Economic growth slowdown in China due to COVID-19 outbreak threatens credit profile of Chinese airlines by Wang Nan

- The NUS-CRI Agg Forward 1-year PD of Chinese airlines shows a sustained worsening of their credit profile in the short-to-medium term as tightening restrictions and soaring oil price squeeze companies' profitability and operational capabilities
- Stress test shows that continued economic slowdown and sustained higher oil prices could cloud Chinese airlines' credit outlook, specifically impacting the top three airlines that are more susceptible to changes in domestic economic recovery and travel restrictions

China is battling the worst COVID-19 outbreak since early 2020, and in response, the government has been restricting travel in line with its zero-COVID strategy. In effect, Shanghai, China's major financial and economic hub, was placed on lockdown starting Mar 28. Flight disruptions caused due to this new wave of COVID-19 cases are further pressuring the operational performance of Chinese airlines, which have already been severely hit by the pandemic. The NUS-CRI Aggregate (median) 1-year Probability of Default (Agg PD) of Chinese airlines in Figure 1a showcases a deterioration in their credit health since 2021 (See Figure 1a) on the back of soaring oil prices and decreased travel demand, with domestic traffic down on average 24.4% in 2021 compared to that in 2019. The current breakout of COVID-19 cases, and the resultant stringent regulations set by the government, are expected to continue weakening operations for Chinese airlines as demand for domestic travel continues to dwindle. Looking forward, the NUS-CRI Agg Forward 1-year PD (Forward PD¹) (See Figure 1b) displays that the credit risk outlook for Chinese airlines may continue to deteriorate as debt repayment abilities may be hindered in the short-to-medium term. Meanwhile, the top three airlines² are faring better than their peers on the back of their scale advantages and potential government support in the face of financial distress.

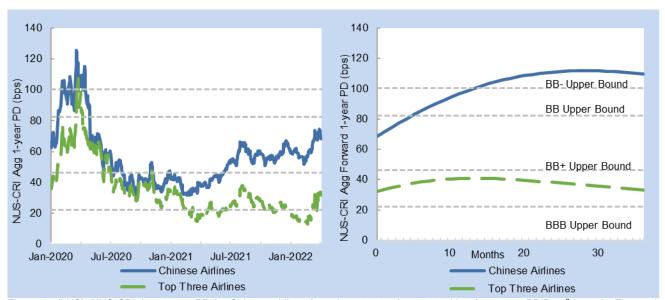


Figure 1a (LHS): NUS-CRI Agg 1-year PD for Chinese airlines from Jan-2021 to Apr-2022 with reference to PDiR2.0³ bounds. Figure 1b (RHS): NUS-CRI Forward PD for Chinese airlines as of Apr-2022. Source: NUS-CRI

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 Referring to China Southern Airlines, China Eastern Airlines, and Air China, which are the three biggest airlines in China.

³ 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.

Due to the heavily curtailed number of international flights, Chinese airlines have been banking on the domestic market to drive their recovery. However, new COVID-19 restrictions have weakened domestic demand. As a result, China's airline revenue per passenger-kilometer only rebounded to <u>56%</u> of 2019 levels, generating a negative net profit margin (median) since Q2 2021⁴. Moreover, the zero-COVID strategy employed by authorities to control the Omicron outbreak continues to hinder⁵ Chinese airlines' recovery in the short-to-medium term.

Additionally, the impact of the Russia-Ukraine war on global oil prices would further pressure airlines' profitability, especially since fuel cost consists an important part of their operating costs⁶. For example, as Brent crude stood at <u>USD 70/barrel</u> at the end of 2021, up 36% from 2020, China's top three airlines faced a 41.40% increase in fuel costs on average⁷, squeezing their earnings. Simultaneously, in an effort to raise finances for operational and working capital needs, Chinese airlines have increased their leverage, with the total debt to capital ratio (median) increasing from 60.25% in Q1 2020 to 75.87% at the end of 2021. The industry specifically faces short-term repayment pressure with close to 41% of Chinese airlines' debt maturing this year. Given the current domestic macroeconomic and operational environment expected to persist over the next few months, Chinese airlines are more likely to face heightened credit risk in meeting these repayment obligations. The industry's aggregate (median) interest coverage ratio has remained negative since Q2 2021, and will most likely be further pressured unless external financing, potentially in the form of government support specifically for the top three airlines that control the majority of the market share, is obtained.

Continued lockdowns in megacities and tightening restrictions could significantly weaken China's economic recovery prospects. The resultant impact of this economic slowdown, especially under the current macroeconomic context of sustained high oil prices, on Chinese airlines' credit quality can be assessed using the Bottom Up Default Analysis toolkit (BuDA8). Figure 2 demonstrates the impact of changes in GDP growth and oil price on Aggregate (Median and interquartile range) PD for Chinese airlines under the base and adverse scenarios⁹. As witnessed, the median PD for Chinese airlines increases over the next three quarters in both scenarios. However, under the adverse scenario, relatively more vulnerable firms (measured as those above the 75th percentile) face faster deterioration in their credit profile, especially as their profitability and operational capabilities could be further hindered by a continued economic slowdown. More specifically, the credit risk of China's top three airlines, which is below that of the relatively non-vulnerable firms (measured as those below the 25th percentile), worsens quickly under the adverse scenario, suggesting that a downturn in growth prospects may worsen the financial position of the top three airlines, and may even prompt the government to step in and provide relief.

⁴ Data from Bloomberg. Specifically, China's top three airlines suffered consecutive losses of over <u>CNY 40bn</u> in total in FY2021 and <u>CNY 42bn</u> in FY2020.

⁵ Due to the lockdown in Shanghai, more than two-thirds of planned flights have been canceled every day across China.

⁶ Fuel costs account for 20% of operating costs calculated based on the data from China's top three airlines

⁷ China Eastern Airlines reduced aircraft fuel costs by <u>CNY 580mn</u> through hedging in 2021. However, benefits are immaterial when compared to the total fuel costs of <u>CNY 20.5bn</u>, and does little to alleviate pressure from rising oil prices.

⁸ The Bottom-up Default Analysis (BuDA v3.3.0) is a credit stress testing and scenario analysis toolkit jointly developed by the Credit Research Initiative (CRI) team of National University of Singapore (NUS) and the International Monetary Fund (IMF).

⁹ Under the base scenario, GDP growth rates remain at 3.5% QoQ throughout 2022, and Brent crude oil prices keep decreasing from USD 112 USD/barrel in Mar-2022 to 94 USD/barrel in Dec-2022. Under the adverse scenario, GDP growth rates decrease by 0.5% QoQ from 3.5% to 2% by the end of 2022, and Brent crude oil prices keep increasing from 112 USD/barrel in Mar-2022 to 160 USD/barrel in Dec-2022. The scenarios are supposed to simulate the economic slowdown felt due to continued lockdowns and restrictive policies that hinder travel in China.

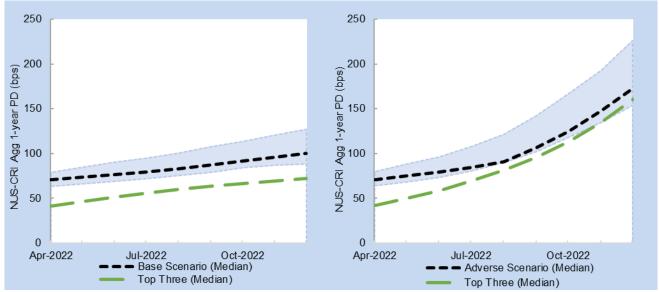


Figure 2: NUS-CRI Agg 1-year PD (median and interquartile range) of Chinese airlines and top three airlines (median) stressed against GDP growth rate, oil price under Base (LHS), and Adverse (RHS) scenarios. Source: BuDA v3.3.0

The suppressed profitability for Chinese airlines as a consequence of COVID-19 restrictions and higher oil prices, in tandem with debt repayment pressures, continue to drive an adverse credit outlook in the short-to-medium term. However, should the number of COVID-19 cases decline in the future, the economy could finally resume its recovery trajectory, potentially boding well for a resumption of activities for Chinese airlines. In the meantime, to navigate domestic growth headwinds and volatile oil prices, airlines may have to implement efficient cost reduction strategies to conserve cash and meet their repayment obligations. Regardless, Chinese airlines, which have been contending with sustained negative profit margins since 2021, challenges posed by soaring fuel costs and slow recovery in domestic demand, continue to face an elevated credit risk.

Credit News

UK businesses face double challenge of rising costs and lower sales

Apr 7. Recent official data shows that almost 50% of UK businesses think they will have to contend with lower sales due to the Russia-Ukraine war, and an increasing number of businesses have also admitted to curtailing their investment plans due to rising input costs. As per the monthly decision-maker panel survey conducted by BoE, businesses expect inflation for 2022 to reach 5%, the highest level since 2017. Additionally, supply chain issues, sick leaves, and difficulties trading have added to the issues faced by businesses. Around 25% of businesses reported supply chain disruptions in the past month, with the manufacturing sector facing more disruptions than other sectors. As a result of the issues faced, UK businesses have also trimmed their investment plans which may hurt future economic growth and living standards. (FT)

Credit investors venture back after worst guarter since 2008

Apr 5. Bond markets see a recovery after the series of losses and substantial drawdowns, although spikes are still likely as external shocks such as central bank action and inflation could sway market sentiment and induce another selloff. Nonetheless, investment-grade bonds have rallied back to a fair level, probably driven by issuers who are looking to secure borrowings at relatively lower costs, with the expectation of higher interest rates farther into the future. As a result, credit spreads are tightening, providing an opportunity for investors to shift to high-quality less risky debt. (Bloomberg)

Wall street banks weigh bond sales in race to beat rising rates

Apr 10. April is usually the second-highest month for bond issuances by the biggest banks of US. The inflationary pressures surrounding the financial markets prompt investors to factor in relevant information into their decisions, especially in the upcoming April bond issuances. One such information is the monetary policy actions announced by the central banks to combat inflation, which strongly influence the yields. In an inflationary environment, interest rates are expected to increase which means higher borrowing costs for debt issuers. Hence, they would need to complete the issuance before rates are hiked further. (Bloomberg)

European credit funds hit by outflows of almost EUR 14bn in first quarter

Apr 8. Q1 2022 turned out to be the worst quarter for European corporate debt funds since the start of the pandemic. Driven by higher inflation and increased market volatility, the funds were hit by withdrawals amounting to EUR 14 bn. Investment-grade bonds saw a decline of 5.4% whereas high-yield debt declined by 4.3%. Investors' concerns stemmed from an expectation of Russian sanctions damaging European corporates, specifically the energy sector, and also a hawkish stance by the ECB stoking recession risks. However, during the pandemic, European companies had taken advantage of lower borrowing costs and loaded up on cheaper debt with a longer repayment schedule. Hence, they are now in a better position to cope with the current situation. (FT)

Companies may speed up refinancing plans as higher rates loom

Apr 7. US companies might accelerate their plans to raise debt due to the hawkish stance of the Fed and its commitment to raise rates successively throughout 2022. Around USD 243 bn of US corporate debt will mature in Q2 2022, followed by USD 199bn and USD 197bn in Q3 and Q4 respectively. Although some companies, may decide to just pay down the maturing debt, a majority of the companies will be looking to refinance. With the Fed planning a series of rate increases, these companies might just decide to take advantage of current lower rates. (WSJ)

Foreigners pull record USD 15 billion From Chinese bonds (WSJ)

US imposes 'severe' sanctions on Russian banks after Bucha atrocities (FT)

World's top corporate ESG debt issuer sets sterling milestone (Bloomberg)

Regulatory Updates

ECB inflation split deepens after hawks call for rate rises this summer

Apr 7. Policymakers are divided on the stance that the ECB should be issuing amid inflation in the Eurozone. Earlier, the ECB had accelerated the winding up of its bond purchases to disencumber itself, and enable it to raise interest rates, when it deems necessary. However, for more hawkish faction, the move is not adequate sans a deadline. They argue that the winding up be completed soon or the ECB risks delayed and ineffective action on inflation. On the other hand, the dovish policymakers favor a more cautious approach as the inflation is heavily caused by external factors such as the Ukraine-Russia war. Besides, imposing an end date on bond purchases that is too soon may have an unfavorable consequence on the labor market, and compound the impact of inflation. While the ECB has generally taken the more balanced approach, a more definitive stance is expected in its subsequent issuances. (FT)

Fed prepares to slash size of swollen balance sheet by USD 95bn a month

Apr 7. In an effort to contain domestic inflation pressures, the Fed is planning to reduce its balance sheet, which has ballooned to USD 9th over the pandemic, by USD 95bh/month. After last month's interest rate hike, decreasing the size of its balance sheet is the biggest lever the Fed has for managing rising inflation across the country. There is sentiment in the market that this move by the Fed has been relatively delayed, given that the central bank was increasing its balance sheet as recently as last month. Further increases in interest rates are also anticipated if inflation pressures persist, estimating the rate to be around 2.3 to 2.5%. (FT)

Russian central bank cuts key rate to 17%, signals further easing (Reuters)

Inflationary forces spell long-term trouble for central banks, warns BIS head (FT)

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