Credit Research Initiative
Risk Management Institute, National University of Singapore
NUS National University of Singapore | RMI
transforming big data into smart data
Weekly Credit Brief Feb 25 - Mar 2 2020

The impact of novel coronavirus on the credit profile of automakers through falling supply chain disruptions and falling demand from China

by Tsoi Yuet Yan

Since the onset of the novel coronavirus we have seen many businesses in China badly affected by it, as reported in the previous CRI Weekly Credit Brief. However, beyond China, the global auto industry is also vulnerable to this novel coronavirus crisis because as many as 80 percent of car parts used globally is manufactured in China and without just a single car part, auto manufacturers will have to halt operations. The outbreak of the virus will certainly affect the credit profiles of many global automakers which relies greatly on China for auto part supplies and also have car sales in China. There are over 500 car parts manufacturers operating in Wuhan and this shows the extent the lockdown on Wuhan could affect the supply of car parts. Moreover, car sales in China have also declined drastically as people refrained from visiting showrooms. Therefore, the lower revenue and the rising cost from production disruptions will create pressure on the credit profile of auto making firms.

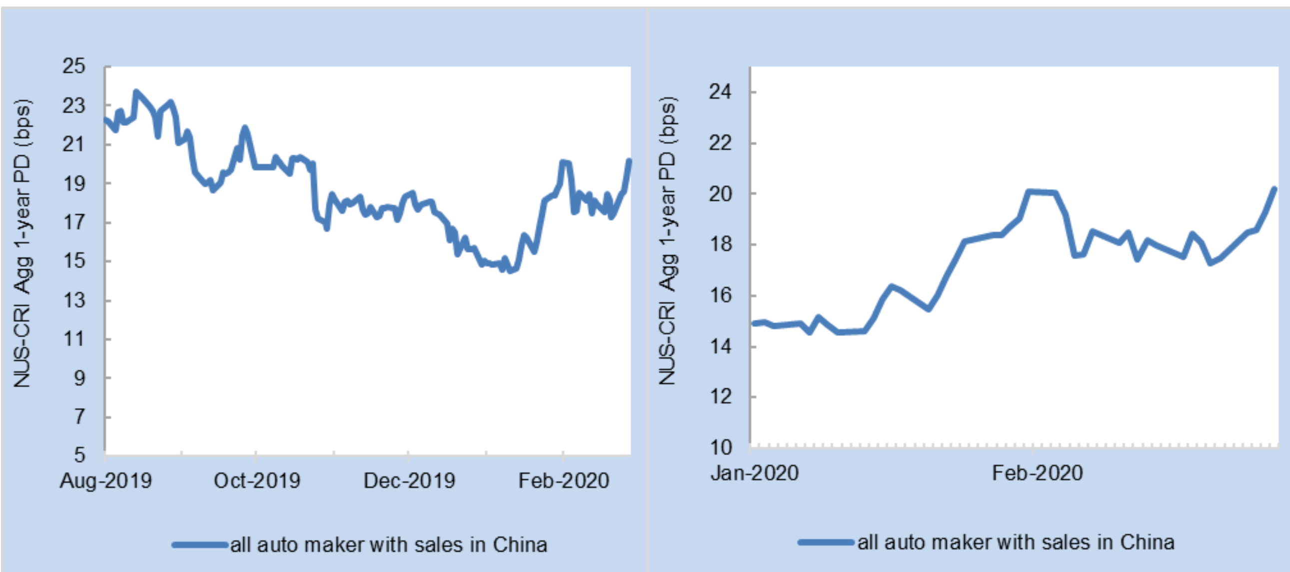

Figure1: NUS-CRI Aggregate 1-year Probability of Default of auto manufacturers that have significant sales exposure in China. *Source: NUS-CRI*

The NUS-CRI Aggregate 1-year Probability of Default (Agg PD) of auto makers with sales in China increased by more than 30% after the outbreak of the novel coronavirus (which started in mid Jan 2020). Though the increase would be even higher if the stock market in China did not display the strong performance in Feb 2020, the change in Agg PD shows that the virus outbreak which led to a fall in car sells in China and higher costs due to a shortage of supplies has negatively affected the credit profiles of the auto makers with sales in China. This includes both China domicile auto makers and auto makers outside of China with significant sales exposure in China.

Since the majority of global car parts production are manufactured in China, the shortage of supplies from China due to the standstill has detrimental effects on the automobile industry globally. Under the epidemic, the production schedule of all major car makers globally are being delayed under the restrictions put in place by the authorities in Hubei Province in efforts to contain the outbreak. There are over 500 car parts manufacturers operating in Wuhan and their closure would mean losing out on production on about one million vehicles. In 2019, China had exported over USD 60bn auto parts, making up about 80 per cent of the parts used in car production globally. Hence the lockdown of the city and its people is especially disruptive to the auto industry as a whole. An analyst from LMC Automotive in Shanghai has highlighted the lack of manpower as many workers are quarantined and there is also a lack of masks for all workers. The shortage of manpower leads to the disruption in auto parts production and thus leads to supply shortages. This inevitably affects the supply of auto parts worldwide with almost all of the 109 US companies that participated in the Shanghai's American Chamber of Commerce poll reflecting that plant shutdowns have (or will in the next one month) impact their supply chains. Nissan has announced that they will be reducing production for its plants in Japan while Hyundai has shut its assembly parts in Korea because of the shortage of Chinese parts. European automakers such as Renault and Fiat Chrysler also have productions suspended in their Busan and European plants respectively for the same reasons.

Wuhan is not only an important city of the automobile manufacturing industry, but also the transportation hub of "the thoroughfare of nine provinces". Thus, the lockdown has also brought about serious logistical problems to car manufacturers whose vehicle plants are in China. Within China, the ports are short staffed and the shortage of drivers are making it difficult to transport finished goods, car parts included, from factories to ports. Furthermore, about one-seventh of the sailors aboard the world's commercial vessels have Chinese passports and shipping lines are having trouble finding replacements. This, combined with the plethora of road checkpoints increases transport frictions and delivery delays. Air freight is also not a solution because the cancellation of flights in and out of China has been so extensive that freight forwarders are also facing limited capacity and higher costs. As a result, this has greatly inconvenienced auto makers with plants in China as they expect shipments of auto parts to be delayed and the logistical costs to go up.

Consequently, the logistical disruption and the shortage of supplies from China create an upward pressure on the cost of production. This is so as many companies began looking for alternatives to Chinese auto supplies, which led to an increase in total cost of about 30-40%. For some manufacturers, they not only have to replace raw materials but the machineries and tools used to work on the materials have to be replaced as well. This may put a strain on their free cash flow and hence affect their credit profiles.

The strain on auto makers' free cash flow is also through its reducing car sales. Car sales in China has fallen by 92% in the first half of February. The passenger car sales recorded from 1st Feb- 16th Feb this year was 4,909 units while that of the same period last year was 59,930 units. Meanwhile, according to China Automotive Dealership Association, only 20% of all dealerships have their showrooms open with sales at about only 5% of their usual levels. The China Association of Automobile Manufacturers (CAAM) estimate that sales will continue to drop more than 10% for the first half of 2020 and around 5% for the whole year. This means that auto makers will not only be faced with increasing costs but also a fall in revenue, hence affecting its overall profitability.

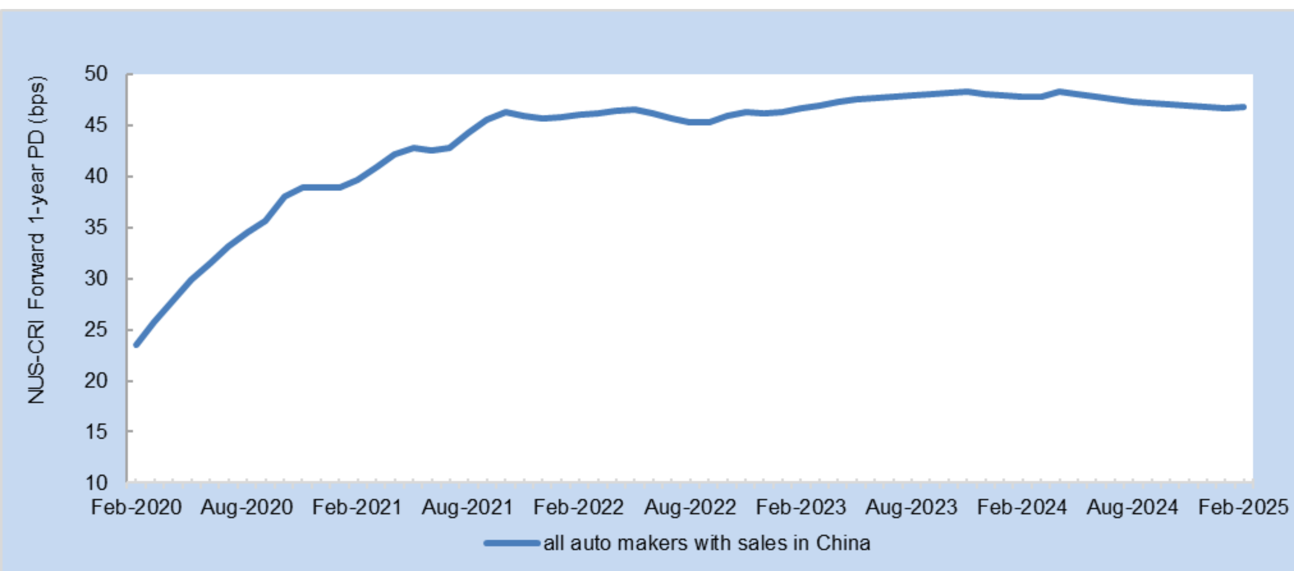

Figure 2: NUS-CRI Forward 1-year PD term structure for the auto makers with sales in China. *Source: NUS-CRI*

The NUS-CRI Forward 1-year PD shows that auto makers with sales in China face heightened risk post 1.5 years outbreak of the novel coronavirus. This is attributed to the cash flow pressure created by the fall in sales revenues and rise in cost to tackle supply shortages and logistical disruptions. However, this also gives us comfort as we see that if the firms can survive in the future 1.5 years, the effect of the virus outbreak will not be worse from the plateau of the Forward 1-year PD after 18 months.

Credit News

Companies put debt sales on ice as coronavirus hits markets

Feb 29. Companies across America shelved plans to sell debt this week, as the coronavirus outbreak sent shudders through bond and loan markets and pushed up the cost of borrowing. At least ten companies sat on the sidelines of the bond market, holding off from planned issuance as sentiment turned sour. Fears over the potential impact of the viral outbreak on corporates have prompted investors to re-price outstanding debt, dramatically increasing the cost of funds. The US stock market also experienced declines in a matter of days, and the weaker outlook for earnings also raised concerns about the ability of some highly-levered companies to repay debt obligations. (FT)

A junk bond's divergence in two markets shows climate of fear

Feb 29. Due to coronavirus-based fears, investors pulled USD 4.2bn from U.S. high yield corporate-bond funds and poured almost USD 600mn into high-yield municipal funds. Regarding US Steel Corp, debt issued in the corporate junk-bond market fell by 7% while debt issued in the municipal-securities market by the steelmaker rose by 1.2%. This is caused by the fear that the company has to face major issues if the economy grinds to a halt due to the virus. Investors' demand for municipal is so high that USD 2.3bn was even invested in the riskiest municipal bond. (Bloomberg)

Chinese firms seek bridge loans to ease bond repayment pressure

Feb 28. According to loan arrangers at four banks, some Chinese state-owned and large private firms are in preliminary talks with them to use bridge loans to refinance bonds under imminent repayment pressure. One of the keen borrowers is Shanghai Electric Group Co., which is sounding out banks' interest in a potential deal of about EUR 600mn to refinance a 5-year, same-sized bond it previously used to back its overseas acquisition in 2015. Some other Chinese companies have expressed similar interest. Uncertainties about the outlook of the global health crisis have also unleashed a flurry of short-dated bonds, which high-quality issuers intend to use to repay soon-to-mature bonds. (Bloomberg)

Dollar bond market in Asia gets rougher for virus-hit borrowers

Feb 28. In spite of China's assurance to avert a widespread credit crunch stemming from the coronavirus outbreak, the market still concerns weaker borrowers tied to commodity prices and consumption-linked businesses. With China being the world's top commodity importer, the weak local demand will hurt oil and coal companies in the region. Supplier firms have been among the worst performers among Asia dollar junk bonds since the beginning of 2020. Given that Asia-Pacific borrowers with stressed bonds are facing USD 14.7bn of maturing debt this year, default risk is increasing, particularly for smaller low-tier companies with less state support. (Bloomberg)

World Bank's pandemic bonds sink as coronavirus spreads

Feb 25. In 2017, the World Bank issued two classes of pandemic bond with a total worth of USD 320mn which was designed to help developing nations in case of an outbreak of an infectious disease. Investors receive interest payments, funded by Japan and Germany, until certain trigger points are reached. The bonds are then not fully repaid, but instead, they are used to help the countries facing the crisis. Nowadays, critics say that payments to infected areas would be too little and too late since the bonds have not been triggered yet. The less risky tranche requires 2,500 deaths in developing countries. The riskier class requires 12 weeks to have passed since the initial outbreak and 250 deaths in the country of origin. So far, almost 2600 deaths have been recorded in China, but the 12-week-mileston will only be reached on 23 March. (FT)

US Treasury yields at new low as coronavirus hits China's factories (FT)

Junk bond funds suffer worst outflows in more than a year (FT)

As US bonds stall, Canada notches record low corporate coupon (Bloomberg)

Regulatory Updates

Bank of England puts squeeze on Libor lending to encourage shift

Feb 27. The Bank of England (BoE) moved on Wednesday to encourage a shift from Libor by toughening the terms of its lending against the tainted interest benchmark. The BoE will apply a discount from October to the value of Libor-linked collateral that commercial banks can post to secure loans. The central bank also intends to publish a compounded index for the new benchmark, Sonia. The index can help corporate borrowers shift bonds and loans over to the new benchmark with predictable interest payment over time, rather than being subject to daily fluctuations in the overnight rate. (FT)

Markets shake-out spurs bets on interest rate cuts

Feb 27. Investors and traders expect the Federal Reserve and other big central banks to lower interest rates to help cope with the consequences of coronavirus on financial markets. Investors focus on the Federal Reserve since it is rare among developed world central banks to have much space to lower their interest rates. So far, Federal Reserve policymakers have not given an indication of a policy change since there are not enough economic data to confirm either size or persistence of the effects of the virus. Furthermore the Federal Reserve aims to see the impact of the cumulative cut 0.75 percentage points between July and October 2019, which could hinder further policy eases. (FT)

RBA is all-but certain to cut key rate, money markets show (Bloomberg)

China pledges cheap credit and tax cuts to aid small firms (Bloomberg)

Published weekly by Risk Management Institute, NUS | Disclaimer
Contributing Editor: Luo Weixiao