Weekly Credit Brief Feb 07 - Feb 13 2023

Weakening demand threatens the credit outlook of smartphone manufacturers' supply chain

by Wang Chenye

- **NUS-CRI Forward PD suggests that weakening demand for smartphones, amidst ongoing macroeconomic headwinds, has taken a toll on the credit outlook of the whole smartphone industry**
- **NUS-CRI PD shows the potentially heightened credit risk faced by upstream companies due to a lack of production demand from smartphone manufacturers**

Shipments from global smartphone manufacturers fell in the last quarter of 2022 by 18% YoY, the largest YoY decline in over a decade, indicating a slowdown in global demand that could impact smartphone manufacturers' credit health[1]. Shrinking demand for smartphones pressures manufacturers' short-term earnings that could worsen their credit profile, especially in an inflationary environment. As seen in Figure 1b, the NUS-CRI Aggregate (median) Forward 1-year Probability of Default (Forward PD[2]) for globally listed smartphone manufacturers is worsening over the next 12 months, rising above the BBB- upper bound when referenced to PDiR2.0[3]. Though the industry's credit profile has remained relatively robust and stable over the past year, as seen from the NUS-CRI Aggregate (median) 1-year Probability of Default (Agg PD) in Figure 1a, a structural global slowdown in growth and demand, partly due to persistent global inflation amidst other macroeconomic factors, are likely to impact these manufacturers' bottom-lines, the impact of which may trickle into upstream industries.

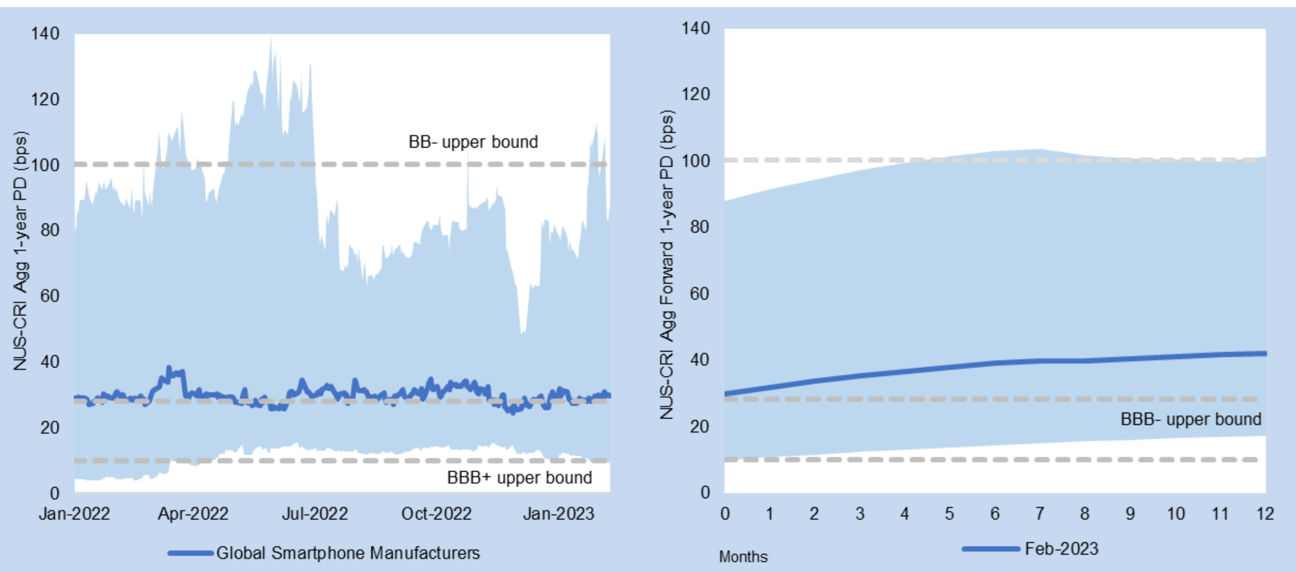

Figure 1a (LHS): NUS-CRI Agg (median) 1-year PD for global smartphone manufacturers and its interquartile range with reference to PDiR2.0 bounds. Figure 1b (RHS): NUS-CRI Agg (median) Forward 1-year PD for global smartphone manufacturers and its interquartile range as of Feb-2023 with reference to PDiR2.0 bounds. *Source: NUS-CRI*

Global smartphone manufacturers underwent a demand shock during the last year, experiencing a decade-low annual shipment of 1.21bn units, declining by 11% in 2022 compared to a year earlier (See Figure 2a), on the

[1] The top five smartphone manufacturers with the largest shipment volume in Q4 of 2022 - Apple, Samsung, Xiaomi, OPPO, and Vivo - all experienced their shipments decline by double-digits compared to the same period last year.

[2] The Forward PD estimates the credit risk of a company in a future period, which can be interpreted similarly 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 – this is conditional on the firm's survival in the next 6 months.

[3] The Probability of Default implied Rating version 2.0 (PDiR2.0) provides a more familiar interpretation through mapping the NUS-CRI 1year 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.

back of weakening consumer growth due to inflation pressures. Smartphone manufacturers that have recently released quarterly financial data are all showing negative growth in both revenue and profit, with Apple Inc having its first quarterly sales decline since 2019 and the largest drop in sales since 2016. Samsung Electronics, which mainly operates in the chip and smartphone businesses, also saw a fall of 69% in operating profit in Q4 2022, the lowest in 8 years. A decline in profitability for these industry leaders may suggest that macroeconomic headwinds may have a disproportionately negative impact on more vulnerable firms, as seen by the interquartile range of Agg PD in Figure 1a. However, despite the demand slowdown which began in 2022, the median Agg PD of smartphone manufacturers has been stable around the BBB- upper bound, in part due to the industry's robust fundamentals. The companies in our sample exhibit relatively low leverage with the median debt to capital at 20% (as of Q3 2022) and favorable liquidity[4] levels, thus anchoring the industry's credit profile against macroeconomic headwinds.

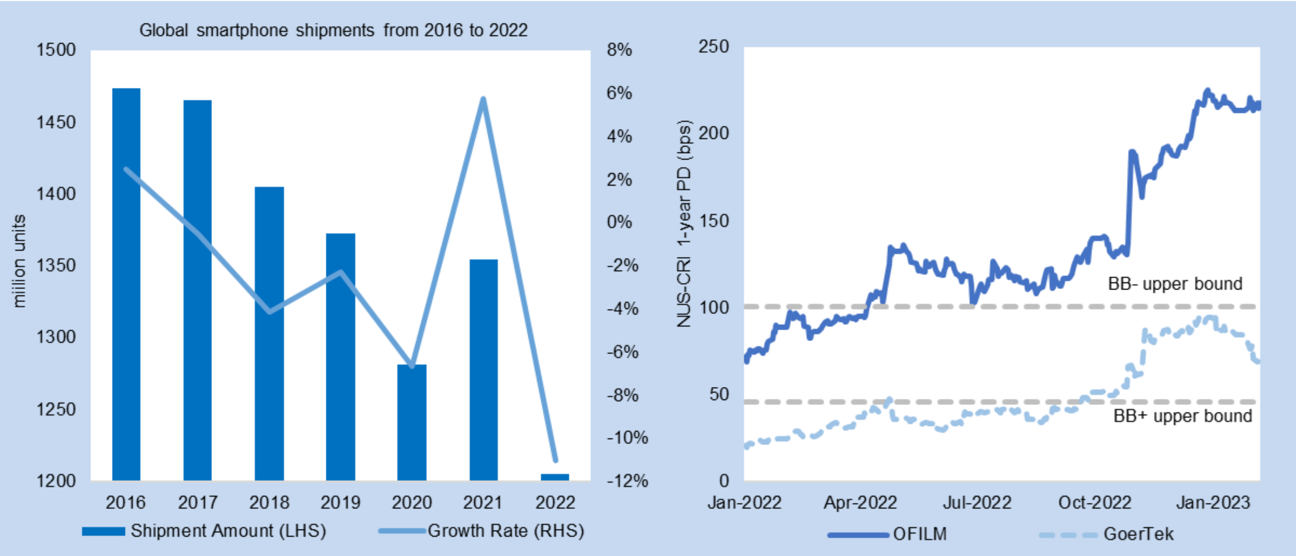

Figure 2a (LHS): Global smartphone shipment amount (LHS) and annual growth rate (RHS). Figure 2b (RHS): NUS-CRI 1-year PD for OFILM Group Co., Ltd. and GoerTek Inc. with reference to PDiR2.0 bounds. *Source: Statista; NUS-CRI*

Though the Agg PD for smartphone manufacturers remained relatively stable over the last year, the Forward PD suggests that the outlook for the industry is likely to worsen over the coming twelve months. Demand from one of the industry's key markets, China, has remained sluggish despite the country re-emerging from strict COVID-19 lockdowns. To add to manufacturers' woes, consumers around the world are also less likely to increase spending on new smartphone models as a looming recessionary slowdown and the energy crisis continue to provide inflationary pressures, hindering growth in discretionary purchases such as smartphones. As such, some market participants are expecting demand for new smartphones to fall by a further 10%. Looking ahead, profitability prospects for the industry are likely to worsen in the earlier part of 2023 as the loss in demand puts pressure on manufacturers' operating cash flows. A potential silver lining for the industry lies in the inherent cyclicity of its sales, which may provide some reprieve to the industry's top line as demand for smartphones may be catalyzed in the latter part of 2023 due to the release of new models.

The negative impact of weak end-user demand is also felt by the upstream suppliers of smartphones. Chips, vital components used in smartphone manufacturing, have experienced price drops up to 10-fold during 2022 from their previous peak as manufacturers cut production capacities in light of the demand slowdown. Such a sharp cut in sales and profits would lead to production cuts[5] and ultimately impact chip manufacturers' bottom lines. Producers of other smartphone components such as those that produce touch screens, camera modules and acoustic components, could face similar, if not more pronounced, headwinds that impact their cash flows and worsen their credit health.

Impact on the credit health of such upstream suppliers due to a slowdown of orders from smartphone manufacturers can be seen in Figure 2b, where OFILM (which produces camera modules) and GoerTek (which produces acoustic components) have both seen an increase in their PD due to a loss of revenue from one of its

[4] The current ratio which stands at 1.9 as of Q3 2022 has remained stable around the same level for the past 4 quarters. Similarly, the cash to total assets ratio only shows a marginal decline from 14.04 in Q1 2022 to 12.27 in Q3 2022.
[5] Samsung Electronics is considering reducing semiconductor production and reducing chip investment to produce fewer DRAM and NAND chips probably due to the 97% YoY fall in the operating profit of chip business in Q4 2022. Before this, chip manufacturers such as SK Hynix, Micron Technology, and Kioxia have already begun to reduce production.

key clients, Apple inc. Though the impact on these companies top lines has been driven by a plethora of other factors, they do serve as a good example of how a weakening operating environment and loss of revenue could lead to a distressed credit profile. Therefore, the credit risk outlook for smartphone manufacturers is set to worsen, as suggested by the Forward PD in Figure 1b, with its impact potentially causing a ripple effect on the global smartphone supply chain.

Credit News

World's riskiest EM bonds in play as distressed makes a comeback

Feb 13. Emerging market dollar-denominated debt is experiencing its best start in the past 3 years mainly due to a rally in distressed government bonds. The rebound indicates an improvement in risk outlook perception by investors who have flocked to riskier investments in 2023. This pivot by the market presents an opportunity in distressed debt where the higher payouts have been attracting investors. Bonds of El Salvador, for instance, have seen yields climb to 30% since the start of 2023. (Bloomberg)

Next big debt wreck seen brewing in Indonesia builder binge

Feb 11. Market participants are of the opinion that a debt crisis may be brewing in Indonesia's real estate market. The top 4 firms in the sector have seen their debt balloon more than 12 times the level seen when the current President Jokowi took office. Private property development companies are also contending with surging debt burdens as interest rate hikes gain momentum. Market analysts have already begun to draw similarities with the crises seen in China and Korea last year. Although the situation may be different than China and Korea, the threat of a possible contagion effect on other firms in the economy persists. (Bloomberg)

China's banks extend record loans as companies borrow more

Feb 10. Following the central bank and banking regulator's directive to increase lending, Chinese banks recorded a huge increase in the amount of new loans extended in Jan-2023. Resultantly, the M2 money supply in the economy grew at 12.6%, the fastest pace seen since April 2016. The boost in credit extended may also be a sign of recovery as the government has withdrawn its zero covid policy. (Bloomberg)

Adani group bonds claw back losses after distressed-debt investors pile in

Feb 08. Few of Adani Group's bonds have been able to regain half of the value lost due to the selloff which followed the release of a short seller's report, highlighting their overleveraged position. The rally in the bonds' prices has been driven by increased interest from distressed investors. Despite the bonds being rated higher than typical distressed bonds, credit analysts observed that since the last week a big portion of demand came from distressed investors. Additionally, Adani Group's announcement regarding repayment of a USD 1.1bn loan backed by company shares, may have further boosted bond prices. (WSJ)

Global bond investors' biggest fear on Japan cash is slowly coming true

Feb 13. The Japanese government is poised to appoint Kazuo Ueda as the next Bank of Japan (BOJ) governor. The appointment of Ueda has been impacting the markets that are betting on whether the new governor is going to be more hawkish than his predecessor. However, regardless of how bond yields are behaving, capital has started flowing back into Japan, with USD 181bn of foreign debt being sold to purchase USD 231bn of Japanese government bonds. Market participants believe that the sustained price and wage rise will inform a relaxation of Japan's yield curve control. If the yield curve control is let go by the BOJ, then it is likely that there will be a further inflow of foreign capital into Japan to benefit from rising domestic yields. (Bloomberg)

Corporate bonds bounce back after horrible 2022 (WSJ)

Fed's inflation fight pushes up cost of U.S. debt (WSJ)

Swedish households signal end may be in sight to housing rout (Bloomberg)

Regulatory Updates

Japan expected to name Kazuo Ueda as next central bank head

Feb 10. The Japanese government is likely to nominate Kazuo Ueda as the next governor of the BOJ, who is going to be succeeding Haruhiko Kuroda in Apr-2023. Ueda has previously signaled against raising rates too early and has said that the continuation of easing measures seems appropriate as a current monetary policy stance. The yield on 10-year Japanese government bonds rose one basis point to 0.5%, which is the upper limit of the BOJ yield cap. Ueda has previously said that the BOJ needs to prepare an exit strategy from its ultra-loose monetary policy, though it is unlikely that that exit is going to come soon. (FT)

Australia's cash pile, powerful price pressures drive RBA pivot

Feb 13. Reserve Bank of Australia's (RBA) latest pivot towards a continued hawkish stance was driven by mounting inflation pressures together with large household cash positions. This put analyst expectations of cash rates to increase to 4%, up from the current rate of 3.35% set by the RBA. RBA estimates that close to 20% of annual disposable income is currently being saved by households, prompting them to hike rates further to tame inflation, believing that households can withstand increased borrowing costs. Long-term inflation expectations reached 6.4% in Jan-2023, up from 5.9% a month earlier, making the central banks fear its stickiness. (Bloomberg)

China regulators querying banks on mortgage prepayment strain (Bloomberg)

ECB piles pressure on banks to exit Russia even as window for sale closes (FT)

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