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Breaking down the credit-strong US technology sector

by Lee Wei Qi

- **The rising NUS-CRI Forward PD for the US technology sector signals headwinds to come with the prospects of rising yields and inflation**
- **Forward PD demonstrates varying credit outlooks as retail technology and hardware lag behind their software and semiconductor counterparts**

Amidst the speculations of another technology bubble, the previous NUS-CRI Weekly Credit Brief provided a comparison between the credit fundamental and outlook of the US technology industry relative to that of 2000. Citing the sector's strong balance sheets, favourable demand conditions and the US's low interest rate environment, the asset light industry has grown to be relatively credit resilient. Though not isolated from market volatility and risks, the representative credit profile and outlook continue to demonstrate the industry's relatively strong narrative. These are corroborated by the NUS-CRI Aggregate (median) 1-year Probability of Default (Agg PD) and Forward PD[1] which is kept within the investment grade threshold as proxied by the Probability of Default Implied Rating 2.0 (PDiR2.0[2]) (Figure 1b). Within the technology industry, 4 key subindustries are selected for further analysis: semiconductors, software, hardware and retail technology.

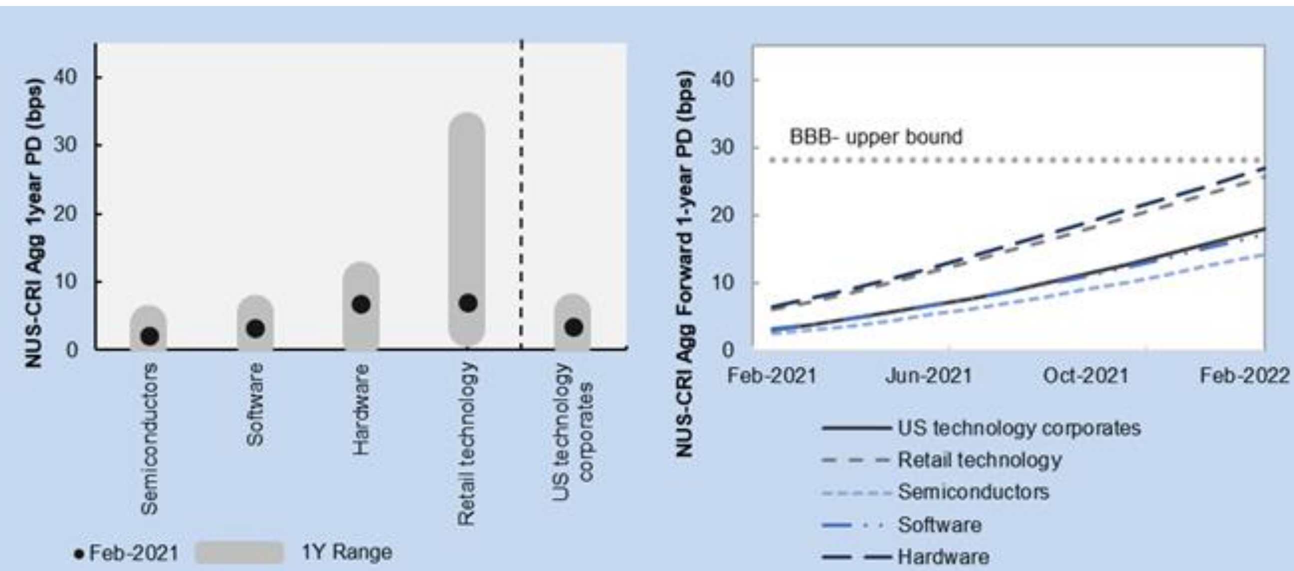

Figure 1a (LHS): NUS-CRI Agg 1-year PD of US domiciled technology corporates and their corresponding subsectors from Feb 2020 to Feb 2021. Figure 1b (RHS): Corresponding NUS-CRI Agg (Median) Forward 1-Year based on data feed as Feb 2021 with reference to the PDiR2.0. *Source: NUS-CRI*

The rising Forward PD forewarns possible headwinds to come (Figure 1b). Rapid recovery, compounded by the better than anticipated vaccine rollout and the potential USD 1.9tn stimulus package, has brought about

[1] 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.

[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.

increasing inflation expectations. This has led to the treasury yields hitting highs after coming down from the spike in Feb 2020. A near zero interest rate environment and the past year's record high debt binge can bring about their own risks should yields continue rising beyond growth prospects. The technology sector is not unabated from this. In 2020, the industry also experienced an all time high in debt issuance (Figure 2a). The pressure is now on duration risk as yields are low and convexities are near negative for weaker papers. Should yields continue rising, investors can experience greater flunctuations in debt prices and corresponding volatilities within the equity capital market, a prominent source of financing for the technology industry.

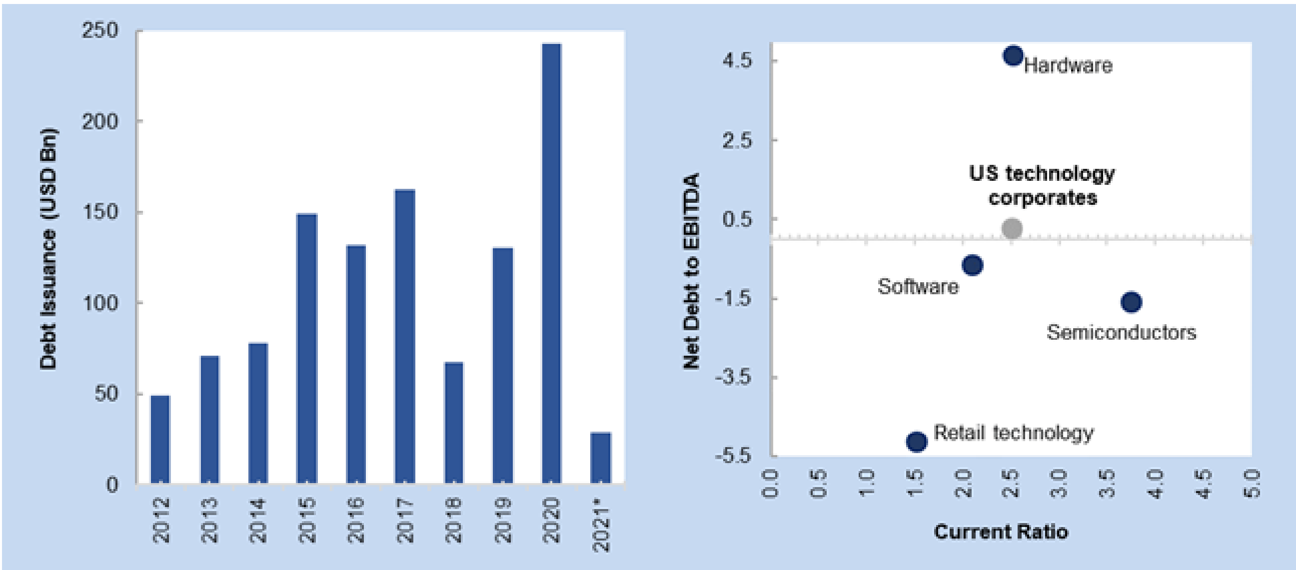

Figure 2a (LHS) Yearly debt issuance by US domiciled corporates from 2012 to 2021 (*As of Feb 2021). Figure 2b (RHS): Aggregate (Average) Net Debt (cash) to EBITDA and current ratios of US domiciled technology corporates and its subsectors. *Source: Bloomberg*

Looking beyond the ongoing systemic pressure, the credit fundamentals of US technology corporates remain robust as evident by the low Agg PD and tight range (Figure 1a). The sector, as a whole, remains asset light with a current ratio of 2.5 and cash rich with a net debt (cash) to EBITDA ratio of 0.2 (Figure 2b). Moreover, the sector's Forward PD is kept within the BBB- upper bound as proxied by the PDiR2.0. This can be partly attributed to the generally favourable market trends for technology across 5G, Blockchain, Big Data and more.

Diving into the specific subsectors, credit variance between the leaders and laggards can be attributed to differing impacts of structural changes experienced by the technology landscape. Relative to software and semiconductor, the retail technology and hardware subsectors' Forward PDs trend closer toward the BBB- upperbound (Figure 1b). Retail technology covers a wide spectrum of products and services. The extremely liquid and capital light attributes of e-commerce leaders such as Amazon, Etsy and Ebay are beneficiaries of the post-pandemic world. However, retail laggards offering travel related or geographically constrained products such as Expedia and Overstock face greater pressure on their revenue streams. COVID-19 has further exacerbated the credit differences of these individual firms as evident in the wide Agg PD range (Figure 1a).

For hardware, the cash streams are inherently challenged by their reliance on brick and mortar sales with little to no recurring revenue. These firms usually have higher fixed operating leverage ratios and longer working capital cycles. Consequently, the Agg PD range for the past year has reflected greater fluctuation for the hardware subsector (Figure 1a). Outlook wise, the subsector is seemingly less credit resilient relative to their semiconductor and software counterparts (Figure 1b). Beyond recovery from the pandemic-induced economic slowdown and supply chain disruptions, these firms are compelled to redirect retained earnings toward digital transformation or an expansion of their logistic networks.

In contrast, software firms have higher recurring revenue streams from their shorter product life cycles. Moreover, due to their light capital intensity, the subsector faces liquid operating costs that can be flexibly cut should cash conservation be required. While the semiconductor subsector is known to be weak at times of recession, the US Congress passed a bill of over USD 22bn in support for US manufacturers in Jun 2020. This availed a fresh stream of liquidity and cash for the firms. As COVID-19 emboldened the demand for cloud computing and workfrom-home operating models, the semiconductor industry have benefited significantly from better than expected earnings and revitalized outlook as these digital themes are likely to maintain momentum.

Beyond the roaring performance by the FAANG companies, there remains winners and losers within the US technology industry. At the start of 2021, the capital markets have noted unusual equity price actions and debt sell offs. These pressures can affect the overall financing conditions for most corporates – the technology sector included. While there is consensus on the aggregate credit profile and outlook of the US technology sector, a deeper dive revealed that the software and semiconductor subindustries are seemingly more well-endowed to weather the future headwinds. Moreover, some heterogeneity in credit profiles can be found within sectors themselves as evident from the case of retail technology.

Credit News

Junk-rated companies enjoy record-low US borrowing costs

Feb 12. Yields for junk-rated bonds have fallen significantly recently, reaching a low 4%, as investors' interest in the risky assets soared post-pandemic. Hopes for a strong vaccine push as well as expansive monetary policy measures have motivated investors to chase riskier bonds, with yields from the debt issued by T-Mobile hitting a record low of 2.25% of interest, the lowest ever for a high-yield issuer. Double B rated Centene Corp also obtained funding at a cost of 2.5% for a USD 2.2bn 10-year bond. Even triple C rated bonds have enjoyed the benefits of the debt craze, as their yields have dropped to below 7 percent. Overall, this may be an issue if the reopening of the US economy continues to be stonewalled, which could put pressure on companies' ability to service their debts and thus pushing down bond prices. (FT)

ECB urged to 'decarbonise' its EUR 2.4tn corporate credit holding

Feb 11. Pressure is being put on the European Central bank (ECB) to adjust the amount of corporate bonds it buys and the value of collateral it accepts, depending on how aligned companies are in achieving goals pertaining to the international climate agreement. France's central bank governor has proposed the 'decarbonization' of the ECB's balance sheet, with the Dutch central bank governor showing support. However, opinion is split over whether the ECB should apply climate change criteria to its portfolio of corporate and bank bonds and thus break with its "market neutrality" principle to only buy bonds in proportion to the overall market. (FT)

Big US loan fund stumbled in 2020 on airline and shale bets

Feb 11. Lord Abbett's floating rate mutual fund sustained losses of 1.7% in 2020, compared to the 2.7% gain in the Credit Suisse Leveraged Loan benchmark. They performed worse than their other mutual loan fund counterparts, which was partially attributed to the fund's allocation into the US airline sector. Alongside this, outflows from the fund increased, causing a fall in assets under management of USD 1.3 bn. As the price of the bond fell from 100 cents to 56 cents on the dollar, it led to the mutual fund cutting their holdings in the airline by half. They similarly struggled with positions in TransDigm, J Crew and Chesapeake Energy. However, the fund is looking to have a change in outlook, as hopes on aircraft travel have shined favorably on airline companies. The fund increased its holdings in US airlines once more. (FT)

Auto loan market revs up as US car demand holds firm

Feb 10. The price of bonds backed by auto loans has hit multi-year highs. BBB groups of auto backed bonds now trade with yields just 0.7 percentage points higher than Treasuries of similar maturities. While yields have fallen due to a rally in prices, interest rates that lenders charge have remained relatively stagnant due to strong demand for cars from consumers. The short lifespans for auto loans mean that borrowers generally do not need to refinance. The loans also take less of the household's income when compared to other types of debt. Furthermore, with strong retail sales and with the government stimulus checks, delinquencies and loan write-offs in this market were typically subdued in the 4th quarter of last year compared to the year before. (FT)

Credit investors lose money like it's 2018 on duration risk

Feb 10. Interest rate risk could be a significant pain point for investors, as they continue to buy longer-dated bonds, while yields continue to fall. These changes have pushed global credit durations higher, with US credit durations having risen by 20% since 2018. Danger could be right around the corner, as yields are expected to inflect upwards soon. These effects are being felt in the market right now, as bonds with 10 years left to maturity have produced losses of around 3.2% so far this year. This has not stopped issuers from flooding the debt market, however, with USD 30bn being sold in 2021, following USD 420bn in total bond issuances in 2020. (Bloomberg)

Air Namibia goes into voluntary liquidation (Reuters)

Intelsat files restructuring plan to emerge from bankruptcy (Reuters)

Billionaire Asda buyers raise GBP 2.75bn in record sterling junk bond sale (FT)

Regulatory Updates

Bank of England plans break from EU with tougher bank capital rule

Feb 15. The Bank of England (BoE) has introduced a proposal that would make bank capital rules tougher in the UK than on the rest of the EU continent, marking initial signs of a significant difference in regulation policies. This policy stance stems from regulation surrounding the recognition of software assets towards the banks' core capital levels, a claim the BoE concludes does not hold under severe stress periods and underestimates the banks' potential loss-absorbing capabilities. As such, prospects of the EU granting "equivalence" status to UK regulation dims, effectively reducing the City of London's access to European markets. (FT)

Fed to test banks' ability to withstand 55% fall in equity prices

Feb 12. The Federal Reserve outlined the targets for the upcoming annual stress tests for banks this Friday, where banks are expected to perform under more stringent conditions than last year. Banks should potentially be able to withstand a 55% drop in the US stock market, a fall in GDP to 4%, and a peak unemployment rate of 10.75%. These measures are stricter on banks as compared to the previous assessment last year, as volatile equity prices could potentially affect the risk profiles of these institutions. (FT)

Mexico central bank cuts interest rates, says outlook uncertain (Reuters)

ECB officials consider climate leap for corporate bond program (Bloomberg)

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