Credit Research Initiative
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Upward and co-moving credit risk of US Consumer Cyclical corporates shows red flag to the US Economy

by YUE Ling

US real GDP growth started to slow down from the first quarter of 2018, with 1.9% realized in the third quarter of 2019, which is 0.8% lower than the 2019Q1 growth rate and nearly half of the 2018Q1 number. This decline has been reflected in corporate credit quality since early 2018, especially for firms with cyclical business. Since January 2018, the NUS-CRI Aggregate 12-month Probability of Default (Agg PD) of US-domiciled Consumer Cyclical listed firms (CC firms hereafter) has trended up from 2.7 bps to over 10 bps in November 2019, going back to the post-crisis period in 2011 (Figure 1). The Agg PD gap between CC firms and all US-domiciled firms has been widening even more folds from 1 bps in January 2018 to over 6 bps in the recent month.

Consumer Cyclical firms directly provide cyclical goods and services to consumers and thus their PDs can be a good predictor for the overall credit quality of the economy. With nearly 30 years of PD data at the NUS-CRI, we performed a simple time-series analysis and it shows that the PD gap between CC firms and US all firms has strong predictive power for the US Agg PD change from 1 month up to 12 months ahead. The widening gap between CC firms and US all firms since last year, especially from Aug 2018, gives a negative signal to the US credit outlook in 2020.

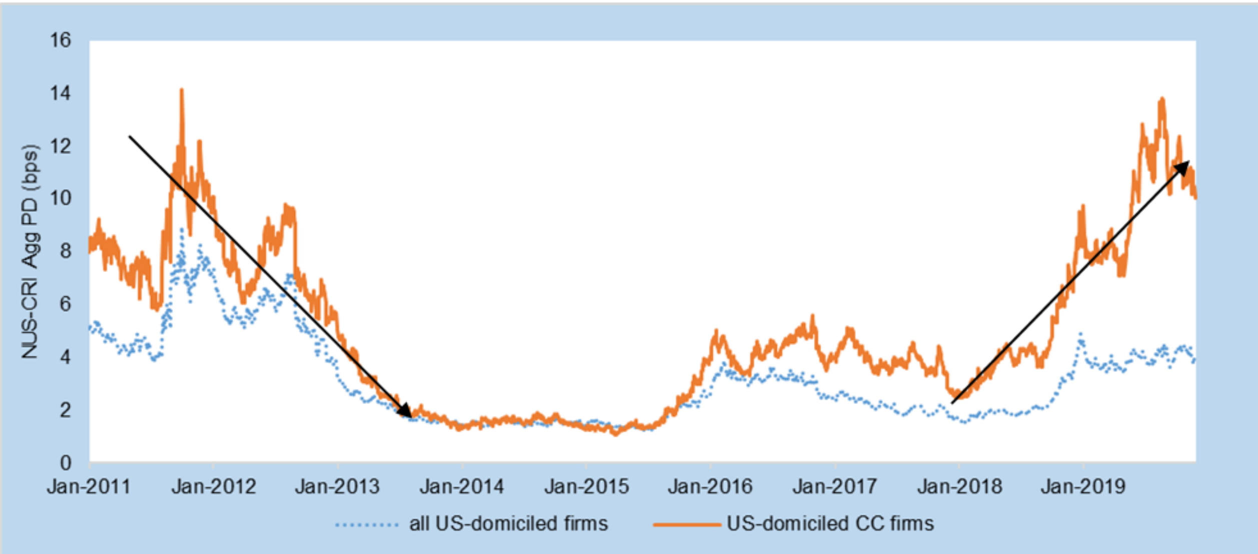

Figure 1: Aggregate Probability of Default of US-domiciled all listed firms and US-domiciled listed firms in the sector of Consumer Cyclical. *Source: NUS-CRI, Bloomberg.*

According to the PD model of NUS-CRI, the main drivers for PD changes from 2011 to 2013 and from 2018 till now are Distance-to-Default (DtD) and market cap. DtD is the expected difference between the asset value of a firm and the default point, after adjusting for the volatility of assets. A corporate with sound credit quality is expected to have positive and high DtD. While the 12-month moving average DtD has been positive in our study period, it has sharply decreased by 25% since Aug 2018. Increasing market leverage is one important driver for DtD's decrease from 2018Q3. While the quick accumulation of debt may help CC firms secure funding before the credit market gets worse, it also piles up the debt to mature in the following years (Figure 2). As the US-China trade war continues, the benefits of Trump tax cuts run out, the Business Confidence Index further reduces, and so on, the CC firms' earnings ability will become weaker. If the Fed policy rates continue to decrease, investors may be reluctant to lend due to the lower return and gloomy credit outlook.

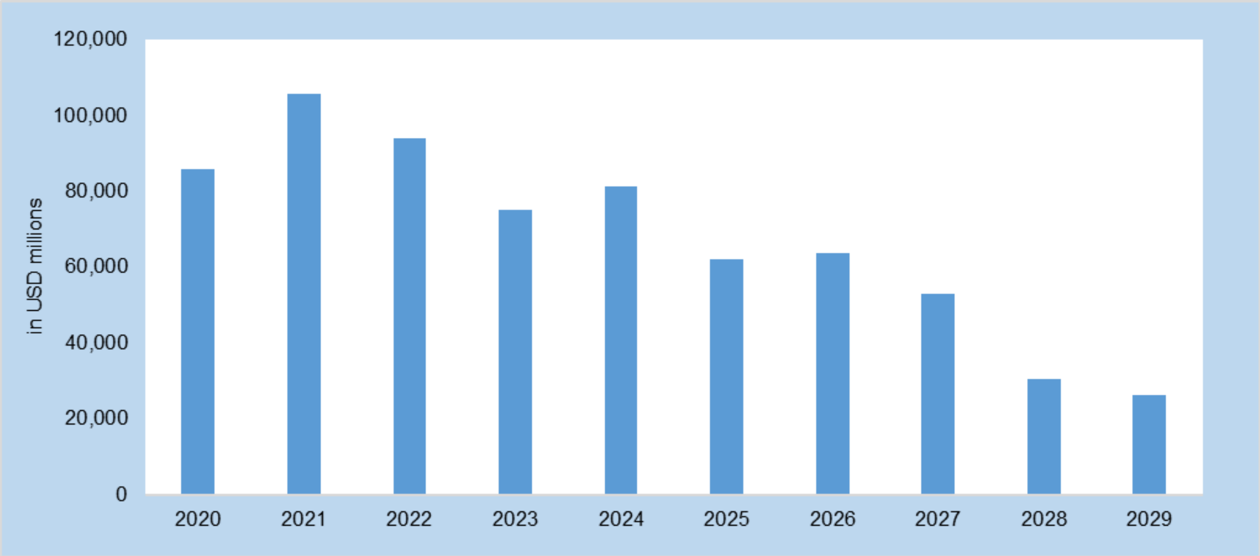

Figure 2: Bond maturity schedule of US-domiciled Consumer Cyclical firms. *Source: Bloomberg.*

During the period of our interest, there is an average of 16% (about 8% in the best month and 32% in the worst month) of CC firms rated as junk-rate (BB+ or lower) corporates according to the NUS-CRI PDiR[1]. These two groups show different movements in the NUS-CRI Actuarial Spread (AS). AS is the annualized premium that is needed to compensate the counterparty for the default risk, on an actuarial basis, of the reference company. It is equivalent to the physical Credit Default Swap (CDS) par spread and is calculated with the term structure of forward PDs[2]. Similar to the CDS contracts, the AS has different tenors from 1 year to 5 years. The median 1-year AS of investment-grade and junk-rated corporates are about 1 to 5 bps and 50 to 130 bps, respectively (Figure 3). These two series have little or slightly negative correlation from January 2011 to July 2018. However, when the aggregate PD of CC firms started to grow at a faster speed in August 2018, these two series started to climb up together with a correlation coefficient of about 0.7 during the past sixteen months. Such a high correlation between investment- and junk-rated corporates ASs usually happens when there is big comovement in the market, e.g, around the 2008-2009 financial crisis and the 1999 dot-com bubble. When the credit risk is going up coupled with strong lasting comovement between firms, the diversification will become less effective in risk management.

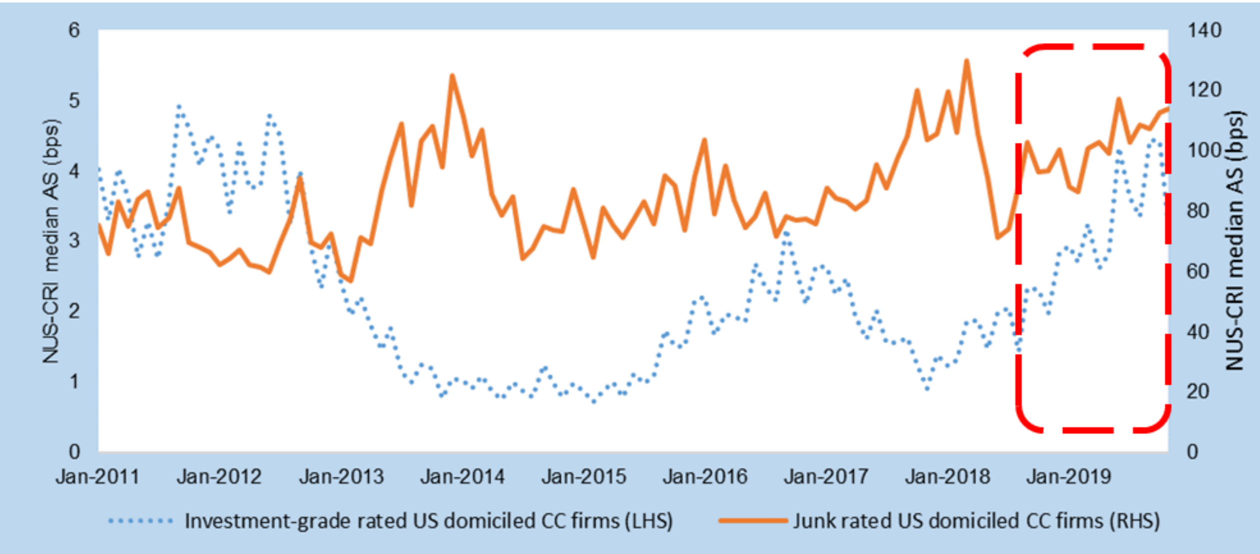

Figure 3: Median 1-year Actuarial Spread of Investment-Grade and Junk-Rated corporates, US-domiciled Consumer Cyclical listed. *Source: NUS-CRI, Bloomberg.*

[1] The NUS-CRI Probability of Default Implied Rating (PDiR) provides a more conventional interpretation of PDs – it translates NUS-CRI 1-year PDs to letter ratings by taking reference from the historical observed default rates of S&P's rating categories.

[2] The NUS-CRI Forward PD computes the conditional credit risk of a company in a future period, which can be interpreted similar to a forward interest rate. For example, the 3-month Forward 1-year PD is the probability that a firm defaults during the period from 3 months onwards to 1 year plus 3 months, conditional on the firm's survival in the next 2 months.

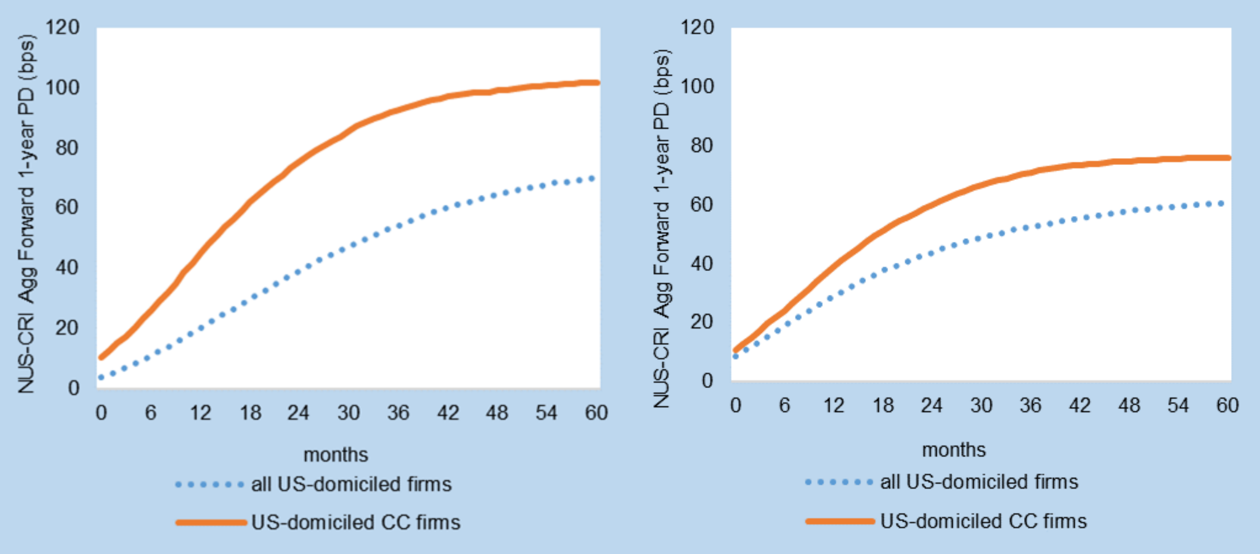

Figure 4a&4b: NUS-CRI Forward 1-year PD term structure based on information in November 2019 (LHS) and in November 2011 (RHS). *Source: NUS-CRI*

Looking into the future, the market expects that the credit risk gap between CC corporates and US all corporates will quickly get wider in the next three years. If a typical CC firm survives from today till Sep 2022, the probability that it will default in the following 1 year is 38 bps higher than a typical US firm (Figure 4a). Though the absolute level of credit risk nowadays is similar to that in 2011, the future is very different. Compared with Nov 2011 (Figure 4b), the forward PD gap between CC firms and US all firms is bigger and increasing faster. Since last year, the PDs of US CC firms have been going up, and the ASs of investment- and junk-rated corporates have been co-moving largely. Considering the tightening business environment both domestically and internationally, the credit outlook of US corporates is facing a challenging test.

Credit News
Rating agencies downbeat on corporate India as defaults rise **Dec 2.** Credit rating agencies have a negative outlook on more than half of non-financial Indian companies which it provides ratings to, its highest level in 10 years. The pessimism in India comes as the country enters the second year of a severe liquidity squeeze, stemming from a breakdown in the Indian shadow banking system. Since September 2018, a wave of defaults among large, non-bank lenders, starting with IL&FS, signified a cash shortage which left more companies struggling to raise capital. IL&FS enjoyed a AAA rating from Moody's affiliate ICRA until its default last year, catching investors off-guard and prompting regulatory pressure on credit rating agencies to reform their rating methodologies. (FT)
US distressed debt flashes warning sign for investors **Nov 28.** Investors are pulling back from the riskiest parts of the US corporate bond market as they fear that even an improving domestic economy may not be enough to save companies that are struggling under heavy debt burdens. Despite the big rally that the corporate bond markets have enjoyed this year, around 11.6% of the bonds in the Ice index are trading with yields more than 10 percentage points above equivalent government bonds, the highest proportion since 2016. Unlike in 2016, current distressed borrowers are not limited to companies in the energy sector but also include several in the retail and telecom sectors. Signs of severe stress in bond markets are concerning given the current positive economic indicators as even supportive monetary policy may not be enough to support borrowers which have taken on excessive debt. (FT)
Bumper Greek credit demand closes door on decade-long crisis **Nov 28.** Greek companies are now welcomed by bond market because yield-hungry investors have been struggling to deploy funds amid negative interest rates. Companies with healthy financials are

benefitting from the current hunt for yield and the low coupons also indicate the increasing confidence of international investors. European Bank for Reconstruction and Development (EBRD) has been buying Greek debts since 2017 to help develop the country's capital market during the nation's debt crisis. However in a deal in November, EBRD got fewer bonds than requested because the adequate demand from investors was more than cover the bond. (Bloomberg)

US CLO issuance forecast to fall in 2020 as spreads remain wide

Nov 27. Issuance of US Collateralized Loan Obligations (CLO) is forecasted to fall next year as spreads remain wide, cutting into the returns of the most junior investors in the funds. In 2019 year-to-date, more than USD 108bn of CLOs were originated, with estimates for 2020 to be in the USD 75bn to USD 100bn area. In 2018, CLO issuance was at a record-high with USD 127.7bn issued. The CLO market has been facing regulatory headwinds, dealing with three rate cuts that curtailed the pitch of the funds as a safe-haven in a rising interest rate environment. The Fed has cut rates three times since June, on the back of hiking rate nine times from December 2015 to December 2018. A 32% drop in 3-month Libor has placed additional pressure on CLOs because the asset pays debt investors a coupon plus Libor; as Libor falls, so do investor payments. (Reuters)

Yield-crazed investors pile into US subprime car loans

Nov 26. The market for subprime auto asset-backed securities (ABS) is booming as yield-hungry investors shrug off concerns over the financial health of the American consumer. In 2019 year-to-date, subprime auto ABS issuance stands at USD 29bn despite softer sales of new cars and trucks, on track to surpass 2018's record haul of USD 32bn. The hunger among investors is reflected in tight spreads over its equivalent government bonds – an index of ABS is currently trading at nearly 90bps over the US treasuries. Bullish investors point to low unemployment, rising wages and low total household leverage as evidence of the solidity of the subprime sector, which normally denotes borrowers with credit scores of less than 620 on the FICO scale. Concerns are rising that consumers have taken up more debt than they can handle – delinquent consumer auto loans have been steadily increasing.(FT)

The way out for a world economy hooked on debt? Yet more debt (Bloomberg)

Another yield-starved Japanese bank steps in to buy CLOs (Bloomberg)

China raises USD 6bn in its biggest ever international bond sale (CNA)

Regulatory updates

European Banking Authority highlights bleak outlook for banks

Nov 30. European banks have significantly increased their riskier lending exposures as they searched for yield in a low-interest rate environment. Low interest rates and even negative ones levied by the European Central Bank (ECB) have driven banks to charge their customers with negative rates, potentially challenging the traditional stable behaviour of depositors and the stability of banks' funding mix. A report by the European Banking Authority (EBA) also underscored the stagnant profitability of Europe's bank as lenders' average return-on-equity across the region declined from 7.2% to 7%, while just 28% of publicly traded European banks boast a price-to-book value of more than 1, compared with 81% in the US. The deteriorating macroeconomic environment is expected to add further pressure to bank profitability and the streamlining of operating expenses is presumably the main area to improve banks' profitability. (FT)

Indonesian banking regulator warns of bad debt risks as loan growth slows

Nov 29. Non-performing loan ratio of Indonesian banks inched up to 2.73% in October, from September's 2.66%, mainly due to excess liquidity in the banking system and weak demand from credit. Loans extended by commercial banks rose 6.53% in October, the weakest pace since September 2016, and slower than 7.89% in the previous month. To boost growth, Bank of Indonesia cut banks' reserve requirement ratio second time this year and also slashed its benchmark interest rate. However, the policies are questioned by some analysts since liquidity injections could not solve demand-side problems. (Reuters)

PBOC signals policy to stay cautious amid uncertain data (Reuters)

Euro zone business lending rebounds in October after plunge: ECB (Reuters)

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