Credit Research Initiative
National University of Singapore
transforming big data into smart data
NUS National University of Singapore | Asian Institute of Digital Finance
Weekly Credit Brief
Apr 19 - Apr 25 2022

Credit risk outlook for the Indian auto sector continues to deteriorate amidst intensifying supply chain woes

by Amrita Parab

- **NUS-CRI Agg PD of Indian auto sector trends upwards as margins remain pressured amidst global supply chain disruptions and higher input costs**
- **NUS-CRI Agg Forward PD suggests differing outlook for commercial and non-commercial vehicle manufacturers as the former benefits from an increase in fiscal spending, while the latter continues to face dampened demand**

Indian auto & auto parts manufacturers (Indian auto sector), who were already dealing with semiconductor shortages and consecutive years of sales declines over the past few years, are now facing new headwinds as rising inflation and lockdowns in China threaten to weigh down margins and production, and prolong the sector's post-pandemic recovery. The NUS-CRI Aggregate 1-year Probability of Default (Agg PD) for the Indian auto sector in Figure 1a showcases an increase in Agg PD since Apr-2021, concurrent with increasing shortages of critical auto parts such as semiconductors, pandemic-driven sales declines and supply chain disruptions stemming from the impact of the recent lockdowns in China and the Russia-Ukraine war. The NUS-CRI Agg Forward 1-year PD[1] (See Figure 1b) as of Apr-2022 also suggests a worsening credit outlook in the short term as threats of inflation and unabating supply chain disruptions continue to weaken margins.

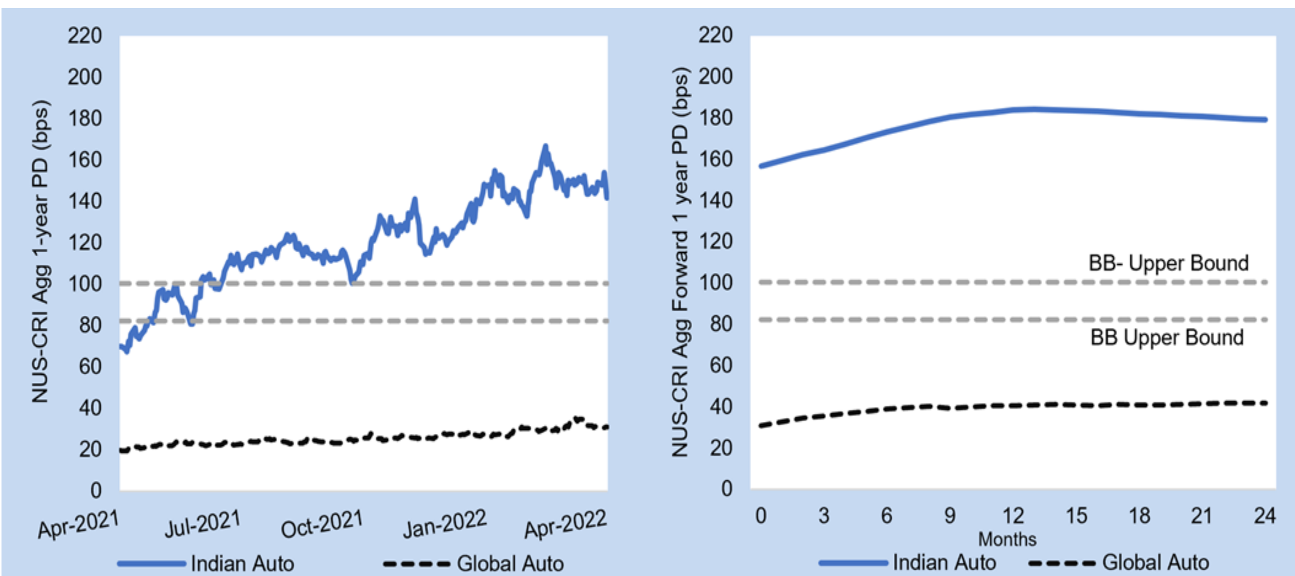

Figure 1a (LHS): NUS-CRI Agg 1-year PD for Indian auto sector from Apr-2021 to Apr-2022 with reference to PDiR2.0[2] bounds. Figure 1b (RHS): NUS-CRI Agg Forward 1-year PD for Indian auto sector as of Apr-2022. *Source: NUS-CRI*

Since 2021, the problems faced by the Indian auto sector have multiplied, with the industry currently facing significant roadblocks from both supply and demand perspectives. The semiconductor shortage, which precipitated as global demand for electronics and related items skyrocketed, worsened with the Russian invasion of Ukraine. Russia and Ukraine are key players in the semiconductor supply chain, with Russia being a major producer of rare metals such as palladium and Ukraine being a key manufacturer of neon gas which is essential in semiconductor manufacturing. The shortage of semiconductors resulted in increased production

[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.

costs, delays in production lines, and lower capacity utilization for the Indian auto sector. As the geopolitical crisis continues to disrupt the supply chain, it is aggravated by another problem - the strict COVID-19 lockdowns in China, an important hub for sourcing auto components for the Indian auto sector. Together, these factors increase the costs of key manufacturing components and logistics, resulting in a higher cost burden for the Indian auto sector dampening growth in margins.

With cost pressures mounting, in a bid to protect margins, the Indian auto sector was compelled to hike prices. These price hikes come at a time when fuel prices have also started to inch higher fuelling domestic inflation[3]. The increased cost of living may cause Indian consumers to steer clear of discretionary purchases such as automobiles and dent the sales growth of companies in the sector. Moreover, a bulk of demand for the Indian auto sector comes from the rural economy, which may still be reeling from the impact of the pandemic compared to its urban counterpart. High unemployment has also had an adverse impact on the purchasing power of rural consumers, which may have contributed to lower sales growth of Indian auto firms. Furthermore, with gross non-performing assets (GNPA) in personal auto loans on the rise, consumers may find it difficult to finance auto purchases at lower costs, dissuading a recovery in demand even if production recovers. The overall impact of lower sales growth, amidst wider macroeconomic issues, poses a challenge for the whole sector over the next two years with close to half of the current total debt outstanding maturing in 2022 and 2023 (See Figure 2a). Should the demand slump sustain over the next 12-18 months, companies in the Indian auto sector may not be able to service debt as low operating cash flows may hinder repayment ability, thus leading to potential refinancing risks.

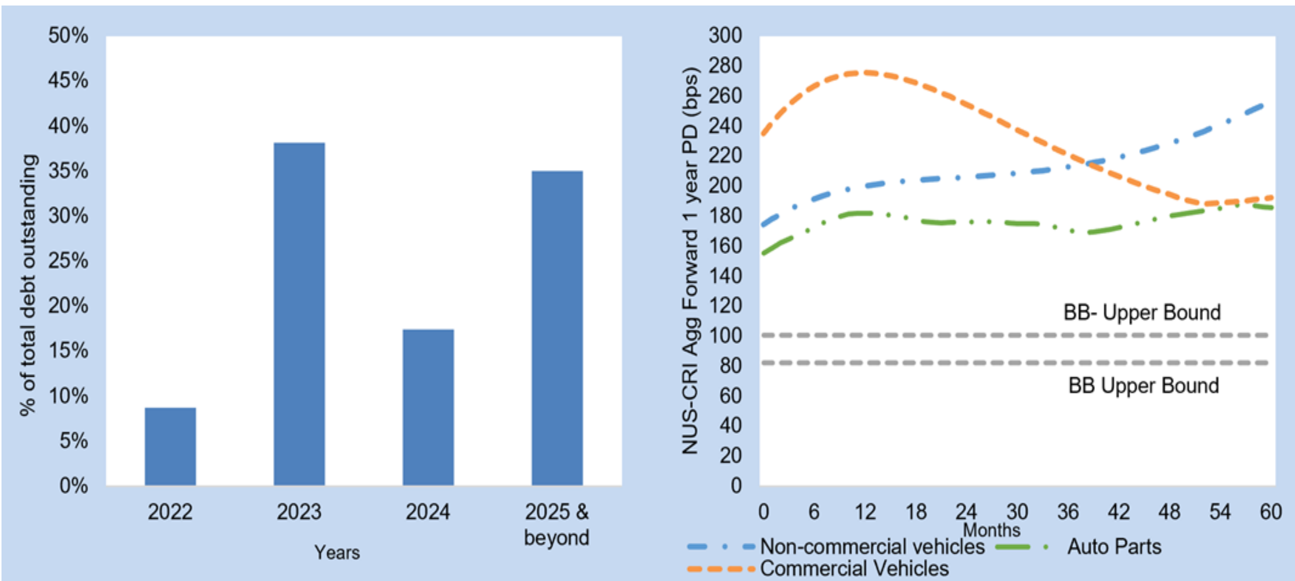

Figure 2a (LHS): Distribution of total debt maturity for Indian auto sector as of Apr-2022. Figure 2b: NUS-CRI Agg Forward 1-year PD of Non-commercial vehicles[4], Commercial vehicles[5] and Auto parts segments of the Indian auto sector as of Apr-2022. *Source: Bloomberg, NUS-CRI*

For Mar-2022, the sales for the Indian auto sector were still 30% below the pre-pandemic level. The two-wheeler sub-segment, which accounts for 77% of domestic market share, has registered a decade-low sales volume of 11.5mn units as compared to around 18.5mn units pre-pandemic. As the sub-segment caters primarily to India's lower and middle-income demographic, demand from this business sub-segment is price-sensitive and is thus less likely to see an uptick in the current operating environment. The passenger vehicles segment also posted a 4.87% YoY decline in retail sales in Mar-2022, mainly attributed to production losses resulting from supply chain disruptions. On the other hand, the commercial vehicle segment potentially benefits from a rebound in demand fuelled by an increase in fiscal spending on infrastructure and a pickup in industrial activity. The breakdown of NUS-CRI Forward PD in Figure 2b showcases the differing trends in credit outlook for the commercial vehicles, non-commercial vehicles, and auto parts manufacturers. In tandem with the expected improvement in operating performance, the Forward PD suggests that the credit risk for commercial vehicle manufacturers may reduce over the next two to three years, despite an initial worsening experienced by the whole industry, as resumption and growth of economic activity in India provides tailwinds to this industry segment. An increase in the Forward PD for non-commercial vehicles and auto parts manufacturers highlights

[3] India's CPI rose to 6.95 percent in March, well above the target band of 2%-6% set by the central bank.
[4] Non-commercial vehicle segment includes passenger vehicles (such as cars), two-wheeler and three wheeler vehicles.
[5] Commercial vehicle segment includes light, medium and heavy commercial vehicles.

the rising credit risk of these industry segments, potentially driven by a prolonged impact of supply-side shortages affecting long-term production and sales.

Going forward, the recovery of the sector is conditional on a recovery in the rural economy, inflation control, and alleviation of supply shortages for key raw materials and components such as semiconductors. With geopolitical tensions showing no signs of abating, the increase in the cost of raw materials is expected to continue fuelling inflation in the coming months. The increase in the cost of living is expected to shrink the rural discretionary income, reducing demand for non-essential items such as automobiles, and lengthening revenue recovery for the Indian auto sector, as shown by the NUS-CRI Agg Forward PD (See Figure 1b). With inflation in breach of the central bank's target band, a rate hike may be imminent in the near future, further increasing borrowing costs. Moreover, with the global transition toward EV gathering steam, the impact of semiconductor shortages may magnify, causing further deterioration of the credit profile of the Indian auto sector (See Figure 1b). Although the Indian government has taken steps to build up domestic semiconductor capacity, the near term shortage is unavoidable and will continue to pose a challenge to the industry.

Credit News

China's restructuring firms staff up for record wave of defaults

Apr 25. The distress in China's property sector created a strong and urgent demand for restructuring firms as developers race against time to avoid default. This unexpected surge in demand required firms to expand in response, but such expansion is capped at a certain level because of a shortage of talent. Nevertheless, the hands-off approach adopted by the Chinese government sends a clear signal of its aim to let the credit market mature by pushing towards a sustainable solution to fix and mitigate financial risks. Such a stance assures the restructuring firms of prospective opportunities beyond the property sector and for more holistic cases. (Bloomberg)

Trillions of negative-yielding bonds vanish

Apr 23. As the global inflation caused by the surge in oil and gas prices continue, the interest-rate swaps market is bracing for further policy tightening and is considering the expectation in its pricing of bond. Signaling a hawkish stance in addressing inflation, the ECB is expected to deliver three quarter-point hikes by December, ending the negative interest-rate regime. In anticipation of the shift, the pool of negative-yielding debt shrinks to less than USD 300bn (from USD 10tn in 2020). Market pricing also sees deposit rates hitting 1.5% from -0.5%. (Bloomberg)

ESG bond market splits on linking ethical goals to nations' debt

Apr 22. The rise of ESG related bonds has proven complicated for issuers, especially nations, as they balance between over-commitment of sustainability linked goals with ambitious targets. Sales of ESG linked bonds have already increased by 800% to USD 108bn, however, the judgement of metrics for companies and countries need to be different to take political risk and country's debt levels into account. From an investor's point of view, the ethics of holding governments to the same standard as companies is brought forward as a breach of covenants and missing goals taking funds under collateral from the taxpayer rather than corporate profit. A possible solution would be the introduction of step-down coupons for sovereigns, which lower the coupon rate for sovereigns should they meet their sustainability goals. (Bloomberg)

Rising rates threaten companies acquired in LBO boom

Apr 21. With rising rates, firms that borrowed heavily at cheap rates last year are starting to feel the pressure of rising costs. Leveraged loans typically have borrowing rates that float, which makes them susceptible to rate hikes by the U.S. Federal Reserve. The resultant increase in financing costs, along with rising operating and wage costs due to inflation, threatens the liquidity of companies with heavier debt loads. This also puts pressure on private equities that used leveraged loans, contributing to the buyout boom seen last year. U.S. companies borrowed a total of USD 1.8tn in junk-rated loans last year. The benchmark rates on which most for most of the leveraged loans are expected to increase to around 3% by the end of this year, equating to a USD 45bn increase in interest expense across the country. (WSJ)

Europe company bonds suffer worst peak-to-trough drop in history

Apr 22. As Europe anticipates an increase in policy rates later this year after the ECB completes its bond purchases, investors have been shunning the corporate bond market resulting in a plunge that surpassed the slump at the start of the pandemic and the global financial crisis. The expectation of tightening monetary policy is likewise evident in the increase in yields to up to 2.5 times the average yield over the past 5 years. With the aggressive tightening of other central banks, investors are becoming more concerned about the health of the global economy, triggering further selloffs. (Bloomberg)

ICICI Bank's profit tops estimates as bad debt drop, loans grow (Bloomberg)

Historic sell-off lures bargain hunters to bond market (FT)

HNA Group says restructuring completed after two years of work (Bloomberg)

Regulatory Updates

Multiple inflation pressures complicate Bank of Canada's soft landing goal

Apr 20. Canada's economy had become rate-sensitive after Canadian households increased borrowings to up to 186% of disposable income to invest in real estate. Because of this attribute, the Bank of Canada's response to inflation requires serious consideration. Although the possibility of hiking interest rates further above neutral for the first time in 14 years is on the horizon, it plans to proceed with caution so as not to trigger a recession. The Bank of Canada also analyzes the drivers of inflation, segregating the permanent from the temporary, to devise more appropriate measures. (Reuters)

Most financial institutions in Asia need until 2023 to scrap Libor benchmark

Apr 20. A recent survey conducted by Asia Pacific Loan Market Association (APLMA) found that most financial institutions in Asia will remove references to the Libor benchmark for loan agreements by 2023. However, most iterations of the benchmark have been discontinued since the end of last year. Most financial institutions have since moved to other benchmark rates such as the Sofr by the U.S. Federal Reserve. However, Asian banks were found using a mixture of Sofr used in the U.S. and the UK, possibly creating some discrepancy in benchmark rates in the region. With the accompanying uncertainty, market participants, Borrowers and lenders are slow in transitioning to any permanent benchmark rate and are waiting to see the rate which is going to be used as the market standard moving forward. (CNA)

Lagarde says Europe, U.S. face 'different beast' with inflation (Bloomberg)

Rising US rates and China's slowdown hit renminbi (FT)

Published weekly by Credit Research Initiative – NUS | Disclaimer
Contributing Editors: Raghav Mathur, Wang Anyi