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US banks' credit profile remains stable amidst higher asset quality and a record release of provisions

by Amrita Parab and Raghav Mathur

- **NUS-CRI Aggregate (median) 1-year Probability of Default demonstrates the marginally improving credit health of US Banks driven by deposit growth, the release of loan loss provisions, and improved profitability**
- **Decreasing loan balances and record-high deposits have resulted in record low net interest margin in the first quarter of 2021**
- **Declining non-performing loans and increased deposits contribute towards improved asset quality and liquidity**

Massive fiscal stimulus, an ultra-loose monetary policy, and an effective vaccination program have propelled the US economy to an unprecedented path of recovery. With the unemployment rate at 5.8% as of May 2021 compared to a high of 14% in Apr 2020 and the GDP growth at 6.4% in Q1 2021, the pace of economic recovery remains strong. The strengthening economic conditions and successful implementation of stimulus programs have caused an improvement in the asset quality of US banks. The NUS-CRI Aggregate (median) 1-year Probability of Default (Agg PD) of US Banks in Figure 1a below showcases an improvement largely attributable to effective government and central bank initiatives, improving economic environment, and growth in profitability aided by reserve release. The Agg PD had breached the PDiR2.0 BBB+ upper bound in Q2 2020 during the height of the pandemic, however it has since been on a steady decline and is now at 7bps, closer to the PDiR2.0 A- upper bound level. The NUS-CRI Agg Forward 1-year PD (Forward PD[1]) also reiterates the improved credit outlook in Jun 2021 as compared to that in Jun 2020 (see Figure 1b).

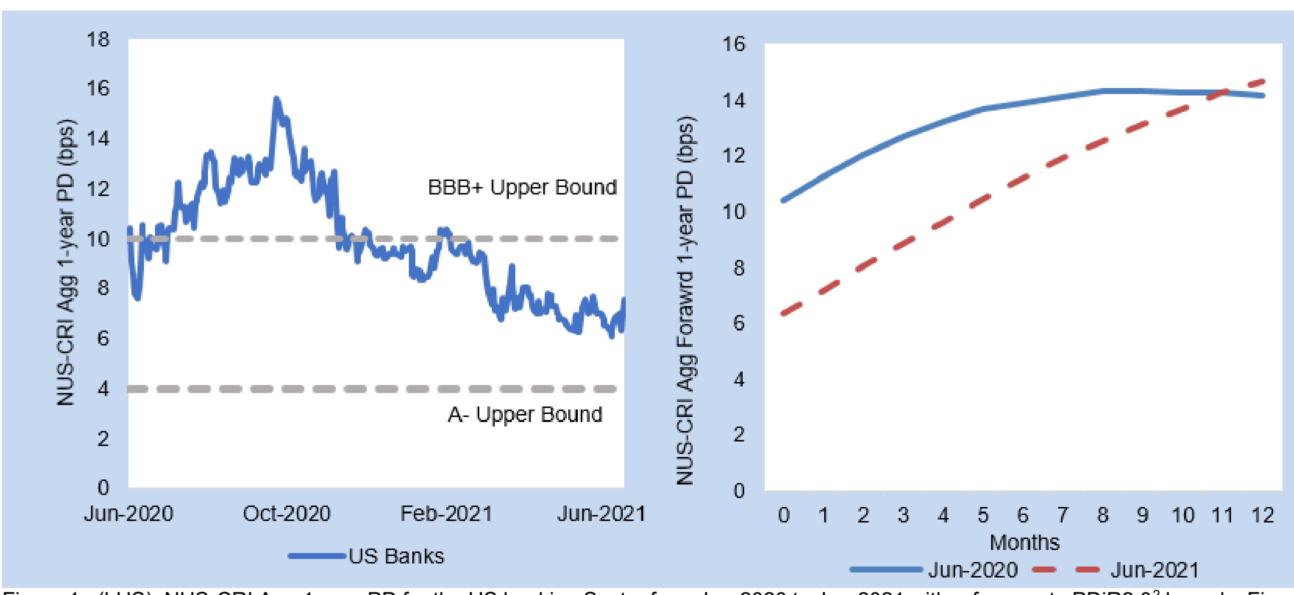

Figure 1a (LHS): NUS-CRI Agg 1-year PD for the US banking Sector from Jun-2020 to Jun-2021 with reference to PDiR2.0[2] bounds. Figure 1b (RHS): NUS-CRI Agg Forward 1-year PD for US banking Sector in Jun-2020 and Jun-2021. *Source: NUS-CRI*

[1] The Forward PD estimates the credit risk of a company in a future period, which can be interpreted similar to a forward interest rate. For example, the 6-month Forward 1-year PD is the probability that the firm defaults during the period from 6 months onwards to 18 months, conditional on the firm's survival in the next 6 months

[2] The Probability of Default implied Rating version 2.0 (PDiR2.0) provides a more familiar interpretation through mapping the NUS-CRI 1-year PDs to the S&P letter grades. The method targets S&P's historical credit rating migration experience exhibited by its global corporate rating pool instead of relying solely on the reported default rates.

Banks' loan loss provisions soared in 2020 (Figure 2a) as fears of increased defaults gripped the industry and banks scrambled to build defenses against fallout from the weakening operating environment. As signs of economic recovery appeared, banks lowered their loan loss provisions. The released provisions have allowed banks to report strong quarterly earnings despite reduced loan growth and net interest margins (NIM). A continuing rebound in manufacturing, the labor market, and an increase in consumer spending herald that the US economy will recover faster than anticipated. This may prompt further release of provisions by banks in the coming quarters.

Non-performing loans (NPL) remained low (Table 1) due to effective fiscal and monetary policies. The quality of consumer credit remained healthy mainly due to government programs such as the USD 1.9tn America Rescue plan act passed in Mar 2021 which most notably increased the direct monetary assistance provided by USD 1,400 per person for households in need. The government also extended favorable forbearance terms which allowed homeowners and students to postpone or reduce their debt payments. As per data released by Mortgage Bankers' Association on June 14, 2021, the total mortgage loans in forbearance dropped to 4.04%. Corporate defaults on bank balance sheets also remained low as corporates, aided by federal programs, tapped on bond markets to raise funds. Banks did lend a large amount of capital (USD 492bn) to small businesses through the Payment Protection program. However, these loans are guaranteed by the Small Business Administration (SBA) and were forgiven if the proceeds were used to fund employee salaries.

On the other hand, deposits at banks have increased to record high levels resulting in a solid liquidity position. Aggregate deposits across the industry grew by USD 635bn in Q1 2021, bringing the proportion of deposits as a percentage of total assets to 81.8%. In 2020, the increase in the level of deposits was a result of corporates and consumers taking a conservative stance and it was expected that the excess deposits will reduce once the signs of economic recovery appear. However, despite an improving economic environment, deposits continue to grow, putting pressure on banks' return on equity.

The NIM of US banks has been shrinking (Figure 2a) due to lower interest rates and declining loan balances. The total YoY decline in loan balances of 1.2% was mainly driven by reductions in credit card and commercial and industrial loans. Americans chose to pay off a remarkable USD 49bn of credit card debt in Q1 2021. The pandemic forced a change in lifestyle resulting in lower expenditures on travel and leisure activities. The lifestyle change, in combination with stimulus checks and forbearance programs, has allowed households to pay off their credit card debt. The decline in commercial and industrial loans was the result of programs such as the primary and secondary market corporate credit facilities, the Main Street Lending Program, Paycheck Protection Program, all of which protected business access to credit. Corporates took advantage of these programs to raise funds from the market and used the proceeds to pay down debt owed to banks. Although declining loans and record-high deposits could further pressure bank profitability, increased deposits and debt pay downs by consumers contribute towards improved liquidity and asset quality for US banks

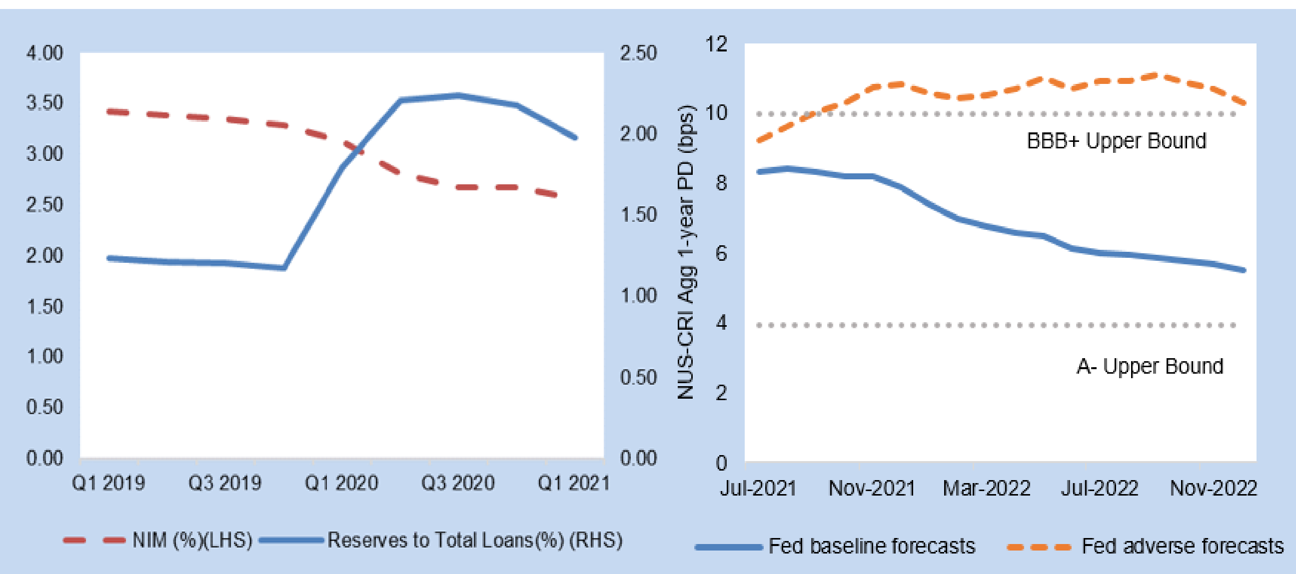

Figure 2a (LHS): Net interest margin (%) and loan loss reserves to total loans ratio for US banking Sector from Q1-2019 to Q2-2021; Figure 2b (RHS): Agg PD baseline and adverse scenarios based on Federal Reserve forecasts on GDP and inflation derived from Feb 2021 stress-test data feed. *Source: FDIC, BuDA v3.3.0*

We utilize the NUS-CRI Bottom-Up Default Analysis toolkit (BuDA[3]) (Figure 2b) to stress test GDP growth rate and CPI inflation against the NUS-CRI Agg PD for US Banks, to assess its resilience to differing macroeconomic environments. We chose to model scenarios on the basis of the Federal Reserve's Feb 2021 Stress Test. The baseline scenario is that of a stable economic expansion where the GDP grows at the rate of 4% in 2021, 2.50% in 2022, and the CPI inflation is steady in the range of 1.75% - 2.25%. The baseline scenario sees the NUS-CRI Agg PD for US Banks undergo a steady decrease at the end of 2022.

The adverse scenario tries to understand the effect of severe economic contraction on the Agg PD of US Banks. The scenario assumes a consistent decline in GDP growth till the end of 2022 and a low CPI inflation in the range of 1% - 1.6%. The results from the adverse scenario showcase the resilience in US banks as the Agg PD, though slightly elevated, remains comparatively stable, providing further evidence of the strong liquidity and asset quality of US banks.

	Net Interest Margin	Net Charge-Off rate	Tier 1 Risk-Based Capital Ratio	Return on Assets
Q1 2021	2.56%	0.34%	14.27%	1.38%
Q1 2020	3.13%	0.54%	12.85%	0.38%

Table 1: QoQ change in key ratios of US banks. *Source: FDIC.*

Although US banks have emerged from the height of the pandemic in good credit health, their recovery continues to be under threat from several factors in the near future. As the programs instituted by the government and the Fed come to an end, the ability of borrowers to service debt will be key in maintaining asset quality. For instance, the mortgage forbearance program is set to expire on June 30. Since around 2mn homeowners who still remain in the program come from low-income households and live in low-income neighborhoods, delinquencies may rise once the program expires. Furthermore, risks remain elevated in certain business sectors such as commercial real estate, hospitality, and tourism which were disproportionately impacted by the pandemic. These sectors may not see demand return to sustainable levels soon and without government intervention, these sectors may put heightened pressure on banks' NPL ratios.

On the bright side, consumer demand for credit is expected to return to normal as large-scale vaccinations have enabled states to lift pandemic restrictions, causing an increase in consumer spending. Banks are also lowering lending requirements to spur growth in consumer loans. Though banks currently struggle to build their corporate loan book, as the economy recovers and the effect of stimulus wear off, loan growth may rebound. Concurrently, inflation rose to 5% in May 2021, the highest level in almost a decade, prompting the Fed to announce the possibility of two rate hikes by 2023. Rising inflation will cause the cost of raw material inputs and labor to increase and businesses may eventually turn to banks to fill the resultant funding needs. Furthermore, as policy rates hike in the long term, pressure on banks' NIM may also ease, possibly further improving the banking sector's credit outlook.

[3] The Bottom-up Default Analysis (BuDA v3.3.0) is a credit stress testing and scenario analysis toolkit jointly developed by the Credit Research Initiative (CRI) team of National University of Singapore (NUS) and the International Monetary Fund (IMF)

Credit News

Bond spreads collapse as investors rush into corporate debt

June 18. The spread between corporate debt and US Treasuries has fallen to its lowest level in more than a decade, indicating investors' confidence that inflation will not impede economic recovery. Buyers are demanding lower premiums for owning the riskier corporate debt. The smaller spread suggests that investors are buying into the Fed's mantra that inflation is transitory as the economy reopens, pushing measures of expected inflation lower. As a result of the central bank's accommodative policies during the pandemic and the federal government's pandemic aid package, the fall in spreads has buoyed. On the other hand, investors are concerned that risky companies are being offered credit at interest rates that inaccurately measure the high levels of risk involved. (FT)

US investors hunt for yield in junk-rated municipal debt

June 17. Investors are snapping up the US municipal bonds, dragging down the yields. This week, the yield on ICE BofA municipal bond index dropped to 0.95%, the lowest since 1991. Municipal bonds have attracted a total investment of USD 49bn, with around a quarter in junk-rated bonds. Besides the low interest rates and a flood of cash in the financial system, the strong municipal finances have also driven the rally in muni bonds, especially junk muni bonds. Amid a strong economic rebound, tax revenues took less of a hit, as tax collections between Jul-2020 and Apr-2021 increased from the prior year in 45 out of the 47 states. Furthermore, the Biden administration's plan to push for higher taxes also boosted the demand for municipal bonds, as buyers of tax-exempt municipal bonds do not pay federal taxes on the debt's revenue. (FT)

EU freezes 10 banks out of bond sales over antitrust breaches

June 15. Ten of the world's biggest banks were temporarily barred from syndicating bond sales for the European Commission's EUR 800bn recovery fund due to previous breaches of antitrust rules. The ten banks will be required to prove that they have taken the necessary remedial measures before they qualify again as "primary dealers", which hold the responsibility to bid for bonds during regular debt auctions. While this responsibility can sometimes prove costly, investment banks usually regard the fees earned from syndications as a sweetener for taking on primary dealer status. This exclusion did not dent demand, as investors placed more than EUR 140bn of orders for the EUR 20bn of debt. However, some say this exclusion risks upsetting the already delicate equilibrium in the existing relationship between issuers and primary dealers. (FT)

Yield-hunt season sends global debt funds flooding into Korea

June 21. Traders are betting on Korea's interest rates hike. In the week ended June 11, net purchase of South Korean bonds reached a record USD 7.1bn, bringing the year's total to USD 55bn. The Bank of Korea (BOK) signaled on policy normalization, paving the way for possibly Asia's first interest-rate hike. Swap markets are pricing in three 25bps rate hikes over the next year, with the first expected by year-end 2021. As gains in services and retail sales strengthen the economic recovery and May exports surged to a peak not seen since 1988, speculation of a tightening has gained momentum. South Korea's three-year bond yields have risen 35bps this year to around 1.33%, returning to pre-pandemic levels. Hedging through cross-currency swaps, dollar-funded investors could earn a higher return on the notes, with an increase of over 100bps on similar-maturity Treasuries (Bloomberg)

Floating-rate bonds are coming back, boosted by bets on rising rates

June 17. Investors are piling into floating-rate bonds, fueling a wave of new debt offerings by blue-chip companies. The issuance of floating rate investment-grade bonds by non-financial companies was over USD 18bn this year as of June 14, nearly four times that of last year. The prospect of rising rates, as signaled by Fed officials, makes traditional fixed-rate bonds less attractive. Investor interest for other assets with variable rates, such as corporate loans with junk credit ratings, has also grown. As of June 15, an index of floating-rate notes maturing within five years has returned around 0.3% to investors this year, outperforming the -2% return on investment-grade bonds. More than 60% of the USD 502bn floating-rate bonds have a maturity between one and three years, indicating investors are seeking short-term protection. (WSJ)

Fed urged to aid money market funds as negative rates loom (FT)

Shares in China's Suning frozen as fears grow about debt pile (FT)

ESG concerns are finally showing up in the bond market (Bloomberg)

Regulatory Updates

Canadian regulator lifts banks' capital buffer to record, priming for post-pandemic world

June 18. In Canada, financial regulators increased the amount of capital the country's biggest banks have to hold, from 1% currently to 2.5% of risk-weighted assets, to guard against risks. This phenomenon may indicate that the economic and market disruption caused by the coronavirus pandemic has subsided and reveals that banks' capital levels remained strong. Even with this higher requirement, Canada's six largest banks would have CAD 51bn worth of excess capital, down from CAD 82bn on April 30. However, vulnerabilities like household and corporate debt levels, and asset imbalances caused by increases in house prices, have remained over the past year. To address concerns about the housing market, the Canadian government increased the minimum qualifying criteria for mortgages. (Reuters)

China set to keep lending benchmark LPR unchanged

June 18. There are strong expectations that China's benchmark lending rate will remain unchanged at its June fixing, as the PBOC has kept borrowing costs on the one-year medium-term lending facility (MLF) loans fixed this week. The MLF, one of the PBOC's primary tools in managing longer-term liquidity in the banking system, serves as a guide for China's Loan Prime Rate (LPR). Although the hawkish shift in the US has led to growing expectations of a similar interest rate rise in China, analysts believe that the PBOC's monetary stance is unlikely to be affected. Major activity indicators in May have missed market expectations, with recovery momentum across sectors starting to moderate and remain uneven. These indicators signal possible downside risks to China's economic activity in the near term, leading analysts to believe that there will be no sharp shifts in Beijing's monetary policy (Channel News Asia)

Lagarde takes bolder tone in setting agenda for ECB stimulus (Bloomberg)

Australian regulator asks big banks to control risky lending (Reuters)

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