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The US technology sector maintains a stable credit outlook amidst speculations of a seemingly Dot-Com like bubble

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Back in 2000, the technology[1] concentrated NASDAQ universe peaked at five-fold from 1995. What followed was a prolonged bear market otherwise known as the Dot-Com bubble burst. The lack of cash flow and inability to refinance left many information technology firms with the only option of folding. This was exacerbated by the panic selling of assets which resulted in a lack of market liquidity. Only 48% of the Dot-Com companies founded since 1996 survived liquidation and default pressures. Today, the favour for US-domiciled technology corporates has grown. Despite the momentary set back by the Covid-19 pandemic, Jul 2020 witnessed many notable US technology firms breaking all-time highs in the equity market. The record-breaking stock gains raised doubts from cautious investors as many prompted comparisons to the infamous Dot-Com bubble. The speculative notion that the technology world is nearing yet another peak can be unnerving for both stock and bond investors alike. However, these concerns might be momentarily unfounded given the industry's strong balance sheets and the US's low-interest rate environment.

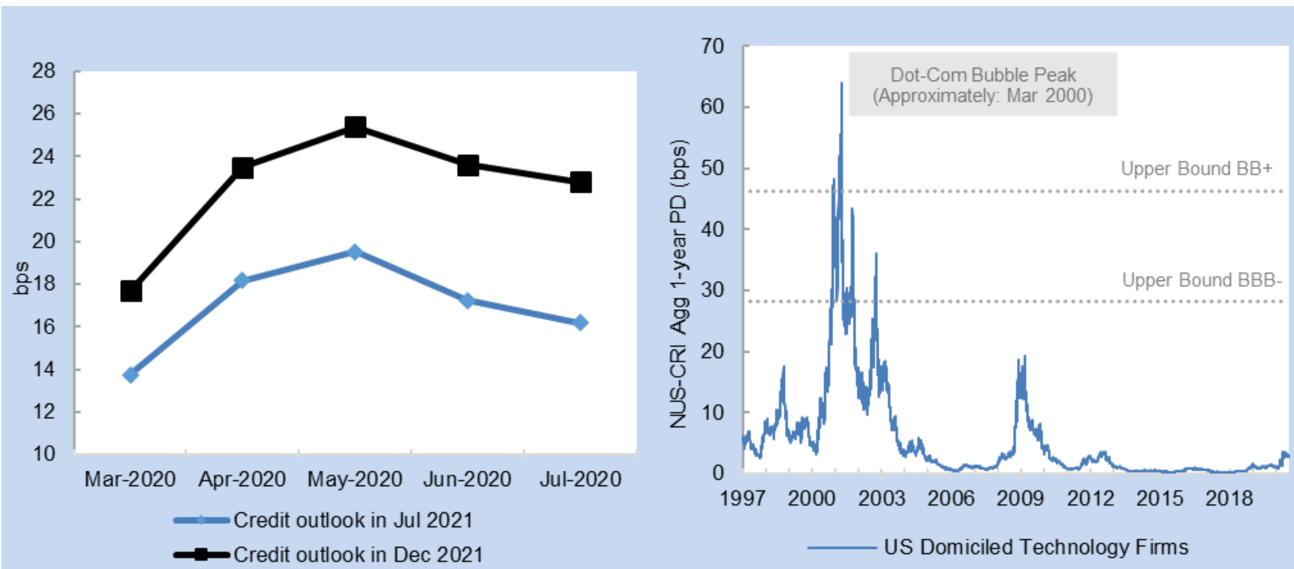

Figure 1a (LHS): NUS-CRI Aggregate Forward 1-year PD time series for US domiciled technology corporates based on information from different historical months. Figure 1b (RHS): NUS-CRI Aggregate 1-year PD of US domiciled technology firms from Jan 1997 to Jul 2020 with reference to the PDiR2.0[2] bounds. *Source: NUS-CRI*

The NUS-CRI Aggregate (Median) Forward 1-year Probability of Default (Forward PD) in Figure 1a illustrates the US technology sector's stable credit outlook. The credit forecast looks to Jul 2021 and Dec 2021 based on data from Mar 2020, when the WHO declared COVID-19 to be a global pandemic, to Jul 2020. Since May 2020, the two Forward PD time series have shown to be decreasing, indicating that the mentioned universe has a sound credit outlook. Looking at the Jul 2021 credit outlook curve in May 2020 for instance, the probability for a

[1] The focused universe for the technology industry includes: (1) the semiconductor subsector (2) the retail-technology subsector (3) the hardware-technology subsector (4) the software and services subsector (5) the new media and entertainment subsector.

[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.

representative US-domiciled technology firm to default from Jul 2021 to Jul 2022 was 19.5bps. Now, the probability of defaulting during the same period has decreased to 16.2bps. Given the stable credit outlook, the same query can be posed looking back over the historical credit performance of US-domiciled corporates. How does the financials today differ from that of the Dot-Com era? From Figure 1b, the NUS-CRI Aggregate (median) 1-year Probability of Default (Agg PD) indicated a sharp and continuous spike through the early 2000s. Today, the Agg PD stands at 3.3bps, a level that is well below the Agg PD then.

While speculations of yet another technology bubble rise, advocates for the sector can claim that the industry has matured from what it was during the Dot-Com boom and bust. The technology corporates have undergone tremendous growth, fierce competition, and series of strategic mergers & acquisitions leaving the sector with resilient players. Businesses with poor prospects, such as Palm and Pebble, have been weeded out. Today, the industry is left with their superior counterparts such as Apple Inc and Microsoft. Many of the household names that dominate the US technology industry are well equipped with strong moats and defensible intellectual property portfolios. In addition to their diversified exposures across products and markets, they remain a considerable force to be reckoned with. In the face of a real-life stress test like the Covid-19 pandemic, the referred universe recorded a mere upward twitch in the Agg PD from 1.1bps to 3.3bps. As such, the confidence in the US technology industry seems to be well-founded given that the representative US technology firm's credit profile remained seemingly resilient against the pandemic induced economic slowdown.

	2012	2013	2014	2015	2016	2017	2018	2019	2020*	2021*
Return on asset	7.95%	9.03%	8.66%	7.31%	7.19%	7.72%	9.70%	8.36%	13.56%	14.77%
Current ratio	1.90X	1.97X	1.89X	1.93X	1.97X	1.94X	1.71X	1.63X	NA	NA
Net Debt to EBITDA	-1.06X	-1.05X	-0.81X	-0.71X	-0.54X	-0.35X	-0.09X	0.33X	0.34X	0.29X

Table 1: Financial ratios for US-domiciled technology corporates. *Source: Bloomberg*

Financially, the evolution in the US technology sector's credit strength is evident as credit analysts highlight their well-endowed positions in terms of liquidity and financial flexibility. Relative to the negative earnings recorded during the Dot-Com era, the US-domiciled technology corporates have seen positive and increasing Return on Asset (RoA). Looking into the coming two years' projections, RoA is poised to reach a new high of 14.77%. This growth in profitability can be reconciled in view of the industry's strong exposure to secular opportunities in the long run. These secular themes include cloud computing, artificial intelligence, big data, blockchain technology, fifth-generation technology standard for cellular networks, and digital transformation.

The Dot-Com burst has also created a long-lasting imperative for technology firms to maintain a substantial level of short term liquidity. Over the decade, the technology sector has fortified their balance sheets as they fully embodied the axiom that "Revenues are vanity, profits are sanity, but cash is reality". The phrase emphasizes cash as the most realistic reflection of a firm's ability to sustain a business without any external lift from investors. According to Bloomberg, the sector's 2019 ratio of cash to market capitalization (6.9%) remains 2.5X of the level it was during Dot-Com (2.7%). This, along with the current ratio, is a testimony to the conservative approach for a liquid balance sheet as levels hold strong despite the long-lasting and poor macroeconomic environment exacerbated by the trade war of 2018.

Moving forward, the financial flexibility of the US technology sector is expected to be well maintained given the prevailing investors' exuberance and the Fed's dovish monetary approach. Both factors would avail a low cost of capital for the US technology corporates to deal with the macroeconomic concerns compounded by the pandemic. Bloomberg estimated that the high-grade technology debt offerings are likely to approach USD 200bn by the end of 2020. The increase in debt is well supported by the earnings of the US technology sector as the aggregate Net Debt to EBITDA currently stands at 0.33X. The fall in the forecasted ratio for 2021 signals confidence in the sector's ability to reduce leverage. Today, the traditional technology firms are undergoing efforts to pursue a relatively capital-light model similar to that of their new innovative counterparts. For instance, legacy software vendors like Oracle are shifting to a cloud and subscription based model which would avail more liquid operating costs.

The rising projected profits, low leverage, and favourable financing conditions align with the stable credit outlook exhibited in the NUS-CRI forward PD time series. Moreover, as evident from the low level of Agg PD, it seems that the US technology corporates are more equipped than they were during the Dot-Com to navigate the headwinds to come. Despite the looming second wave of Covid-19 in the US, there remains confidence that the demand for cloud computing, media streaming, and off-premise marketplace delivery systems endows the US technology firms the ability to weather and capitalize from the prevailing circumstances. From a macroeconomic perspective, the economic backdrop today greatly differs from that of the Dot-Com. The period then saw a hike of interest rates well above 6%. The corresponding increase in the cost of funding contributed to the dried up capital market. Currently, the Fed has cut rates to near-zero with a commitment to maintaining the rate throughout 2021. Along with the timely injection of the USD 2tn stimulus package, the credit outlook for the US technology industry holds strong.

Credit News

Bank across Europe braced for further heavy loan-loss charges

Jul 27. European banks are going to unveil another huge round of provisions for loan losses, which would make it the highest net addition to reserves since the first half of 2009 when combining with the provisions previously set aside by the five largest US banks. It is forecasted that European banks will suffer as much as EUR 800bn of loan losses over the next three years if there is a second wave of infections. The sector is still dogged by problems carried over from the financial crisis of 2008-2009 and is currently trading on average at less than 40 percent of the book value of their net assets. However, European banks with significant investment banking arms are less affected as the surge in trading revenues could cushion the blow. (FT)

Foreign investors flee Turkey's bond market

Jul 24. Fund managers withdrew more than USD 7bn from Turkey's local currency bond market in the six months ended in June, making it the largest drawdown in the first half on record. The real yield on the debt has fallen below zero this year as the Turkish central bank cut interest rates to below the inflation rate, making the bonds less attractive to investors. The money flowing out of Turkey stands to add to the woes of the heavily indebted country, which has been struggling for years with a dependency on overseas capital, and investors are speculating that the nation is edging ever closer to a balance-of-payment crisis. To solve this crisis, Turkey would be forced to let the currency weaken and raise interest rates, reducing economic growth, or seek a bailout. (WSJ)

Indian banks' bad debt ratio could hit nearly 15% by March in worst-case scenario

Jul 24. Indian banks' gross non-performing assets (NPA) decreased from 9.3% in September to 8.5% in March after new rules imposed by the central bank came into effect. However, by March 2021 bad loans in the Indian banking system could jump to 15% of total loans under a very severely stressed scenario according to the Financial Stability and Development Council. Moreover, almost half the customers accounting for half of the outstanding bank loans have opted to use relief measures such as deferments of loan and interest payments for six months to battle the financial implications of the Coronavirus to their cash flows. However, the higher capital buffers and a shrinking interbank market in recent years may help to control the contagion risks within the finance sector. (Reuters)

Indonesia's global bonds spike in popularity amid uncertainty

Jul 24. Indonesia's government and corporations have seen an uptick in demand for their global bonds as both investors and issuers seek to limit their foreign currency risk and improve liquidity due to market uncertainty. The government previously issued USD 43.1bn worth of sovereign debt papers in June to cover the country's budget deficit of 6.34% of GDP for the year and that money has gone to strengthening their economy. State-owned enterprises and private corporations are also turning to the global market to raise funds and have seen their issuances met with great popularity, with Bank Mandiri reporting that their USD 500mn global debt paper was 5 times oversubscribed at USD 2.4bn. (Jakarta Post)

China's hidden debt swells in scramble to finance public works

Jul 21. Chinese local government financing vehicles (LGFVs), which are widely known to be backed by regional governments, have been instrumental in lifting the Chinese economy out of its coronavirus struggles. These LGFVs have issued CNY 3.3tn in new bonds this year, an increase of 50% from the same period in 2019. Much of this funding has resulted in China's gross domestic product bouncing back, increasing by 3.2% in the second quarter. China still stands firm that the regional governments will only raise funds through regional bonds and that they will not bail out the LGFVs. However, the public still expects the regional government to bail them out if required. This has left the nation with CNY 43tn of hidden debt according to China Chengxin International Credit Rating. Some of these LGFVs are already running out of cash and this could expose the limitations of China's economic recovery led by public projects. (Nikkei Asian Review)

ECB tells Montei dei Paschi to boost capital for bad loan deal (Reuters)

Singapore Airlines gets USD 540mn in funding to manage coronavirus crisis (Reuters)

Bombardier secures up to USD 1bn in credit, cites improved cash usage, shares rise (Reuters)

Regulatory Updates

Treasury and banks in talks to tackle coming wave of bad COVID debt

Jul 26. The Treasury is in talks with the UK's big banks to help tackle bad debts expected under the government's light-touch coronavirus bounce back loans scheme. The Office for Budget Responsibility estimated that up to 40% of the loans could default, costing the taxpayer GBP 16bn. One option being discussed by officials and bankers is whether bad loans could be extended for as long as a decade to give borrowers more time to repay. However, banks are pushing back strongly against long extensions as they are wary of the greater work and risk. Besides talks around a common code of conduct to deal with bounce back borrowers, bankers are also in discussions over a standardized, automated approach to dealing with defaults, with measures to help borrowers rolled out across all lenders to ensure consistency and efficiency. (FT)

China to slash private lending rate cap from 24% in effort to tackle "usurious loans"

Jul 24. The Supreme People's Court and China 's top economic planning agency announced that any interest rate of private loans above 36 percent per annum will be illegal and legality of interest rates ranging from 24 to 36 will be decided on a case by case basis. The move to significantly lower the legal interest rates of private loans is mainly to reduce borrowing costs for businesses but critics fear that the overpowering control over the cost of financing may harm the private lending market. Many Chinese private businesses which fail to access the state banking system turn to private lending as a source of capital. Businesses that are denied even private loans due to their unhealthy balance sheets sometimes turn to underground loans to stay afloat. If no proper discussions with financial professionals were sought before the amendment, the state's control over private loan's annual rates might backfire with underground banking activities getting more rampant. (South China Morning Post)

South Africa extends COVID-19 loans for struggling businesses (Reuters)

Russia surprises with small rate cut, signals more easing (Bloomberg)

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