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Credit Tightening Risk in the US and Implications for the Banking Sector

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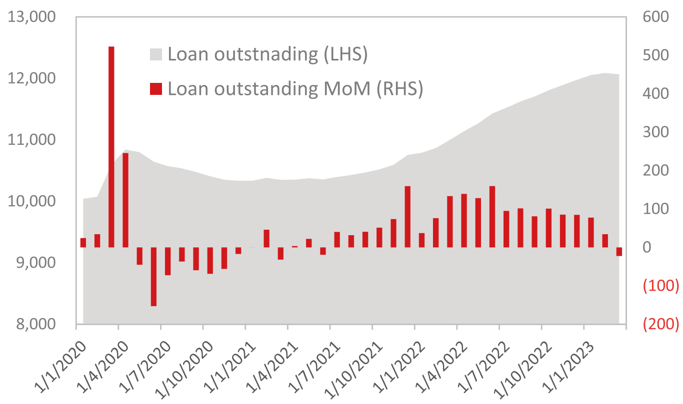
Following the collapse of Silicon Valley Bank ("SVB") in early March, loan outstanding of the US banking sector shrank that month. Discussion about US economic recession became a market focus given the risk of credit tightening escalated.

I. Credit Tightening Has Emerged

As of the end of March 2023, total loan outstanding of the US banking sector reached USD 12.1 trillion, down USD 22 billion versus the previous month, marking it a monthly contraction again since June 2021. The previous credit tightening cycle in the US banking sector occurred from May to December 2020. The monthly contraction of loan ranged from USD 17 billion to USD 153 billion during the period, with the cumulative drop of USD 508 billion or 4.7%. Loan contraction in March 2023 was not that significant compared with that in the previous credit tightening cycle.

Exhibit 1: Loan outstanding in the US banking sector (in USD billion)



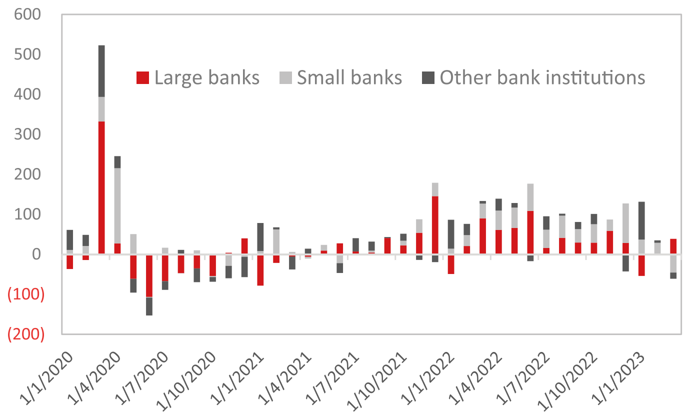
Sources: The Federal Reserve, Hong Kong Financial Research Institute of Bank of China

The collapse of SVB triggered loan contraction across the banking sector during the month. According to weekly published data, total loan outstanding of the US banking sector still registered positive growth in the first two weeks of March. SVB announced fundraising on March 8, but was taken over by regulatory authorities on March 10, triggering bank runs and challenging the stability of the financial system.

In the weeks ended March 22 and March 29, total loan outstanding of the US banking sector decreased by USD 60 billion and USD 45 billion, respectively. Nevertheless, the phenomenon of a weakening credit supply by the US banking sector was already evident before the bankruptcy of SVB.

Loan outstanding by large domestically chartered commercial banks [1] ("large banks") has decreased since 2023. In terms of asset size, the lending structure of the US banking sector is more balanced than that of Hong Kong. Currently, loans from large banks account for 54.4% of the total, while small domestically chartered commercial banks ("small banks") account for 37.0%, and other bank institutions (such as foreign banks) account for 8.6%. In fact, loan outstanding by large banks has contracted for two consecutive months since this year, with a cumulative decrease of USD 55 billion. The expansion of the loan outstanding in the US banking sector for the first two months of this year was mainly supported by small banks and other bank institutions. However, the collapse of SVB in March raised concerns about operational resilience of small and medium-sized banks. As a result, loan outstanding by small banks and other bank institutions decreased by USD 46 billion and USD 16 billion, respectively from the previous month. Although loan outstanding by large banks increased by USD 39 billion month-on-month, it still could not compensate the decline form small banks and other bank institutions.

Exhibit 2: Loan outstanding MoM by different banks (in USD billion)



Sources: The Federal Reserve, Hong Kong Financial Research Institute of Bank of China

Commercial and industrial loans have been losing stream, and the month-on-month decline in real estate loans has exacerbated the credit tightening in the banking sector. When the economy faces greater downward pressure, commercial and industrial loans decline more than real estate loans with longer period, while the performance of consumer loans is relatively stable. In 2020, the outbreak of COVID caused the US economy to register negative growth for the year. At that time, the contraction of commercial and industrial loans began in June 2020 and lasted for 16 months, with an average monthly decrease of USD 38 billion. As for real estate loans, the contraction period lasted for 13 months, with an average monthly decrease of only USD 3 billion. As for consumer loans, except for a contraction in March to June 2020 at the beginning of the COVID outbreak, consumer loans continued to expand thereafter.

The current situation is similar to the outbreak of COVID in 2020. The Federal Reserve began a rate-hike cycle in March 2022, and the negative impacts on economic activities have been accumulated. From the changes in the outstanding of commercial and industrial loans, the average monthly increment in the second half of 2022 was USD 21 billion, compared with USD 33 billion in the first half of 2022. The performance of commercial and industrial loans weakened further. Starting from February 2023, the outstanding of commercial and industrial loans started reducing since February 2023 with

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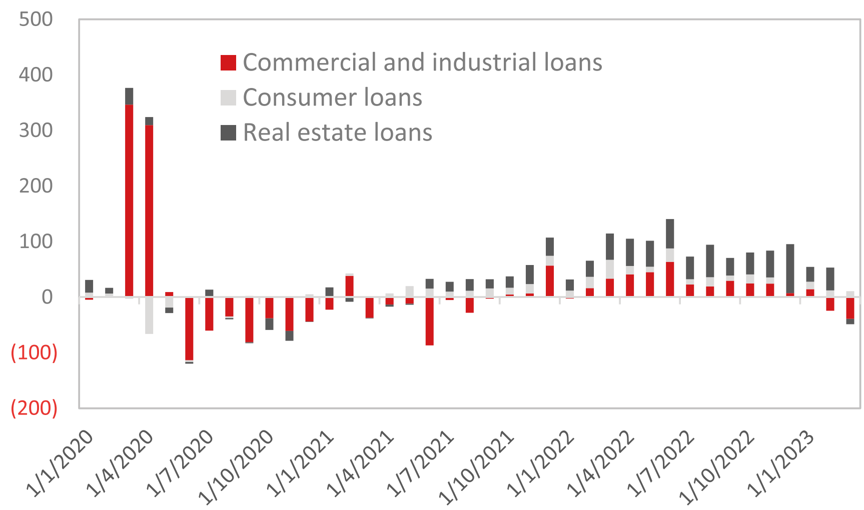
[1] "Large domestically chartered commercial banks" are top 25 domestically chartered commercial banks in terms of asset size. Other domestically chartered commercial banks are defined as "small domestically chartered commercial banks".

increasing magnitude. In addition, real estate loans, which account for about 45% of the total loan outstanding in the banking sector, registered a month-on-month decline of USD 10 billion in March 2023, with a larger scale than the average monthly amount during the contraction period in 2020, exacerbating the credit tightening situation in the US banking sector.

Exhibit 3: Loan outstanding MoM by different usages (in USD billion)



Sources: The Federal Reserve, Hong Kong Financial Research Institute of Bank of China

II. Credit Environment Is Under Pressure

Given the impacts of deposit reduction, increasingly cautious lending attitude in the banking sector and the change in lending structure, the risk of credit tightening in the US could not be neglected.

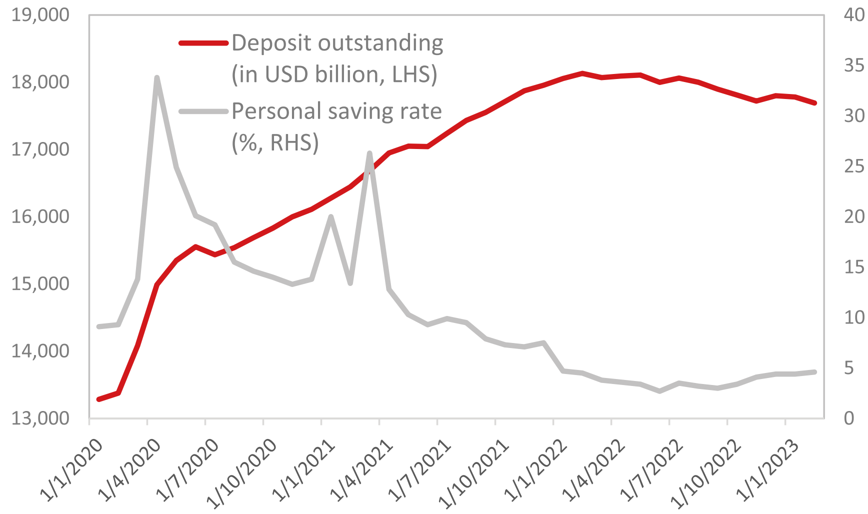
1. There is room for deposits to reduce further

The fundamental business for commercial banks is to accept deposits and use the funds for lending and investment. Therefore, the change in deposits is directly proportional to the lending capacity of commercial banks.

Since the outbreak of COVID, the deposit outstanding of the US banking sector increased first and subsequently declined. The pandemic once brought a severe shock to the US economy. The government has provided cash handouts to residents in April 2020, December 2020, and March 2021, respectively, which were three times in total. Therefore, the deposit outstanding of the US banking sector surged from about USD 15 trillion in March 2020 to USD 16.7 trillion in March 2021. During the period, personal saving rate also spiked several times due to the cash handout measures, with the highest ratio reaching 33.8%. Subsequently, the US government withdrew fiscal stimulus measures in 2021, and personal saving rate gradually declined, while the deposits of the US banking sector continued to expand.

The deposit outstanding of the US banking sector began to decline in 2022. Amongst which deposits of large banks began to reduce from April, while small banks had similar situation 4 months later. After the collapse of SVB, in the week of March 15, 2023, deposits of small banks decreased by USD 196 billion, while the deposits of large banks increased by USD 67 billion, indicating the phenomenon of depositors transferring funds from small banks to large banks. However, as the US authorities promised to guarantee customer deposits, the panic of bank runs was under control. The deposits of small banks even increased slightly by USD 2 billion in the week of March 29. Meanwhile, the deposits of large banks resumed the declining trend.

Exhibit 4: Deposits and personal saving rate in the US



Sources: The Federal Reserve, Hong Kong Financial Research Institute of Bank of China

The Federal Reserve began the rate-hike cycle in March 2022. Theoretically, a tightening monetary policy would constrain economic activity. However, the US economy remained resilient after the interest rate hike, in particular the performance of personal consumption. From March 2022 to March 2023, the annual growth rates for real personal consumption expenditure ranged between 2.7% and 1.4%. On one hand, the relatively strong consumption performance was partly due to robust wage growth momentum. On the other hand, both the deposit outstanding of the banking sector and personal saving rate declined, indicating that individuals took out more funds from deposits to support daily consumption activities.

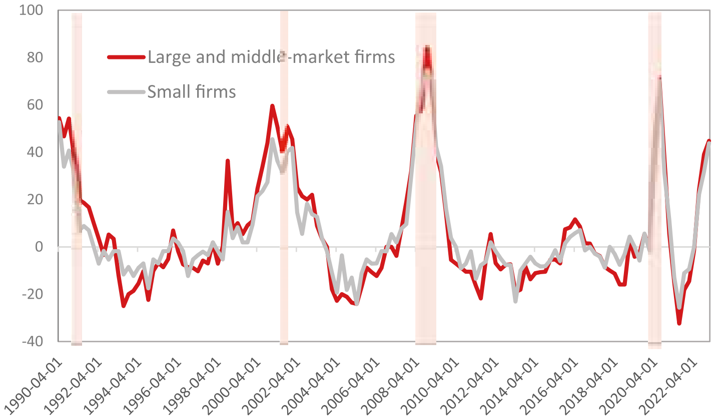
At present, the deposit outstanding of the US banking sector is USD 17.2 trillion, which is 14.7% higher than that in April 2020. It is believed that individuals still have certain ability to use excess deposits to support daily consumption. However, the latest personal saving rate was only 5.1%, which was lower than the average level of 7.2% between 2009 and 2019. The low saving rate should be able to constrain deposits reduction in the banking sector.

2. Banks are more cautious in lending

As the supplier of credit, banks' attitude is an important factor affecting the credit environment. The Federal Reserve releases the "Senior Loan Officer Opinion Survey" quarterly, which surveys 80 large domestic banks, 24 foreign banks' branches in the US, and agencies of foreign banks. The survey includes questions on changes in bank lending standards and terms of loan facilities, demand for loans from businesses and households, etc. In particular, changes in net percentage of domestic banks lending standard for commercial and industrial loans are closely watched by the market.

When the net percentage rises, it reflects that banks tighten lending standards. Judging from several economic cycles since 1990, the net percentage of tightening standard for commercial and industrial loans tends to rise before an economic recession. After the Federal Reserve began the latest interest rate hike cycle, the net percentage of tightening standard for commercial loan standards returned to positive levels and continued to rise. As of the end of 2022, the net percentage of tightening standard for large and middle-market firms and small firms reached 44.8% and 43.8%, respectively, both of which have surpassed most levels before economic recessions since 1990, reflecting the prudent attitude of the US banking sector towards lending business.

Exhibit 5: Lending standard for commercial and industrial loans (net ppt)



Note: Shaded areas denote economic recessions
Sources: The Federal Reserve, Hong Kong Financial Research Institute of Bank of China

Indeed, the latest "Senior Loan Officer Opinion Survey" did not reflect the situation after the collapse of SVB, and the survey results for the first quarter of 2023 would be released in May. However, market concerns triggered by the collapse of regional banks would further dampen the lending intentions of the banking sector. In particular, the financial channels for small and medium-sized enterprises with relatively weak financial strength may be more severely affected. According to a survey by the National Federation of Independent Business, the net percentage of small and medium-sized enterprises that reported difficulty in borrowing in March compared to three months ago rose to 9%, the highest level since December 2012 and higher than the 12-month moving average of 5.4%.

3. The vulnerability of credit supply increases

The categories of loan usages in the US banking sector mainly include commercial and industrial loans, consumer loans, and real estate loans, accounting for 22.8%, 15.5%, and 44.8% respectively. Real estate loans account for the most significant proportion. If the growth momentum of real estate loans slows down, it will have a greater impact on credit tightening. This can be seen from the credit performance of the US banking sector in March this year.

In fact, the role of small banks in credit supply has been increasing after the global financial crisis in 2008. First, the proportions credit supply by small banks in all three areas have increased. Second, the increase in the proportion of small banks' real estate loans was significant, surpassing that of large banks. In general, small banks are more vulnerable to negative news given their smaller asset sizes, less robust capital and liquidity conditions compared with large banks. Market confidence has yet to be restored following the collapse of regional banks. Therefore, we should stay vigilant against the risk of deposit outflows from small banks. If there are massive deposit outflows from small banks, it will worsen the situation of credit tightening.

Exhibit 6: Changes in loan structure of the US banking sector

Market share (%)	January 2009	March 2023
Commercial and industrial loans		
Large banks	57.7	54.7
Small banks	21.1	28.0
Consumer loans		
Large banks	85.4	76.2
Small banks	14.4	23.9
Real estate loans		
Large banks	62.4	44.5
Small banks	36.1	53.8

Sources: The Federal Reserve, Hong Kong Financial Research Institute of Bank of China

III. Implications for the Banking Sector

The risk of credit tightening in the US escalates amid high interest rate environment and the failure of reginal banks. Banks should learn from the recent crisis and prepare for potential changes in the business environment that may occur in the future.

We need to remain cautious about the spiral between credit tightening and asset price volatility. After the collapse of SVB, the US authorities quickly responded to prevent the spillover of bank runs, containing financial systemic risks to certain extent. Nevertheless, credit tightening of the banking sector will narrow the financing channels for businesses and individuals, exacerbate the pressure of economic downturn, and put pressure on asset prices. Although the collapse of SVB was mainly due to the problems of high customer concentration and maturity mismatch, which has a certain degree of uniqueness. However, against the backdrop of high interest rates and asset price pressures, the US banking sector still faces the challenge of adjusting its balance sheet.

Hybrid business model is not conducive to financial stability. The massive holding of Treasury securities and MBS by SVB increased its market risk exposure on the assets side, which may also be a common problem faced by US commercial banks. For a long time, hybrid business model has strengthened the connection between commercial banks and the capital market, and the proportion of securities assets held by the banking sector on the assets side has increased significantly compared to loan assets. Although there would be also the risk of rising non-performing loans during economic downturns, the repricing of loans would be slower than that of securities assets. Therefore, the market price fluctuations of securities assets would have more immediate impacts on the change in asset net worth of commercial banks. As a result, under the hybrid business model, the contagion risk within the financial system would be significantly enhanced, endangering overall financial stability.

Financial regulation is likely to strengthen. After the financial crisis in 2008, global financial regulatory reforms have introduced more stringent requirements for "systemically important" banks to ensure their resilience in withstanding potential bank runs. However, in 2018, the United States raised the asset size threshold for "systemically important" banks from USD 50 billion to USD 250 billion, and "non-systemically important" banks are excluded from conducting regular liquidity stress tests, and they are only required to maintain a certain level of liquidity coverage ratio. SVB does not belong to "systemically important" bank. Its failure reflects the loopholes in current liquidity regulation and the need for strengthening.

To conclude, although financial systemic risks have been somewhat under control for the time being, the credit environment is under pressure, increasing the risk of economic recession. In the foreseeable future, the operating environment of the US banking sector will be challenging.

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主要經濟指標 (Key Economic Indicators)

一. 本地生產總值 GDP	**2021**	**2022**	**2022/Q4**	**2023/Q1**
總量 (億元) GDP($100 Million)	28,677	28,270	7,389	N/A
升幅 (%) Change(%)	6.4	-3.5	-4.1	2.7
二. 對外貿易 External Trade			**2023/03**	**2023/01-03**
外貿總值 (億元) Total trade($100 Million)				
總出口 Total exports	49,607	45,317	3,672	9,435
進　口 Total imports	53,078	49,275	4,078	10,551
貿易差額 Trade balance	-3,471	-3,958	-406	-1,116
年增長率 (%) YOY Growth(%)				
總出口 Total exports	26.3	-8.6	-1.5	-17.7
進　口 Imports	24.3	-7.2	-0.6	-12.7
三. 消費物價 Consumer Price				
綜合消費物價升幅 (%) Change in Composite CPI(%)	1.6	1.9	1.7	1.9
四. 樓宇買賣 Sale & Purchase of Building Units				
合約宗數 (宗) No. of agreements	96,133	59,619	8,599	19,006
年升幅 (%) Change(%)	31.1	-38.0	124.6	38.4
五. 勞動就業 Employment			**2022/12-2023/02**	**2023/01-2023/03**
失業人數 (萬人) Unemployed(ten thousands)	250.9	195.9	11.6	11.5
失業率 (%) Unemployment rate(%)	5.5	4.3	3.3	3.1
就業不足率 (%) Underemployment rate(%)	2.7	2.4	1.3	1.2
六. 零售市場 Retail Market			**2023/02**	**2023/01-02**
零售額升幅 (%) Change in value of total sales(%)	8.1	-0.9	31.3	17.3
零售量升幅 (%) Change in volume of total sales(%)	6.5	-3.4	29.6	15.5
七. 訪港遊客 Visitors			**2023/03**	**2023/01-03**
總人數 (萬人次) arrivals (ten thousands)	9.1	60.5	245.4	441.5
年升幅 (%) Change(%)	-97.4	561.5	136,238.5	38,322.6
八. 金融市場 Financial Market			**2023/02**	**2023/03**
港幣匯價 (US$100=HK$) H.K. Dollar Exchange Rate (US$100 = HK$)	779.8	780.8	784.9	785.2
貨幣供應量升幅 (%) change in Money Supply(%)				
M1	8.0	-20.7	-25.1	-24.0
M2	4.3	1.6	0.0	1.4
M3	4.3	1.6	0.0	1.4
存款升幅 (%) Change in deposits(%)				
總存款 Total deposits	4.6	1.7	-0.1	1.1
港元存款 In HK$	1.4	0.7	0.3	1.1
外幣存款 In foreign currency	7.9	2.6	-0.5	1.1
放款升幅 (%) in loans & advances(%)				
總放款 Total loans & advances	3.8	-3.0	-3.3	-3.4
當地放款 use in HK	4.7	-0.2	-0.2	-0.7
海外放款 use outside HK	1.7	-10.0	-10.8	-9.9
貿易有關放款 Trade financing	14.2	-13.5	-21.0	-21.8
最優惠貸款利率 (%) Best lending rate (%)	5.0000	5.6250	5.6250	5.6250
恒生指數 Hang Seng index	23,398	19,781	19,786	20,400