US dollar rally ripples through the credit profile of high-risk emerging markets' banking sector

by Elaine Uy

- **NUS-CRI Agg (median) 1-year PD of APAC and EMEA high-risk EM banking sector appear more responsive to an increase in sovereign risk owing to the substantial sovereign exposure.**
- **High commodity prices may provide the credit health of the LATAM high-risk EM banking sector a short-term respite against rising USD as corporate health remains relatively stable in the region.**
- **The effect of weakening of domestic currency is compounded by the overall economic downturn which may be precipitated by tightening monetary controls, as the BuDA results suggest.**

The Fed has reinstated its aggressive stance in reining in inflation with a second consecutive 75bps hike, the largest increase since 1994. The action further strengthened the US dollar (USD), which is currently at its strongest in decades after a multi-month rally. The rising USD appears to be a bane for high-risk[1] emerging markets, which are feeling the brunt doubly in the form of capital outflows and costlier debt servicing. Earlier this year, emerging market economies dealt with a decline in investor confidence after Sri Lanka defaulted on its sovereign debt. Financial markets have already priced in the mounting pressure on the troubled sovereigns as seen in the increasing premia required on sovereign credit default swaps. In turn, the heightened sovereign risk has trickled through the rest of the banking sector through the government debt and securities held by locally-domiciled financial institutions.

The NUS-CRI Aggregate (median) 1-year Probability of Default (Agg PD) for the banking sector in high-risk emerging markets (EM) in both Asia Pacific (APAC) and Europe, Middle East and Africa (EMEA) exhibited deterioration since early in 1Q 2022 due to the cost-push inflation triggered by the Russia-Ukraine war, with the degree of the former visibly worse due to higher sovereign exposure amidst tightness in external liquidity (See Figure 1a). On the other hand, the credit risk for the Latin American (LATAM) EM banking sector appears relatively steady on the back of lower exposure to sovereign risk and gains from higher commodities prices, partially mitigating the effect of depreciating domestic currency. The deterioration in the overall credit health of the high-risk EM banking sector could linger for the next 12 months, in parallel with the expectation of worsening economic conditions, before improving into recovery potentially as bailouts materialize especially in APAC and EMEA, as implied by the NUS-CRI Agg (median) 1-year Forward PD (Forward PD[2]) (See Figure 1b). In the longer horizon, the potential repercussions of the supply chain disruptions on trade and foreign policy could keep the level of the APAC and EMEA high-risk EM banking sector's credit risk heightened.

[1] High-risk economies are the top three most-at-risk economies selected according to the highest YoY change in average 5-year sovereign CDS mid-spread as of Jul-2022. APAC includes banks from Sri Lanka, Pakistan, and India; EMEA includes banks from Ghana, Egypt, and Kenya; LATAM includes banks from Colombia, Brazil, and Chile.

[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.

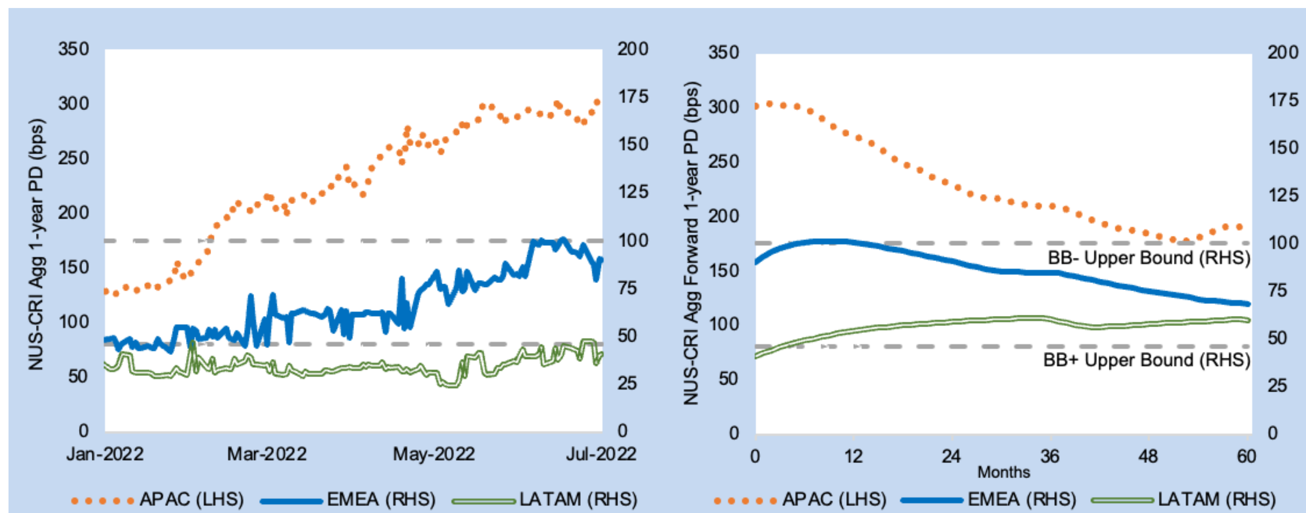

Figure 1a (LHS): NUS-CRI Agg (median) 1-year PD of the banking sector of high-risk EM in APAC, EMEA, and LATAM regions from Jan-2022 to Jul-2022, with reference to PDiR2.0 bounds[3]. Figure 1b (RHS): NUS-CRI Agg (median) Forward 1-year PD of the banking sector of high-risk EM in APAC, EMEA, and LATAM regions as of Jul-2022, with reference to PDiR2.0 bounds. *Source: NUS-CRI*

While the credit risk for APAC high-risk EM banking sector remained elevated (above BB- upper bound as per PDiR2.0) during the pandemic, it has exhibited rapid deterioration as the fallout from the Russia-Ukraine war accelerated inflation and aggravated the shortage of commodities. Exacerbated by depreciation in domestic currency due to inflation, surging commodity prices and dwindling supply led to costly imports of fuel and energy for India and Pakistan who are battling incumbent power crises, causing trade deficits to balloon. The imported inflation contributed substantially to overall inflation in the region which has hit an all-time high of approximately 25%[4], mapping an unfavorable trail for the banking sector's asset quality, especially in the face of expiring pandemic-related supportive measures by local governments. The record inflation has prompted central banks to forcefully hike interest rates – Sri Lanka and Pakistan to around 15%, while India reverts to pre-pandemic interest levels, subduing credit growth and increasing refinancing costs.

Meanwhile, the approaching external debt maturities of Pakistan and India put the sovereigns' debt servicing capacity into focus. Against the backdrop of Sri Lanka's default, the substantial sovereign holdings of the region's banking sector amid increasing sovereign risk could not only further depress asset quality but also shun potential investors or financiers. Such disproportionate uncertainty, along with the higher yields from major and safer economies like the US, present an incentive to investors to withdraw from EM. As capital flow reverses, the domestic currency weakens against the USD, putting the international reserves of APAC high-risk EM under pressure[5]. Declining reserves makes it costlier to service foreign debt, and narrows the central banks' elbow room to control currency depreciation[6]. With around 32.4% of total domestic credit extended to the government, and similarly substantial holdings in the investment portfolio[7], an increase in sovereign risk translates to higher risk-weighted assets for the APAC EM banking sector which require more capital buffers, or higher losses should the government defer domestic debt repayments in favor of foreign debt. Efforts to dilute government holdings could do well to limit the impact of a further increase in sovereign risk, however, banks might not be able to effectively de-risk their portfolios considering the unfavorable macroeconomic condition which affects loan repayment. As such, an uptick in the already high NPL[8] might be imminent.

Despite the diminishing reserves and slumping domestic currency[9] amidst maturing foreign debt, the deterioration in the credit health of the EMEA high-risk EM banking sector is muted compared to that of APAC's. Among the identified economies in EMEA, only Egyptian banks have heavy sovereign exposure. As such, the

[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.
[4] Sri Lanka recorded a 45.3% YoY inflation rate in May-2022 and is expected to further increase. Pakistan's inflation stands at 21.3%, the highest in 13 years, while India's inflation remained above 7% in Jul-2022.
[5] Sri Lanka's reserves had been steadily decreasing and had remained low relative to the 2020 level. Pakistan's reserves plunged further, down 28.2% since Jan-2022.
[6] Pakistan central bank's action of slowing the depreciation of its currency at the cost of its reserves, for instance, backfired as its currency slid further.
[7] Average government loan exposure to total credit for Sri Lanka (42.2%) and Pakistan banking sector (22.6%), while aggregate government holdings (loans and securities) to total loans and securities are 49.7% and 58.8%, respectively.
[8] NPL ratios for Sri Lanka and Pakistan are at 4.5% (as of Dec-2021) and 8.8% (as of Mar-2022), respectively. India's non-performing assets ratio is at 5.9% (as of Mar-2022).
[9] Kenya sustained a 14-month depreciation against the USD, and year-to-date depreciation of Ghana currency accumulated to 20.5%. Meanwhile, Egypt's currency reached a new all-time low against the USD and is expected to fall further.

impact on the banking sectors' credit risk for other economies in the region could become apparent after their respective central banks implement countermeasures to prevent further depreciation of their currency, possibly by increasing interest rates. An increase in interest rates would pass through to the banking sector in the form of a slowdown in credit extension, possibly offsetting the expected benefit in the banks' margins. With central banks already raising interest rates to combat inflation, the added pressure might push these ailing economies closer to a recession.

In contrast, credit risk for the LATAM high-risk EM banking sector shows a relatively steady trend notwithstanding global pressures. Currencies in the region have generally shown resilience against the rising USD as a result of gains from higher commodity prices and asset mispricing, suggesting that the increase in the sovereign risk of the EM cannot be solely attributed to the performance of their domestic currency. Additionally, unlike its APAC counterparts which show co-movement in PD owing to commonalities in sector profiles (e.g., sovereign exposure), LATAM EM banks exhibit diverging trends potentially indicating that country-specific factors play a bigger role in affecting the credit health of the banking sector. As such, despite the increase in sovereign risk, probably because of large current account deficits, Chile is not as heavily-saddled with debt, with a total debt to GDP ratio of 36.3%, in contrast to Brazil's 78.5% as of Mar-2022, or Colombia's over 20% in external debt alone. Moreover, as lending is more focused on households and private firms, the overall credit health of the banking sector will most likely be affected by mounting pressure on debt servicing capacity as a result of the respective central banks' hiking of interest rates to combat domestic inflation. Nonetheless, adequate capitalization[10], as well as satisfactory earnings generation, currently provides LATAM banks with a cushion against further economic shocks.

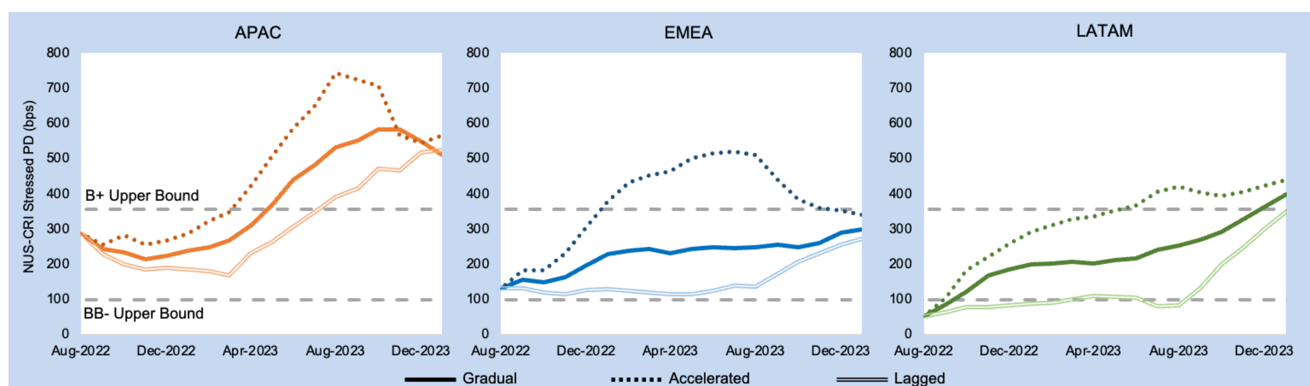

Figure 2: NUS-CRI Agg (median) 1-year PD of banking sector of high-risk EM in APAC (left), EMEA (center), and LATAM (right) stressed against forward foreign exchange rates and economy/country credit risk cycle indices[11], with reference to PDiR2.0 bounds. *Source: BuDA v3.4.2*

In the face of the continued strengthening of the USD relative to domestic currency and the anticipated monetary policy response that will be implemented by the central banks, stress tests were conducted using NUS-CRI's Bottom-Up Default Analysis toolkit (BuDA[12]). Results of the stress tests (see Figure 2) demonstrate that should monetary policy tightening in response to a sustained depreciation of domestic currency usher in the overall deterioration of credit risk of corporates, the credit outlook for the high-risk EM banking sectors' credit risk could worsen in the short term. Meanwhile, in the scenario where the effect of tight monetary policy on the economy credit risk cycle indices (CCI) lags by 12 months, stressed PD follows the same trajectory as the forward PD in a pre-recovery descent, potentially because of higher earnings buoyed by increasing interest rates. For the banking sector of APAC and EMEA EM, as soon as CCI plateaus, after its immediate and rapid deterioration, stressed PD is seen to trend downwards despite the continued depreciation of the domestic currency. This suggests that by itself, a weakening domestic currency poses minimal impact on the banking sector's PD but might cause or catalyze the worsening of the financial condition of the economy, which could, in turn, have a magnifying effect on their banking sector's credit risk. On the other hand, LATAM EM banking sector stressed PD's continued increase suggests that gains from commodity prices which somehow moderate the effects of the rising USD against the region's respective domestic currency would only be beneficial in the short-term.

[10] Capital adequacy ratio (CAR) for Colombia is higher than pre-pandemic levels as of Jun-2021. Brazil (16.05% as of May-2022) has maintained CAR above the minimum required, while Chile's capital position is compliant with Basel III requirements.
[11] The PD of the banking sector is stressed against the historical level of economy/country CCI on the same month in the most recent 12 months (e.g., Jul-2023 uses Jul-2022 CCI as base), if such base level will increase by an additional 1bp every 12 months (gradual), initially increase by 2bps then remain constant at that elevated level (accelerated) or equal the base level for 12 months before increasing by 2bps (lagged). In all scenarios, exchange rates against the USD is constantly increasing by 2% MoM.
[12] 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).

The strong USD resultant of the successive Fed hikes fits into the perfect storm for highly-indebted EM which are scrambling to source adequate reserves to service near-maturing external debt. Countries which have stockpiled foreign currency reserves might be well-positioned to control the domestic currency depreciation and stave off the debt crisis, while those with lower foreign currency reserves would have to contend with increasing rates at the cost of slowing credit growth. Nonetheless, should the troubled EM be able to weather the external liquidity crisis, potentially with a top-up in reserves from IMF bailouts, the outlook for its banking sector's PD looks towards recovery, especially for APAC and EMEA (See Figure 1b). However, with the current global economic shocks exposing the vulnerabilities of supply chains, the configuration of international trade and globalization might be reversed leading to potentially adverse implications for the EM. Such economic threats might result in an elevated PD in the long term, especially for local banking sectors with substantial sovereign exposure.

Credit News

European banks hit rate sweet spot with defaults kept at bay

Aug 05. Monetary tightening by the ECB to curb soaring inflation has benefitted European banks as the interest rate hikes boost margins while bringing an end to nearly a decade of negative interest rates. Banks have outperformed analysts' expectations with profits for the ten largest EU banks totaling EUR 13.9bn. Especially banks that practice floating rate lending have seen their bottom line rise sooner. However, rising inflation, uncertainty over the Russian gas supply, and souring investor confidence suggest a possible weakening in their earnings in the future. (Bloomberg)

Global bond funds receive biggest weekly inflow in nine months

Aug 05. Investor preference for safer securities has skyrocketed over political tensions in Taiwan and a dampened global economic outlook. Weekly inflow in global bond funds recorded a nine-month peak of USD 14.4bn while inflows into money market funds also increased 66% WoW. Global government bond funds and short-and-medium-term funds were able to reverse trends of weekly outflows, registering USD 3.77bn and USD 1.59bn inflow in the week to Aug 3. On the other hand, commodity and fuel funds have reported outflows. (Reuters)

US household debt surpasses USD 16tn on higher mortgages

Aug 02. According to the NY Federal Reserve Bank, US household debt increased by 2% to USD16.2tn in Q2 2022. The increase was driven by lifts across mortgages, auto loans, and credit card balances. The biggest driver was mortgage debt which drove two-thirds of the increase in the previous quarter. Out of the USD 16.2tn in debt, USD 435bn is delinquent, while USD 294bn is seriously delinquent. Nonetheless, Joelle Scally, administrator of the Center of Microeconomic Data notes that household balance sheets overall appear to be in a strong position. (Bloomberg)

Junk bond market is signaling the US will avoid a recession

Aug 04. Looking at current market pricing, the US junk bond market reflects that the economy may weaken but will not tip into a recession. Investors are increasingly hopeful that signs of slowing growth would translate to the central bank easing up on monetary policy. Last week, Walmart noted that consumers are avoiding big-ticket items. AT&T also said that customers are delaying paying bills. Over in housing, pending home sales in June fell the most since April 2022. (Bloomberg)

Turkey's 79% inflation drives company debt into distressed zone

Aug 02. Turkish firms face an immense level of debt which is expected to go beyond USD 16bn by the end of 2024 as soaring inflation and currency depreciation wreak havoc on the economy. The situation is even more challenging for companies with high foreign exchange exposure primarily due to their outstanding bonds. Additionally, Turkey's central bank kept its 2022 benchmark rate unchanged even if worldwide central banks are tightening their monetary policy to tackle the high inflation levels which has contributed to higher uncertainty for investors. (Bloomberg)

Facebook parent Meta set to raise USD 10 bn in bond debut (Reuters)

Singapore braves tough market with debut 50-year green bond (Malaysian Reserve)

India's top mortgage lender signs 'world's biggest' social loan (Bloomberg)

Regulatory Updates

ECB injects billions of euros into weaker eurozone debt markets

Aug 08. The ECB, which ended its bond purchase program in March is now focusing its efforts to protect highly vulnerable eurozone countries. With the monetary authority focused on taming inflation in the eurozone, effects of rate hikes and unwinding of stimulus programs threaten to throw vulnerable countries like Italy, Spain and Greece in crisis. Thus, to keep crises at bay, the ECB poured in EUR 17bn in Italian, Spanish and Greek markets while at the same time allowing debt in stronger markets to fall by EUR 18bn. The differing stance comes as policymakers worry that a tighter monetary policy might increase fragmentation risk amongst economies. (FT)

Bank of England set to become first big central bank to sell QE bonds

Aug 05. With the announcement of a GBP 40 bn sales program, the Bank of England is set to become the first major central bank to sell bonds that it purchased as part of its quantitative easing program. Although the BoE does not expect the bond sales to contribute extensively to the monetary policy tightening efforts, the sales are initiated to create room for possible QE requirements in the future. The BoE intimated that beginning Sep 2022, it expects to reduce its bond holdings by GBP 80bn via maturing bonds and bond sales of GBP 10bn per quarter. (Reuters)

New Sebi rules may pull the rug out from India's bid to boost bond market (Business Standard)

Germany wants clearer EU debt rules to rein in spending (Reuters)

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