Credit risk for Eurozone industrials surges as energy crisis inflames recession fears

by Elaine Uy

- **NUS-CRI Agg (median) 1-year PD of Eurozone industrials increases as ongoing energy crisis squeezes profitability margins**
- **Stress test shows that rising borrowing and energy costs could accelerate the deterioration of the sector's credit health**

The yield curve between the 2-year and 10-year government bonds of Germany, one of the Eurozone's largest economies that often acts as a market barometer for the state of the European Union, had inverted for the first time since 2008 last week, potentially indicating an onset of a recession only weeks after the European Central Bank (ECB) acknowledged such a possibility. The Eurozone has been at the receiving end of energy supply headwinds and has been reeling from the resulting economic shockwaves since early 2022, resulting in a deepening energy crisis. Business activity data in the region for Oct-2022 showed a rapid contraction, registering the lowest reading since Nov-2020. The NUS-CRI Aggregate (median) 1-year Probability of Default (Agg PD) for the Eurozone industrial sector (Eurozone industrials), one of the sectors most vulnerable to the ongoing energy shortage, shows a deterioration in credit health concurrent with growing concerns on the wider macroeconomic climate (see Figure 1a). The weakening credit outlook for Eurozone industrials could likely persist in the short-term, as suggested by the elevated NUS-CRI Agg (median) 1-year Forward PD (Forward PD[1]) in Figure 1b which rises well above the BBB upper bound when referenced to PDiR2.0[2], as the adequacy of the gas stockpiles and the availability of the non-Russian energy sources are tested in the upcoming winter months, coupled with the worsening macroeconomic conditions that are driving up input costs and reducing demand.

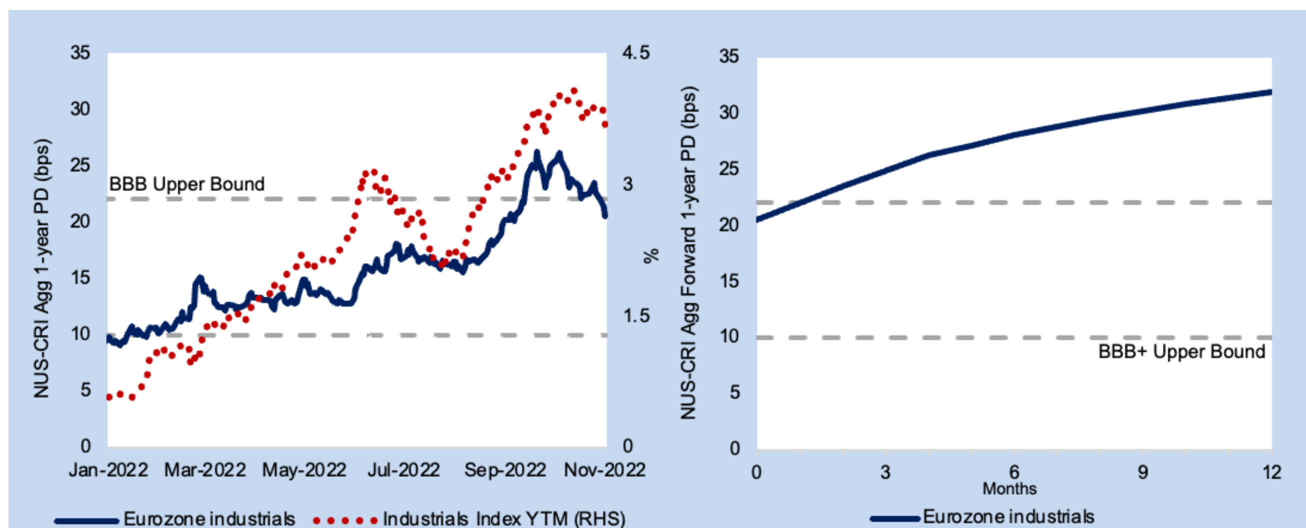

Figure 1a (LHS): NUS-CRI Aggregate (median) 1-year PD for Eurozone industrials from Jan-2022 to Nov-2022, with reference to PDiR2.0 bounds; Bloomberg Euro-Aggregate Industrials Index yield-to-maturity from Jan-2022 to Nov-2022. Figure 1b (RHS): NUS-CRI Aggregate (median) 1-year Forward PD for Eurozone industrials as of Nov-2022, with reference to PDiR2.0 bounds. *Source: NUS-CRI, Bloomberg*

Since the start of this year, the Eurozone's industrial sector has been operating in an environment where hampered economic activity, with rising input costs, has pressured the sector's demand prospects, and vis-a-vis, its profitability. The Purchasing Managers' Index (PMI) for the Eurozone's manufacturing sector hit a 29-month low of 46.4, its fourth consecutive month below 50, suggesting a deeper contraction in the sector as both

[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.

domestic and export demand fell, led by a reduction in activity from Spain and Germany. Furthermore, the sector's export demand has also reduced, due in part to heightened geopolitical tensions across Europe as well as high inflation. Lower Russian gas supply into Europe, due to the Nord Stream 2 pipeline damage, caused gas prices to spike again near the end of Q3-2022. Although European countries had scrambled to import energy supply from alternative countries to fill up storage capacities to around 90%, this stockpile might only be sufficient for 2 months of colder weather, and will most likely need to be replenished at a higher cost, possibly worsening the sector's profitability in the short term. This high energy cost also fuels the region's record-high inflation of 10.7% YoY in Oct-2022. Amid elevated raw material costs and limited gas supply, Eurozone industrials are also lowering energy consumption to facilitate a higher energy supply available for public use. For instance, German industrials' energy consumption dropped by nearly 20% YoY resulting in a decrease in production of 9.7% YoY. While doing so aids the region in weathering the energy crisis, restrictive energy consumption reduces production outputs, with some firms permanently shutting down plants, impacting their top line moving forward.

Moreover, demand has been wearing out for discretionary products, such as autos, in the region as inflation bites, and sustained high inflation levels will likely hinder future demand moving forward[3]. The effect of the diminished demand and increasing costs has already been realized in the sector's median operating margins, which have declined by 3.9%[4] YoY as of Jun-2022. Furthermore, the volatility of global gas prices, sans protective measures by the member-state governments, may translate to higher operating costs that negatively impact the sector's profitability moving forward. On the positive side, total debt to total capital and current ratios for the sector remains relatively steady at approximately 40% and 1.25[4], respectively, over the past 3 years, indicating that the sector might have had adequate liquidity buffers moving into the current crisis period, rather than relying on raising funds through debt financing, to cushion against cost shocks and immediate repayment concerns in the short term. Furthermore, the sector's debt load might not be an urgent concern considering that only around 20% of outstanding debts are maturing within 1-2 years, and of which, only 16% might be susceptible to repricing risks (see Figure 2a). That being said, the higher costs upon refinancing (see Figure 1a) owing to the ECB's continuing interest rate hikes, could add to the sector's profitability and financing woes in the future. As such, though the sector is not facing an immediate debt crisis, its worsening financial performance may translate to heightened default risk in the longer term should the current financing and operating environment remain weak.

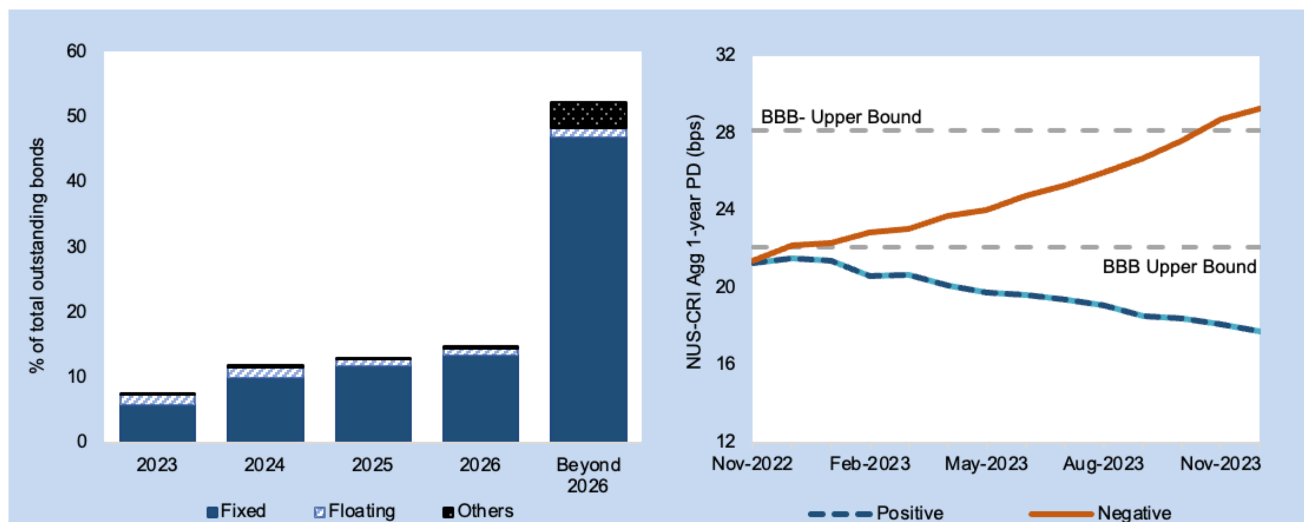

Figure 2a (LHS): Maturity distribution of total outstanding bonds of Eurozone industrials as of Nov-2022. Figure 2b (RHS): NUS-CRI Agg (median) 1-year PD of Eurozone industrials stressed against the German natural gas spot prices and Germany's 3-month interbank rates[5].
Source: Bloomberg, BuDA v3.5.1

The implication of changing macroeconomic conditions on the credit profile of Eurozone industrials can be simulated by conducting stress tests using the NUS-CRI's Bottom-Up Default Analysis (BuDA[6]) toolkit. Results of the stress tests in Figure 2b show that in a negative scenario where persistent inflation has driven an increase in borrowing costs, and where gas prices have also increased due to sustained supply constraints, deterioration

[3] Real new orders for German industrials (domestic and non-domestic) decreased by 10.8% YoY in Sept-2022.
[4] Data from Refinitiv.
[5] The PD of Eurozone industrials is stressed using a negative scenario where natural gas prices increase at a constant rate of 5% MoM and short-term interest rates increase by 20bps MoM; and a positive scenario where natural gas prices decrease at a constant rate of 5% MoM and short-term interest rate growth tapers from 20bps MoM for the remaining months of 2022 to 10bps in Q1-2023, and then remains constant throughout 2023.
[6] The Bottom-up Default Analysis (BuDA v3.5.1) 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).

in credit health for the sector could accelerate, in line with the Forward PD in Figure 1b. In a positive scenario where borrowing costs gradually stabilize and gas prices reduce, the credit health of the sector improves, highlighting the sensitivity of Eurozone industrials' PD to the incumbent operating and financing conditions.

Therefore, the trajectory of the Eurozone industrials' credit risk might be highly dependent on the implementation of measures to control the further upswing of gas prices. Such measures, like the price cap policy which is currently under deliberation by the European Commission, could improve the sector's profitability and production capabilities moving forward. Furthermore, the meeting of world leaders currently taking place at the G20 summit in Indonesia could also provide some relief if further steps are taken to reduce the geopolitical tensions in the region. With the realization of such measures, the credit outlook for the Eurozone industrials could take a favorable turn, as suggested by the stress tests in Figure 2b. However, based on the current environment, the macroeconomic landscape of the region could keep the sector's credit risk elevated as suggested by the Forward PD in Figure 1b.

Credit News

Businesses rush to sidestep rate shock by paying down debt

Nov 09. As recession worries peak, businesses are actively taking steps to protect themselves against the seemingly inevitable economic downturn. Companies are proactively trying to reduce their debt service burden as borrowing rates continue to trend upwards. The 3-month LIBOR, often used as a benchmark to price commercial loans, has soared to 4.56% this month as compared to 0.15% in the previous year. Resultantly, companies across industries are trying to control expenses and cut down interest burdens in the face of continued interest rate hikes. (WSJ)

South Korea suffers from corporate debt liquidity crunch

Nov 14. South Korea is facing a corporate credit crisis triggered by the surprise default of the developer Gangwon Jungdo Development Corp. As contagion spreads, even investment-grade companies such as Korea Electric Power Corp. struggle to raise capital from debt markets. As investors fret about the credit health of Korean corporate borrowers, the average yield for 3-year IG corporate bonds has jumped to 5.69% as compared to 4.54%, 2 months earlier. To ease liquidity, the Bank of Korea announced that it would inject KRW 50 tn. However, the market conditions remain rocky and companies face the tightest borrowing conditions since the 2008 financial crisis. (Nikkei Asia)

Property downturn hits UK housebuilders as sales plummet

Nov 11. Redrow, Persimmon, and Taylor Wimpey, three of the UK's largest housebuilders, recently reported a drastic fall in demand as rising mortgage costs dissuade homebuyers. The warning serves as a definitive indicator of an onset of a downturn in the UK property sector. As mortgage rates accelerate, the property sector may see a possible increase in delinquencies as homeowners will be faced with a higher rate when they re-mortgage. As a recession looms, analysts predict house prices will plunge on expectations of higher unemployment and a higher cost of living. (FT)

Big hedge funds shop for bargains in corporate debt markets

Nov 08. The hard-hit corporate debt market is now experiencing a revival in interest from big hedge fund groups as they look to take advantage of cheaper bond prices. The corporate bond market experienced a steep fall in 2022 as fears of an uptick in defaults concurrent with rising borrowing rates resulted in a massive selloff in markets. The yield on junk-rated debt, as indicated by the Ice Data Services euro high-yield index, jumped from 2.8% at the start of 2022 to 7.8%. Many prominent hedge funds believe that the sell-off may have gone too far and has now presented favorable investment opportunities. (FT)

Climate debt trap risks pushing emerging markets to the brink

Nov 14. Rising borrowing costs globally are hampering the financial position of many climate-vulnerable companies that have previously borrowed at extra-low interest rates. The latest increase in borrowing costs is creating a 'debt trap' for the countries that need to borrow to fund projects that make them resilient to climate risks. Pakistan is an example of such a country, which has dwindling reserves and has just faced a climate crisis requiring it to be bailed out by the IMF. Governments of at-risk countries have now had to rely heavily on bond markets to access financing, increasing their debt position significantly. The total debt burden for developing countries currently stands at USD 350bn by the end of 2024. Dollar-denominated sovereign bonds have also been trading with a spread of 1000 basis points above US treasury yields. (Bloomberg)

Record apartment price drop adds Korea property sector worries (Bloomberg)

India's first green bond to attract mix of local, foreign buyers - bankers (Reuters)

Sam Bankman-Fried's USD 32bn FTX crypto empire files for bankruptcy (FT)

Regulatory Updates

China plans property rescue in latest surprise policy shift

Nov 13. The Chinese government has issued a 16-point plan to financial firms to boost the real estate market, ranging from addressing the sector's liquidity concerns, and reducing the down-payment requirements for home buyers. The industry is also getting access to pre-sales funds, which should reduce its liquidity concerns. In response, developers' shares jumped by 14%, and high-yield dollar bonds gained 5 cents on the dollar. The regulation change also allows the extension of borrowings due within the next six months by a year, while repayment of bonds can also be extended or swapped through negotiations. This set of regulations provides much-needed breathing space for the real estate industry, which has been one of the worst-performing markets in the country. (Bloomberg)

European regulators will struggle to supervise crypto groups, warns ECB

Nov 13. Regulators from the ECB have cited concerns regarding the risk posed by crypto asset providers that don't have financial prudence at the heart of their business model and don't respect national borders or prioritize consumer protection. This criticism comes after the failure of FTX, which filed for bankruptcy protection in the US last week. The EU is finalizing regulation legislation that will monitor risk build-up in the crypto markets, though it will be a challenge from an implementation standpoint. The issue is more of a concern given that the regulation is dictated on legal entities and territories, both of which are hard to establish in the market. Though the ECB does accept that the market is not big enough to be a stability concern now, early responsive regulation is key to ensure that risk does not bubble over to the traditional financial network and stability. (FT)

ECB to lend out more of its bonds to ease market squeeze (Reuters)

Fed officials back slower pace of rate rises after inflation data (FT)

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