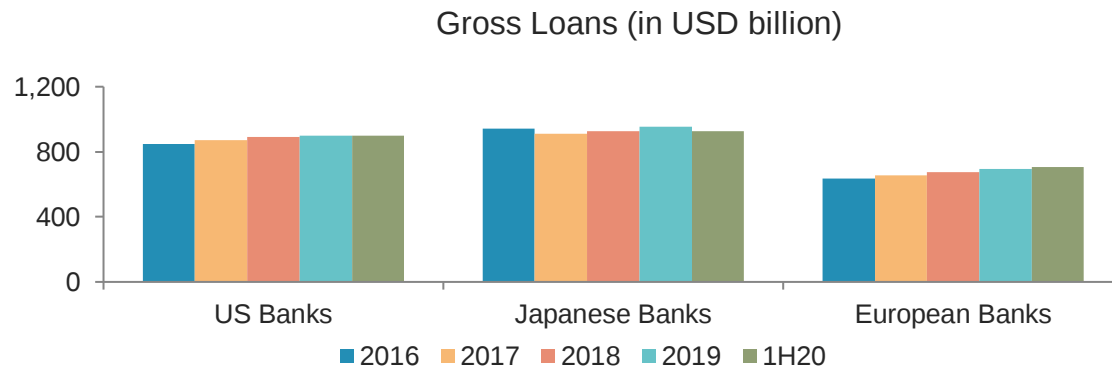
Historically, NIMs of Japanese banks have been lower than 1% due to negative interest rates since 2016. In contrast, US and European banks have relatively higher interest rates.



Despite the loan-to-asset ratio being in line with that of European and US banks, Japanese banks have the lowest NIMs.

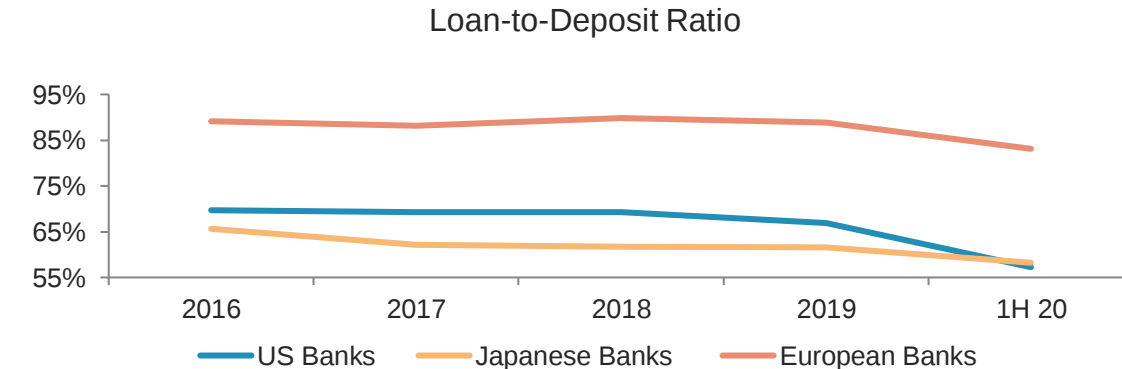


Loan books across the regions have remained stable in absolute terms.



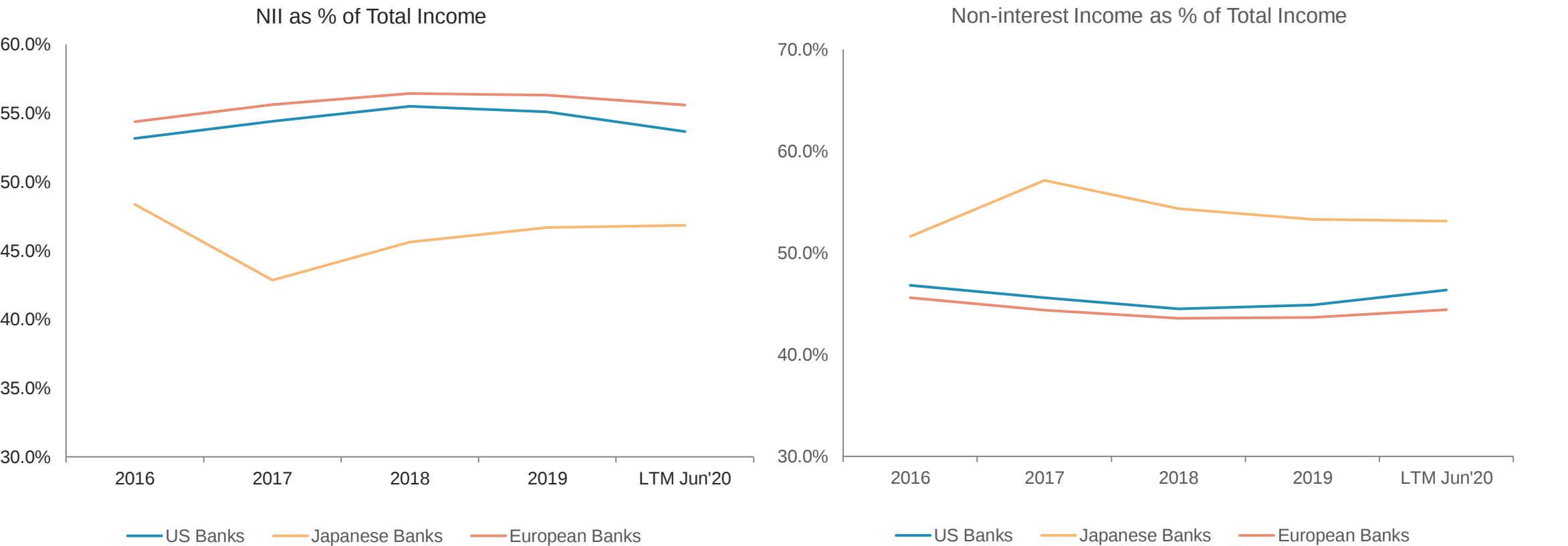
Source: Bank Filings, Aranca Research

Prolonged pressure on NIMs forced Japanese banks to shift focus from the lending business to fee-based business, leading to continuous fall in loan-to-deposit ratio.



Lower NIMs encouraging Japanese banks to diversify into other businesses, resulting in higher share of non-interest income

US and European banks generate more than 50% of the income from Net Interest Income (NII), unlike Japanese banks, indicating higher sensitivity to interest rates.

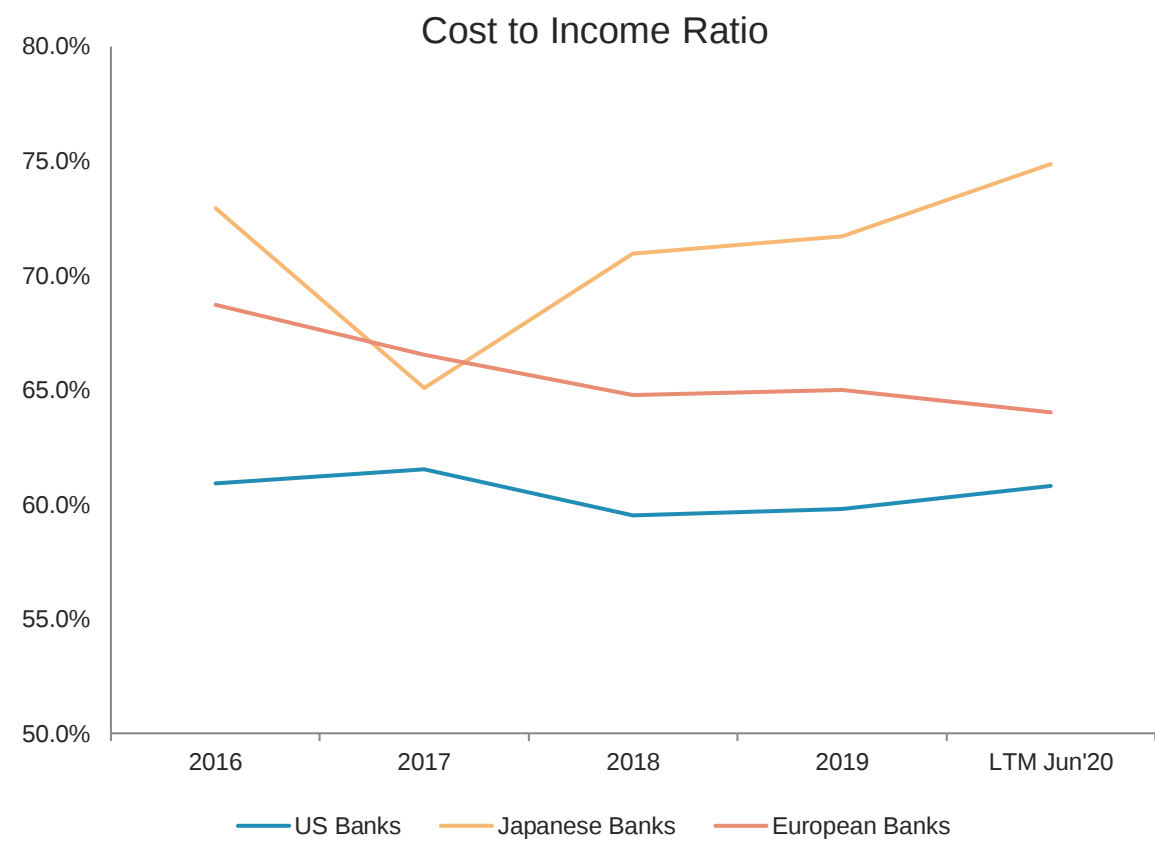


Source: Bank Filings, Aranca Research

Lower NIMs and growing C/I ratio forcing Japanese banks to speed up cost-cutting measures

Japanese banks have the highest C/I ratio, reflecting higher administrative expenses compared with US and European banks. This is ascribed to various services being offered for free or at low costs. The US and European banks' digitization impetus helped them in cutting costs.

The pace of cost-cutting for Japanese banks has been quite slow compared with US or European banks. Hence, Japanese banks recently started intensifying cost-cutting measures.



Source: Bank Filings, Aranca Research

Cost-cutting Initiatives by Japanese Banks		
MUFG	SMFG	MIZHO
Branch Network		
Increased planned reduction of branches to 35% by March 2024, from earlier target of 20%	Achieved JPY12 billion in retail branch costs as of March 2019 out of the JPY20 billion target for March 2020	Planning to reduce branch count by 130 by March 2025, of 500 branches (as of March 2018), up from initial plan of 100 branches
Workforce		
Planning to reduce workload equivalent to more than 10,000 personnel by March 2024, up from target of 9,500	Planned to implement workload reduction of 5,000 employees by March 2020, from 4,000 earlier	Expecting to achieve reduction of 19,000 of the current 80,000 employees ahead of the scheduled deadline of March 2027
Expecting decline in staff headcount of around 8,000 by March 2024, from March 2018 levels, through attrition	Planned to cut domestic headcount by 4,000 through attrition by March 2020	

Source: Bank Filings, S&P

Conclusion

So far, the impact of the pandemic on the balance sheets of banks in all three regions has remained limited. Banks entered this crisis with a much stronger capital and liquidity position and strengthened risk management processes, thanks to the financial reforms adopted after the global financial crisis.

Non-performing Loans

- **US banks** have the lowest NPL ratio (~1%), while European banks have the highest NPL ratio (~3%). However, US banks were the most aggressive in frontloading the provisions in 1H20, as indicated by the highest CoR compared with European and Japanese banks.
- This was mainly due to the loan portfolio composition of US banks being skewed toward unsecured consumer lending in the form of credit cards.
- As European banks were backed by mortgages, the rise in CoR was lower compared with US banks. This nature of the loan book was also indicated by US banks having the highest reserve ratio.

US Banks

Capitalization

- Historically, due to stricter measures from ECB to absorb the high NPLs and strengthen capital ratios, **European banks** were better capitalized compared with US and Japanese banks.
- Japanese banks' NPLs have been relatively stable even during the pandemic due to the secured nature of their corporate lending books. Thus, the TLAC requirements by central banks have been the lowest for Japan, followed by the US and Europe.

European Banks

Cost Efficiency

- Despite **Japanese banks** having comparable loan-to-asset ratio (~35%) to US and European banks, they have the lowest NIMs, owing to negative interest rates since 2016. Thus, to mitigate the negative interest rate risk, Japanese banks have gradually shifted toward other sources of income, as indicated by the highest non-interest income as a percentage of total income.
- Japanese banks have the highest C/I ratio due to higher administrative expenses compared with US and European banks. This is ascribed to various services being offered for free or at low costs. Due to fewer digitization initiatives, the pace of cost-cutting for Japanese banks is quite slow compared with US or European banks.

Japanese Banks



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