The credit health of the three biggest cruise liners drifts towards rough waters despite recent tailwinds

by Ng Ziyan Derlyn & Tian Mengxi

- **NUS-CRI 1-year Probability of Default demonstrates the improving credit health of the three major cruise companies amidst the resumption of cruise ships in the US and mass vaccination**
- **Concerns about the cruise companies' ability to repay their debts and high leverage rise amidst possible interest rate hikes in the future, partially demonstrated by the NUS-CRI Forward PD time series**

Despite the drastic initial increase in the credit risk of the three biggest cruise liners[1] as operations worldwide ceased due to the COVID-19 pandemic, Carnival Corporation (Carnival), Royal Caribbean Cruises Ltd (Royal Caribbean) and Norwegian Cruise Line Holdings Ltd (Norwegian) have experienced an improvement in their credit quality as demonstrated by the NUS-CRI 1-year Probability of Default (PD) in Figure 1 below. Though the companies were not able to directly benefit from the multitude of stimulus packages in the US, their rampant debt binge has aided in alleviating their short-term repayment and operational challenges. The three companies have racked up a combined USD 60bn in debts as of Q1 2021, a 50% increase from the pre-pandemic level. However, as overarching inflation concerns drive central banks to increase borrowing rates over the next two years, the debt-laden sector faces a worsening credit outlook due to increased repayment concerns, as demonstrated by the NUS-CRI Forward 1-year PD (Forward PD[2]) time series in Figure 2b below.

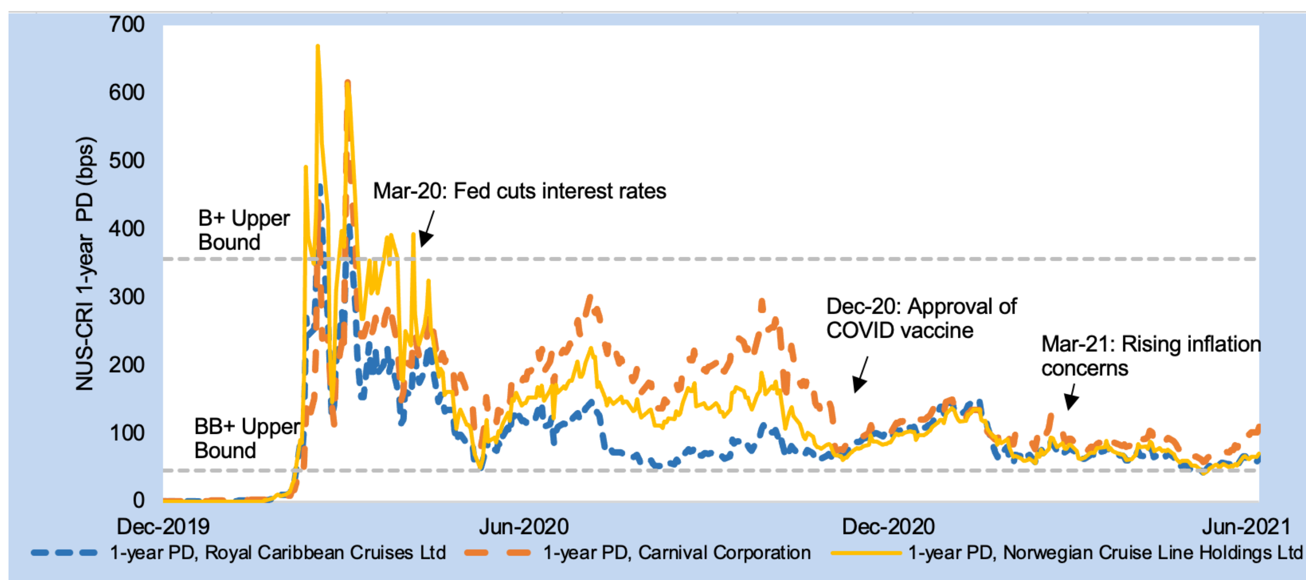

Figure 1: NUS-CRI Agg 1-year PD for Carnival Corporation, Royal Caribbean Cruises Ltd and Norwegian Cruise Line Holdings Ltd from Dec-2019 to Jul-2021 with reference to PDiR2.0 bound[3]. *Source: NUS-CRI*

All three companies have been experiencing negative operating margins, with the average monthly cash burn rate at USD 500mn, USD 190mn, and USD 300mn for Carnival, Norwegian, and Royal Caribbean in Q1 2021 respectively, amounting to between 5-6% of their total cash reserves per month. To bolster liquidity, these

[1] Carnival Corporation (Carnival), Royal Caribbean Cruises Ltd (Royal Caribbean) and Norwegian Cruise Line Holdings Ltd (Norwegian) control more than 80% of the market share in the cruise line sector.

[2] 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

[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.

companies took advantage of the lowest level record yields during the height of the pandemic to issue new debt, which brought about a surge in new bond issuance. Carnival's debt racked up to USD 33bn in Q1 2021, almost triple the amount in Q1 2020. Meanwhile, Norwegian and Royal Caribbean amassed USD 12.4bn and USD 21.6bn in debts in Q1 2021 respectively, almost doubling their debts in Q1 2020. Although it left them highly levered, this strengthened the companies' liquidity and improved their short-term debt repayment ability, with Norwegian and Carnival even claiming to have sufficient cash to tide through 2021 without any revenue. They even resorted to selling older cruise ships, reducing their staff, and had to pledge their assets as collateral. Once uncommon in the corporate bond market, these secured debts became a necessity for these cruise companies as investors' confidence plummeted due to the companies' critical financial health.

	Operating Margin	Debt/Equity	Current Ratio	Cash Flow Ratio	Interest Coverage
Carnival Corporation	-0.85	1.38	1.22	-1.34	-5.28
Royal Caribbean Cruises Ltd	-1.32	2.28	0.95	-0.82	-3.60
Norwegian Cruise Line Holdings Ltd	-0.84	2.76	1.83	-0.76	-3.93

Table 1: Leverage and Profitability ratios for the three largest cruise line companies, Carnival Corporation, Royal Caribbean Cruises Ltd, and Norwegian Cruise Line Holdings Ltd as of 2020. Source: *Wall Street Journal*

With their interest coverage and cash flow ratios dipping negative for the first time, concerns have been raised regarding the companies' ability to meet repayment obligations in the future, especially given their high leverage. Should cash flow from operations not improve, the three companies will possibly resort to further refinancing to repay their debts. Not only would this further inflate the companies' balance sheets and leverage positions, but it would also make them more susceptible to rising borrowing costs as interest rates are expected to increase over the next two years. From the breakdown of the debt maturities shown in Figure 2a, more than 50% of each company's debt outstanding will mature between 2023 and 2025, in tandem with the timeline of the expected interest rate hikes. The worsening outlook is demonstrated in the NUS-CRI Forward 1-year PD time series shown in Figure 2b, which demonstrates that all three companies are facing heightened credit risk in Dec-2023 when the repayment pressure on debt outstanding currently is at its peak. With the heightened pace of contractionary monetary policy from the Fed, investment-grade bond yields have already begun to rise. In light of these interest rate speculations, Carnival recently announced a tender offer to repurchase debt originally due in 2023. Although this move reduced the companies' cash flows in the short term, it has helped to alleviate future refinancing pressures. Furthermore, Carnival has also reported that it would sell USD 500mn in stocks to raise cash, highlighting that these corporations are aware of these roadblocks ahead and are looking to relieve their future debt obligations now.

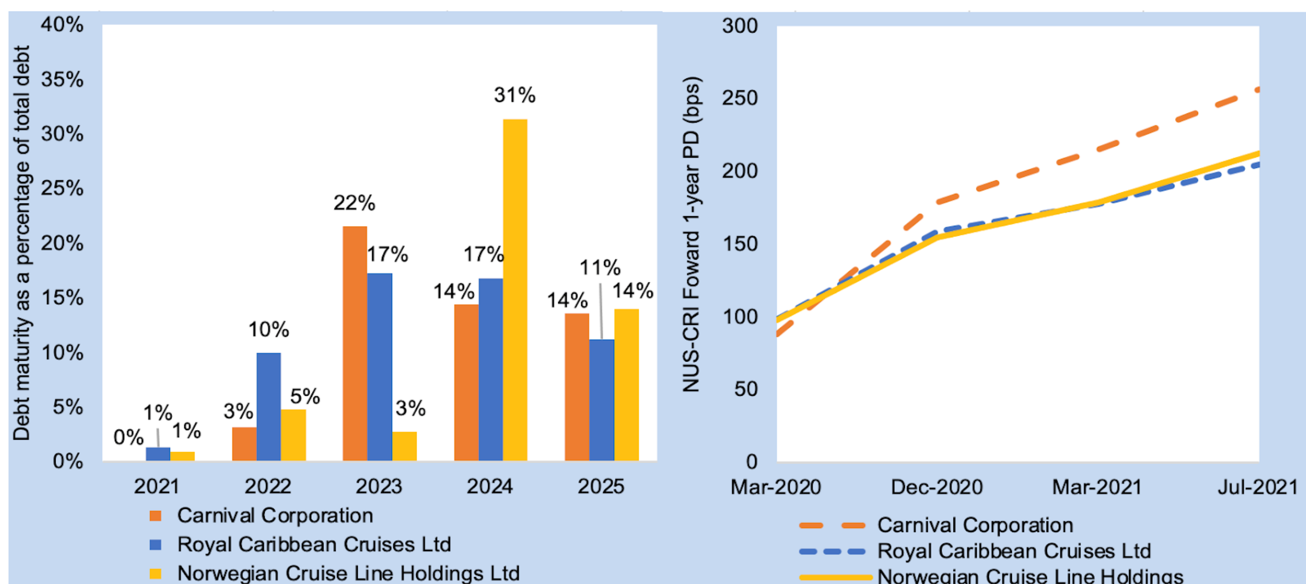

Figure 2a: Debt maturity as a percentage of total debt for Carnival Corporation, Royal Caribbean Cruises Ltd and Norwegian Cruise Line Holdings Ltd in billions *Source: Bloomberg* Figure 2b: NUS-CRI Forward PD time series for Carnival Corporation, Royal Caribbean Cruises Ltd and Norwegian Cruise Line Holdings Ltd from different historical months looking to December 2023 *Source: NUS-CRI*

However, the introduction of COVID-19 vaccines in Dec-2020 has brought an increasingly positive sentiment on the recovery of the cruise sector, supported by the fall in the three companies' PD to present levels of around 100bps. The announcements by the US Centres for Disease Control and Prevention that cruise ships would be able to set sail in the US, which constitutes about 50% of passengers worldwide, also provide a silver lining for recovery to the big three industry players. Furthermore, new cruise ships require only a 30% load factor to breakeven, while older ones require 50%. With current cruise ships at a 30% to 70% occupancy rate, it relieves pressures on the companies' cash burn rate. Pent-up demand for travel and higher ticket prices are also expected to aid the struggling sector. Prior to the pandemic, the cruise line sector experienced the fastest growth in the travel industry, with demand for cruises increasing 20.5% from 2016 to 2020. As such, cruise operators are expecting strong demand and prices, with prices for bookings for 2021 being higher than they were in 2019. However, recovery to pre-pandemic levels in this sector is not projected until 2023.

With cases still reported amongst guests and crew in the cruise ships that are currently sailing which is prompting cruise line companies to yet again delay their voyages, the road to recovery for these cruise liners seems arduous. Conversely, with an oligopoly over this sector, these companies have well-entrenched consumer support and brand loyalty which will allow them to prosper from the increased demand in the long term when COVID-19 restrictions are completely lifted. Combined with regulations stipulating that 98% of crew and 95% of passengers must be vaccinated, mass outbreaks of the virus should be prevented. Despite the relatively lower credit risk today and the three companies' healthy liquidity positions, the main cause of concern for cruise line companies is to ensure that they manage their leverage, meet their repayment obligations, and are able to refinance their debts relatively cheaply.

Credit News

China's bonds rally on signs of policy easing to aid economy

July 8. China's government bonds rallied, sending the benchmark 10-year yield below the key 3% level, the lowest since August. This came after China's government indicated a potential policy easing, which would provide bond markets with the liquidity to absorb local government debt sales. The dovish shift could unwind residual policy normalization fears and render support to broad risk assets, with strategists predicting a fall in 10-year yields to between 2.90% to 2.95%. Strategists also forecast a RRR cut in the coming weeks to offset some of the CNY 4.15tn of the medium-term lending facilities coming due by the end of 2021. Although the policy divergence of the Fed and the PBoC could narrow yield differentials and erode the yuan's carry advantage, impacts of the easing on the yuan are expected to be limited due to the potential support of such monetary policy action for the real economy and domestic assets (Bloomberg)

EU's Gold standard in green will command biggest debt premiums

July 10. Debt issued under the EU's self-proclaimed 'gold standard' may likely command higher prices than conventional debt, as well as sustainable debt under different frameworks. A rush of bonds into environmental assets has driven up the price of ethical bonds, spurring a frenzy of borrowers and prompting policymakers to create a slew of rulebooks to regulate the USD 3tn market. Requiring mandatory impact reports and external review, the EU's rules could ensure ethical quality that investors pay up for, whilst debt issuers could borrow at cheaper costs. A German green bond, for example, is trading at a premium of about 6bps to a comparable non-green bond. The EU green label could potentially provide greater security to investors in the future as this label can be embedded into the legal protection offered to investors (Bloomberg)

As big banks report, USD 40bn are on tap in U.S. credit

July 11. Next week, the largest US banks that borrowed heavily at the end of last year will be reporting their earnings and can access the investment-grade market for new capital, with up to USD 40bn in high-grade bond sales expected over the next five trading days. According to JPMorgan, the fall in Treasury yields may boost supply on the margin as issuers take advantage of "increasing attractive funding levels" to bring forward transactions. A persistent lower yield environment may also result in a pick-up of near-term spread volatility and hurt demand from pension funds and insurance buyers. However, demand is strong for now, and a continuation of such issuance levels is expected as companies seek to take advantage of what they believe is going to be a multi-year level of increasing growth. (Bloomberg)

China's bond defaults hit record high of USD 18bn in first half

July 9. Chinese corporate bond issuers defaulted on approximately CNY 116bn between Jan and Jun-2021, with the full-year estimation surpassing the record-high CNY 187bn in 2020. To tackle moral hazard problems, the Chinese government has given signals to stop bailing out state-owned enterprises (SOEs) from financial troubles, which is 2021, accounts for about 40% of all defaulted corporates in China. Chinese dollar-denominated high-yield bonds have crossed the 10% yield threshold for the first time in 13 months, compared to their global counterparts that have hovered around 5%. As investors rush out of junk bonds, a possible credit squeeze may hurt China's economic rebound. (Nikkei Asia)

Market for bonds meant to keep world cool heats up

July 6. Sales of sustainability-linked bonds have accelerated dramatically this year, led by companies with high carbon emissions, such as Italian energy giant Enel SpA and Spanish energy firm Repsol SA. Investors looking to decarbonize their portfolios are looking to invest in bonds from the biggest polluters. They want these more challenged companies to come with properly defined decarbonization plans. Investors like the approach taken by Enel, which has a strategy for reducing their high emissions and a history of meeting their targets. However, while green bonds have typically commanded a "greenium (a green premium)" it remains to be seen if sustainability-linked bonds will also lower borrowing costs for issuers. As for now, Investors aim to tackle the consequences of missed targets remains unclear, especially with increasingly varied targets, step-up costs, and penalty periods laid out by issuers. (WSJ)

US bond funds rake in more cash despite inflation fears (FT)

Lufthansa raises USD 1.2bn in corporate bond sale (Reuters)

Bond contrarians vindicated by US Treasury yield plunge (FT)

Regulatory Updates

ECB split deepens over scaling back bond-buying as economy improves

July 9. In last month's meeting, ECB officials debated whether to slow the pace of emergency bond purchases. The more conservative council members suggested cutting back the asset purchases in response to the brightening economic outlook and improved financial conditions, whilst the more 'dovish' proponents of loose monetary policy resisted. In the end, there was a broad consensus in favor of maintaining the current level of monetary stimulus provided amounting to EUR 1.85tn through the pandemic emergency purchase program (PEPP). However, policy stance may be revisited in the upcoming policy meetings. The ECB's announcement this week of its new strategy, which commits to a slightly higher inflation target of 2% that can be, temporarily, exceeded to avoid being stuck at ultra-low rates, has given added spice to the contest. (FT)

China frees up USD 154bn for banks to underpin economic recovery

July 9. The People's Bank of China (PBOC) will cut the reserve requirement ratio (RRR) for banks by 50bps starting from July 15. The weighted average RRR for Chinese financial institutions would fall to 8.9% after the cut. As China's post-pandemic economic recovery is losing momentum and smaller firms are suffering from recent rising commodity prices, PBOC tuned its policy to release around CNY 1tn in long-term liquidity to support the economy. According to PBOC, part of the liquidity released will assist financial institutions in repaying maturing medium-term lending facility (MLF) loans as well as ease liquidity pressure caused by tax payments (Reuters)

NY Fed to begin to sell corporate bond holdings on July 12 (Reuters)

RBI advises lenders to prepare for Libor shift (Live Mint)

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