Stress tests suggest EU's major non-financial sectors' credit profiles react differently under a recessionary scenario

by Wang Chenye

- **Stress tests show that the Agg PD for EU companies might move into the non-investment grade territory by Dec-2023, with the stressed Agg PD under the adverse recessionary scenario surging over the next two years and crossing the BB upper bound**
- **Sector-level stress tests reveal the diverging impact of the adverse scenario across major non-financial sectors**

Stagnation has plagued Europe and a looming economic downturn is expected, foreshadowed by bleak economic indicators. As the interest rate reaches record-high and cost-push inflation persists, businesses in the Eurozone area are suffering from the high borrowing costs and disrupted supply chains. The NUS-CRI Aggregate 1-year Probability of Default (Agg PD) for companies domiciled in the European Union has been steadily increasing since the start of 2022, surging after the Russia-Ukrainian war outbreak in Feb-2022. Furthermore, as the ECB began to raise interest rates in the middle of last year, the Agg PD increased sharply and approached the BBB upper bound when referred to PDiR2.0 bounds.[1] Using the underlying forecasts stipulated by the European Banking Authority in their recent stress tests for the EU-domiciled banking sector, further stress tests can be conducted using the Bottom-up Default Analysis toolkit (BuDA v3.5.1[2]) that showcase the impact on stressed Agg PD for EU domiciled companies as a whole, as well as for specific sectors, namely consumer discretionary, healthcare, energy, and real estate. The analysis highlights the differing trends under both the base and adverse scenarios, derived from the EBA's forecasts. As such, our approach shifts the focus towards encompassing the broader economy.

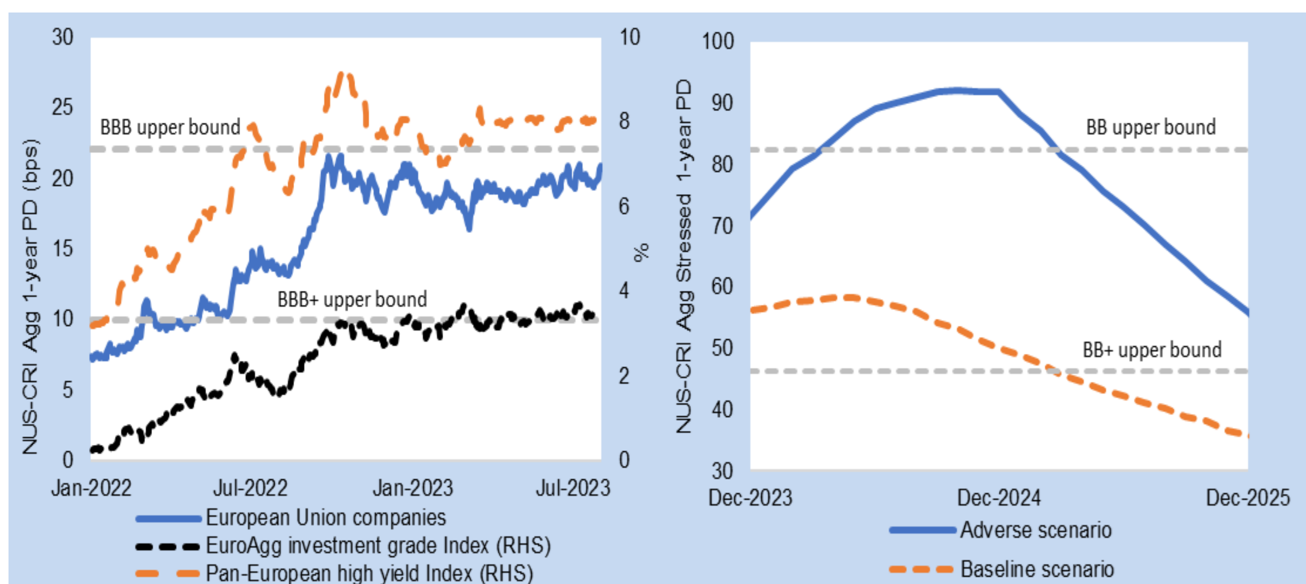

Figure 1a (LHS): NUS-CRI Agg (median) 1-year PD for the EU-domiciled firms, with reference to PDiR2.0 bounds (LHS axis), Bloomberg EuroAgg Total Return Index (RHS axis) and Bloomberg Pan-European High Yield Index (RHS axis).
Figure 1b (RHS): Stressed NUS-CRI Agg (median) 1-year PD for the EU-domiciled firms under adverse and baseline scenarios. *Source: NUS-CRI, Bloomberg, BuDA V3.5.1.*

[1] The Probability of Default implied Rating version 2.0 (PDiR2.0) provides a more familiar interpretation by 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.
[2] 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 the National University of Singapore (NUS) and the International Monetary Fund (IMF).

The BuDA Toolkit can be used to assess the resultant impact of varying macroeconomic conditions on Agg PD across all the sectors (see Figure 1b). The selected stressors are five exogenous macroeconomic indicators[3], with real GDP growth forecasts for both the adverse scenario and the baseline scenario in line with the assumptions of the EBA.[4] The adverse scenario implies economic contraction accompanied by high-interest rates and high inflation. As shown in Figure 1b, the stressed Agg PD for the EU companies in the adverse scenario continues to increase, crossing over the BB upper bound to over 90bps during the assumed recession in 2024; however, in the baseline scenario where the real GDP growth rate remains positive with faster rate cuts and tamed inflation, the stressed Agg PD only rises slightly in early 2024 and then continued to improve going back to the BB+ level. In 2025, both scenarios assume positive real GDP growth with improved economic conditions after Dec-2024, indicated by the parallel downward trend for the stressed PD in both scenarios in 2025.

The high level of granularity achieved through bottom-up stress testing can yield valuable insights into sector-level analysis. Four major non-financial sectors are chosen to showcase the diverging impact of the adverse scenario across the sectors as shown in Figure 2. Moreover, by examining the variance in stressed Agg PD between the two scenarios, we can gauge the immediacy and severity of the impact that extreme conditions impose on different sectors.

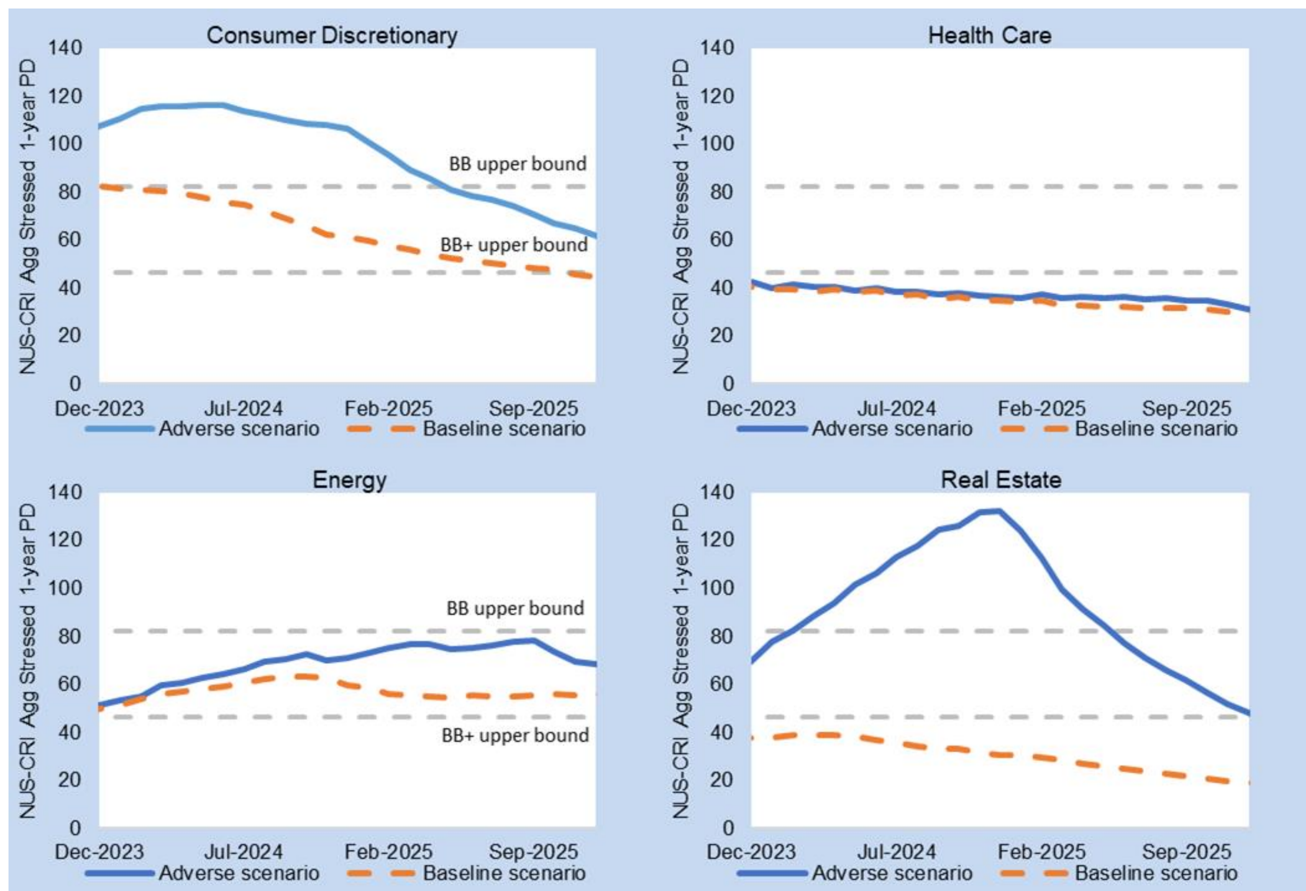

Figure 2: Stressed NUS-CRI Agg (median) 1-year PD for EU consumer discretionary sector, healthcare sector, energy sector and real estate sector, with reference to PDiR2.0 bounds *Source: NUS-CRI, BuDA V3.5.1.*

The aggregate stressed PD of the consumer discretionary sector is responsive to the economic slowdown simulated in the adverse scenario, with the Agg stressed PD deteriorating potentially due to recessionary headwinds and lower domestic household disposable income directly denting the aggregate demand for discretionary products, signs of which have already been present since late last year, leading to squeezed profits and a potential liquidity crunch for businesses operating in this sector. In contrast, the stressed Agg PD of the consumer staple sector demonstrates an almost parallel trend in both scenarios, with insignificant level differences, reinforcing that similar demand dynamics are not present for firms providing staple goods. The

[3] The five stressors are real GDP growth rate, inflation rate, interest rate, unemployment rate and the Brent crude oil price. The referred data sources include IMF, the World Bank, and FRED.
[4] The adverse scenario envisages a cumulative decline of EU real GDP by -0.6% from 2022 (-3.5%, -4.2% and 1.6% as of 2023, 2024 and 2025 respectively). The baseline scenario envisages that the GDP in the EU will increase in the three-year horizon (0.4%, 1.8% and 1.9% as of 2023, 2024 and 2025 respectively).

healthcare sector remains robust to the adverse macroeconomic conditions given that the stressed PD in the adverse scenario almost coincides with that under the baseline scenario below the BB+ upper bound. Compared to other sectors, the development of the healthcare sector is more dependent on long-term demographics and force majeure and is less sensitive to economic cycles and credit conditions.

The recessionary impact on the energy sector's credit profile suggests a potential structural long-term risk, as the sector also hinges on commodity prices and restoration of the supply chain that may take longer to recover from a recession. The energy sector has borne the brunt of the ongoing geopolitical tensions and continues to face increasing risks in the longer term as renewable energy gains more attention. The real estate sector shows relatively volatile momentum along with negative real GDP growth, high-interest rate and high inflation under the adverse scenario. With the indebted nature of the property developers in the EU, a continued property crisis may continue to gather steam should corporate borrowing costs remain high and disposable income levels remain low.

An increase in default risk for major non-financial sectors could hamper the asset quality of EU-domiciled banks as well, adding additional stress to the financial sector that is highly dependent on the business and credit cycle. Based on the results of the NUS-CRI Bottom-up stress testing, the credit profile of some EU companies may deteriorate to an unprecedented degree under the extremely adverse scenario, potentially due to the amalgamation of multiple adverse macroeconomic factors. This may not only impact corporate financial performance, but also hinder access to necessary funding required to maintain liquidity and solvency due to elevated borrowing costs. As such, even though the base case scenario suggests a relatively minor deterioration in the credit risk profile of major non-financial sectors, EU-domiciled regulatory bodies and the ECB have to be mindful of the cross-effect of slowing down the economy too fast and incubating a hard landing that spills across sectors.

Credit News

US regional banks struggle to break free from government life support

Aug 07. US banks continue to rely on significant government financing, a lifeline established following the collapse of Silicon Valley Bank. A crucial source of this funding is the Federal Home Loan Banks (FHLBs), a group of 11 government-sponsored wholesale regional lenders, which could potentially be rescued by the government if they faced failure. As of June, data from the FHLB Office of Finance reveals that US banks and credit unions held USD 880bn in outstanding loans from these entities. Although this amount has decreased from the first quarter's peak of over USD 1tn, it remains significantly elevated compared to the end of 2021. Critics are raising concerns about excessive risk-taking enabled by government sponsorship, leading to calls for the FHLB's reevaluation. (FT)

Hungry investors queue up as Japan's BOJ lifts yields bit by bit

Aug 01. Japan's government bond market has transformed into a strategic tussle between investors and the Bank of Japan (BOJ). The BOJ is striving to curb an upsurge in yields towards its new policy threshold, while investors are preemptively purchasing the bonds. This dynamic emerged after the BOJ modified its seven-year yield-curve-control policy, allowing for more flexibility in the 10-year Japanese government bond yields, which can now reach as high as 1%, compared to the previous cap of 0.5%. In the days following this adjustment, the market has attempted to anticipate the BOJ's desired yield movement pace, as the BOJ executes specialized bond-buying maneuvers to limit yield growth. Analysts assert that this slight policy adjustment has ignited investor interest in the third-largest global bond market, potentially ensuring that the yield ceiling remains unchallenged for a considerable period. (Reuters)

Ratings firms struggle with climate risk in USD 133tn market

Aug 01. Amidst the escalating impacts of heatwaves, droughts, and intense storms worldwide, concerns are rising about the inadequate assessment of climate risks in the global bond market, which amounts to USD 133tn. This misinterpretation, if left unaddressed, could adversely affect both creditors and borrowers. Notably, major credit rating agencies, including S&P, Moody's, and Fitch, assert that they consider climate risks in their evaluations, albeit acknowledging the complexity of the process. The European Central Bank's findings from last September emphasize that while progress has been made, ratings agencies struggle to transparently communicate their climate risk assessments, encompassing both transition and physical risks. (Bloomberg)

Fitch strips US of triple A rating after borrowing stand-off

Aug 02. Fitch Ratings has downgraded the United States debt rating from triple A to double A plus, citing deteriorating fiscal conditions and governance. This decision comes two months after political disputes pushed the world's largest economy to the brink of a sovereign default. Fitch explained that the downgrade was prompted by anticipated fiscal challenges in the coming three years and a substantial and growing burden of government debt. The potential downgrade had been previously signaled by Fitch in late May due to heightened political divisions hindering effective resolutions. The announcement did not significantly impact markets for US Treasury bonds or the dollar index, which measures the US currency against a basket of six other currencies. (FT)

UK firms with GBP 12.8bn debt coming due turn to unusual financing tool

Aug 03. UK-domiciled companies are turning to collateralized loan obligations (CLOs) denominated in euros instead of sterling to address credit risk challenges amid a sluggish economy and a substantial amount of maturing debt. Firms like Iceland Foods and Travelodge have refinanced debt by issuing floating-rate notes in euros, attracting CLO fund managers. With GBP 12.8bn of bonds coming due in 2025 for UK companies, this approach is seen as a way to diversify their investor base, given the limited depth of the sterling market in the current macroeconomic context. This strategy has helped lower the 2025 maturity wall from GBP 14.3bn to GBP 12.8bn. CLOs' growing appetite for high-yield bonds has further supported this trend, aiding struggling UK firms amidst a challenging credit environment to access the necessary financing to survive the incumbement economic slowdown. (Bloomberg)

Global bond market mood souring ahead of pivotal us jobs report (Bloomberg)

AT1s deliver big returns to traders braving credit suisse rout (Bloomberg)

Carnival wraps up USD 1.81bn debt sale to replace covid debt (Bloomberg)

Regulatory Updates

Bank of England raises key interest rate by quarter percentage point

Aug 03. The Bank of England (BOE) raised its key interest rate to 5.25% from 5%, marking the 14th consecutive increase in over a year. The move aims to curb surging consumer prices in the UK, similar to recent actions by the US Federal Reserve and the European Central Bank. The UK's resilient economy defied recession predictions due to rising food and energy costs following Russia's Ukraine invasion. Despite this, escalating borrowing costs could potentially lead to contraction. The BOE's tighter stance is intended to cool inflation, and its governor, Andrew Bailey, noted the potential for more rate hikes if significant wage increases lead to further price rises. The central bank suggested that this round of rate hikes might be coming to an end, with a forecast that inflation will fall below the 2% target by mid-2025 if rates are raised to 6%. The market response indicates the belief that the BOE is nearing the end of its tightening cycle. (WSJ)

City of London calls on Bank of England to delay bank capital rules until mid-2025

Aug 06. The Bank of England (BOE) is facing calls from the finance industry to postpone the implementation of new global banking capital rules by six months to synchronize with the US. The Prudential Regulation Authority (PRA), the BOE's regulatory arm, had planned to introduce the "endgame" of the Basel capital rules from January 2025, aligning with the EU's timeline. However, the US was recently surprised by setting a June 2025 implementation date for Basel IV measures, which raises US bank capital requirements by about 16%. UK-based finance executives fear regulatory misalignment and reduced competitiveness if the UK and US have different timelines. Lobby group UK Finance is considering advocating for the PRA's delay in implementation. (FT)

China's central bank to guide more financial resources to support private sector (CNA)

UK to establish resolution regime for insurance companies (FT)

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