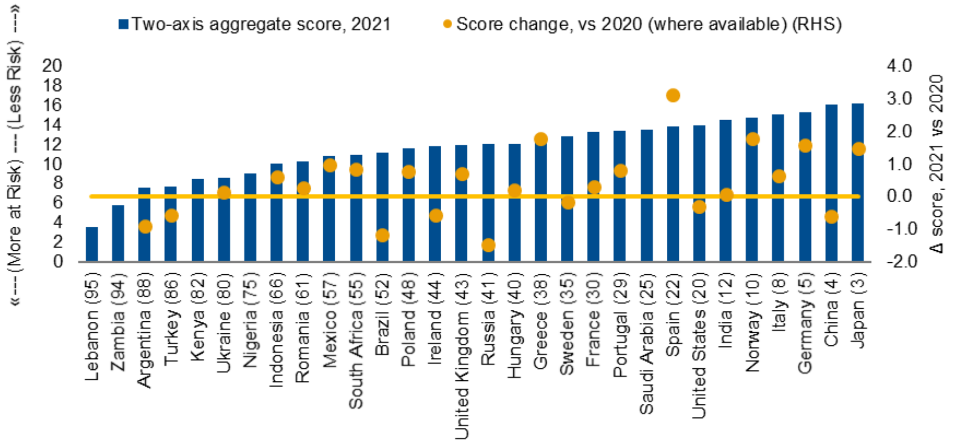
2021 External Vulnerability and Resilience rankings: Risks for emerging economies amid rising inflation, rates

Amid uneven recoveries, rising inflation and the turning interest-rate cycle, an increased threat of risk-reversal in global markets increases likelihood of crystallisation of the external vulnerabilities of global borrowers struggling to exit the Covid crisis. Under an enlarged 95-country format in Scope's 2021 external risk rankings, Lebanon, Zambia and Angola are 2021's "risky-3" of economies *most* exposed under environments of external crisis. Argentina and Turkey also continue to rank among a top-10 most at risk.

Since 2020, the Covid-19 crisis laid bare underlying external weaknesses of developing and advanced economies, associated with *severe* supply and demand shocks, supply chain disruption, as well as broad-based stress in bond, FX and commodities markets, revealing latent financial-system vulnerabilities and varying capacities of national governments and central banks to cope in such external conditions. Sovereign credit defaults reached a record last year: Argentina defaulted twice (as one of Scope's "risky-3" of most at-risk countries under last year's report); Zambia and Lebanon (neither included in last year's 63-country sample but positioned in 2021's risky-3) defaulted in 2020. The risk of further credit events is high as vulnerable countries face repayment difficulties under testy markets.

In this year's report, Scope provides an update of its annual external vulnerability and resilience two-axis grid, introduced originally in 2018, while expanding the set of countries from 63 to 95 to include more emerging economies. As before, the rankings evaluate economies on a) their underlying *vulnerabilities* to occurrence of balance of payment crisis; and b) economies' degree of *resilience* when exposed to an external crisis.

Figure 1: External risk scores, 2021, select countries (2021 ranking in parentheses)



Aggregate 2021 rank among 95 countries in parentheses. Source: Scope Ratings GmbH.

Summary: In identifying a global risky-3 of Lebanon, Zambia and Angola, the report:

- Includes a **centrepiece** on the Central & Eastern Europe, Caucasus, and Central Asia (CEECCA) region, in which Georgia, Belarus, Armenia and Turkey compose a CEECCA "fragile-4".
- Adds **special concentration** on Africa, including discussion of Africa's regional risky-3 countries of Zambia, Angola and Gabon.
- Identifies **Latin America**'s riskiest nations: El Salvador, Argentina and Costa Rica.
- Highlights a **Developing Asia** "resilient-3" of China, India and Thailand.
- Confirms that **advanced economies** are generally the most robust to external-sector risk, with Switzerland, Malta and Japan representing an international "sturdy-3" of most resilient economies to shock.
- Includes full scores and rankings of the 95 countries, including changes of ranks since 2020, all available via **Annex I**, with scoring by component variable displayed in **Annex II** and underlying data organised by region summarised in **Annex III**.

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Scope's external vulnerability and resilience assessment framework

Scope's methodology for assigning sovereign credit ratings is based upon five analytical rating pillars, of which "external economic risk" represents only *one* of these five dimensions, with roughly a 15% weighting in the overall sovereign rating review process[1].

External risk becomes highly significant for assessment of probability of default during global crisis

As reflected in the 15% weighting, external risk is very significant for prediction of sovereign default amid global economic and financial-sector downturns. This was again demonstrated since the Covid-19 crisis as global value chains broke down, transport and tourism services ground to a halt and capital outflows experienced sudden-stop events. Attrition of short-term government revenue flows and need for extension of extraordinary state support weakened general government balance sheets and raised governments' budgetary vulnerabilities. Alongside stress placed upon international-reserve stocks and sources of foreign-exchange receipts, foreign-currency-denominated debt has become harder in frequent cases to repay, especially as regards emerging market borrowers experiencing concurrent devaluations of currencies – curtailing capacity of revenue in domestic currency to meet obligations in foreign currency. Even as this Covid-19 crisis presently *slowly* wanes as global populations obtain vaccination, inflationary global conditions amid early recovery have asserted concurrent risk of "taper tantrum", global risk-off sentiment and rising global bond yields – presenting alternative stress factors as concerns developing-country currencies and debt capital markets – assailing serviceability of public- and private-sector debt. Unlike advanced economies, emerging markets face less-mature *domestic* financial systems and a bottleneck of "original sin" in comparatively more limited capacity to issue in domestic currency to domestic financial actors, with resulting higher structural dependency upon the up-and-down whims of external credit channels, heightening debt repayment risk under downturns when such foreign avenues close and domestic currencies devalue.

Sovereign credit events have accelerated since 2020

Under contemporary conditions, sovereign credit events reached a record in 2020: Argentina (twice), Zambia, Lebanon, Suriname (twice) and Ecuador defaulted last year alone. The risk of further sovereign credit events over 2021-22 is high after two sovereign credit events already in the current year (Suriname and Belize, see **Annex VI** with respect to a summary of sovereign credit events since the Covid-19 crisis) as vulnerable countries see bottlenecks engineering sustainable recovery. Governments of lower-income economies also see credit-rating downgrades to technical default as some sign on to participation under the G20 and Paris Club's Covid-19 debt-relief programme, the Common Framework for Debt Treatments beyond the Debt Service Suspension Initiative (DSSI)[2] – in several cases involving private-sector participation in restructuring of unsustainable debt stocks. Ethiopia is an example potentially seeing restricted default as a creditor committee decides upon what debt treatments to apply after prudently co-signing to the programme. At the same time, robust if uneven economic recoveries in the advanced world, gradual, well-measured withdrawal of accommodative monetary and fiscal policies in G10 economies – seeking to minimise market distress, and sharp gains of commodity prices curtail outstanding liquidity pressure of some developing country borrowers. The IMF's historic USD 650bn allocation of special drawing rights (SDRs) for 190 member states also significantly enhances resilience of vulnerable countries.

Scope's external risk framework: expanded global coverage

In view of the necessity of close monitoring of external-sector risk at this juncture in economic history of uneven recoveries and amid a transition between the vicissitude of the Covid-19 crisis and alternative undulations in global markets as central banks begin "normalisation" policies, this report presents an update of the rating agency's external

[1] The 'External Economic Risk' pillar of the Agency's sovereign rating methodology holds a 10% weight in the overall rating review process via the sovereign quantitative model, the Core Variable Scorecard (CVS), but a 20% weighting in the methodology's qualitative analyst overlay, the Qualitative Scorecard (QS).
[2] See Scope sovereign research on the DSSI and proposal of a DSSI+ framework of more comprehensive debt forgiveness for vulnerable countries.

vulnerability and resilience risk assessment model of economies for such conditions, expanded in 2021 to reflect 95 countries[3] (from an original 63 under 2018 and 2020 reports). The framework is designed upon eight core indicators (**Figure 2**) divided along two axes: i) external vulnerability; and ii) external resilience, capturing a snapshot of *some* crucial elements associated with external-sector risks confronted by varying economies.

Figure 2: External vulnerability and resilience framework (structure)

Axis	Variable	Axis weight
External vulnerability	Current account balance + net foreign direct investment (FDI), % of GDP	25%
	Net portfolio flows and other investment flows, % of GDP	25%
	Three-year standard deviation of monthly changes in the nominal effective exchange rate	25%
	Net international investment position, % of GDP	25%
External resilience	Resilience against currency crises (reserve currency status and reserve coverage of short-term external debt)	25%
	Share of general government debt held by the non-resident sector, %	25%
	Foreign-currency-denominated general government debt, % of general government revenue	25%
	Foreign-currency-denominated loans, % of GDP	25%

Source: Scope Ratings GmbH. Details of the framework (introduced in 2018) and individual component variables summarised under **Annex IV**.

The framework assumes a minimum-maximum algorithm to determine a score under each of the above eight factors, with this variable-level score ranging from 0.1 (lowest) to 10 (highest). Factor scores are then combined equally weighted to reach axes-level scores of each country under separate vulnerability and resilience axes. A country's overall score reflects a simple mathematical summation of the two axes-level scores.

As concerns comparability of this year's framework with those presented within reports of past years, core alterations of the model used in the current year's report: i) revision in the horizon of the standard deviation of monthly changes in the nominal effective exchange rate variable from a five-year backward horizon to a narrower (more-timely) three-year horizon; ii) some updates to the resilience against currency crises risk assessment[4]; and iii) revisions to the scoring system of several variables[5].[6]

While dialogue around external vulnerability assessments and rankings may customarily centre around exposures of emerging markets, Scope hearkens, as we have in previous years, to a comment that external-sector risks are not unique to developing countries, but rather shared across nations, as evidenced over this pandemic crisis. As such, this report is based on an assessment of economies internationally – emerging and advanced.

[3] The 95 countries in the 2021 external-risk framework are selected from 125+ countries adopted under Scope's sovereign rating model (CVS), selected from this CVS sample of 125+ on the basis of data sufficiency for metrics evaluated under this study. The 95 countries evaluated in this report are, by way of summarisation, the EU-27, three European Free Trade Association (EFTA) countries, five additional "western" economies, 14 non-EU central and eastern European countries, four nations in the Middle East, 16 Asian economies, 12 African countries, and 14 Latin American economies.

[4] The resilience against currency crises score as regards euro-area member states was revised under the 2021 framework to a maximum score of 10 from 7.5 in previous years' assumptions, to simplify via removal of an earlier 2.5pp "penalisation" for lack of an independent monetary policy of euro-area member states. Countries participating in the Exchange Rate Mechanism II (Bulgaria, Croatia) absent their own safe-haven domestic currencies (not Denmark in this case due to Denmark already issuing a safe-haven currency in the krone) receive an automatic uplift to a score of 5.05 on the currency status assessment for ERM-II participation (Denmark's krone already receives 10). For non-reserve-currency economies (e.g., reserve-currency status assessment <10), assessment of the reserve coverage of short-term external debt sub-element of the resilience against currency crises variable was re-benchmarked with reserves coverage of ≤0.5 receiving a minimum score of 0.1 and coverage of ≥2 receiving a maximum score of 10. More on the resilience against currency crises variable's composite calculation under **Annex IV**.

[5] To improve comparability of scores between versions of this annual study, the scoring mechanism within the individual variable-level scoring ranges of 0.1 to 10 was adjusted for multiple variables to be assessed with placement within this 0.1-10 range on basis of fixed ranges as concerns performance on the variables, as opposed to, in previous years, being assessed based upon only comparative performance with other economies' performance in the sample in the given year.

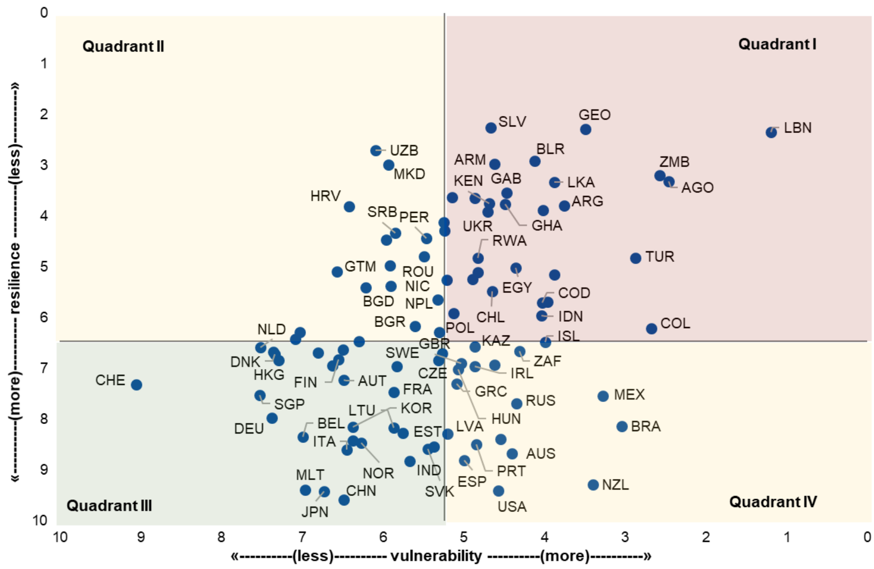
[6] These changes do modestly affect comparability of scoring between last year's and this year's reports.

External vulnerability and resilience indicator: global results

Scope's external vulnerability and resilience assessment divides economies into one of four quadrants

Figure 3 displays the external vulnerability and resilience framework results this year of the 95 evaluated economies[7]. The graphic is divided in four quadrants: *Quadrant I.* countries that are comparatively vulnerable and comparatively less resilient to external shocks – the highest risk group; *II.* countries that are less vulnerable to external shocks but also less resilient to one were one to occur; *III.* those nations that are less vulnerable to crisis *and* also comparatively resilient in advent of any crisis – the lowest risk group; and *IV.* countries that may be vulnerable to crisis but resilient should any crisis occur. The dividing lines between quadrants reflect median country scores on each of the two respective axes (vulnerability and resilience). Individual country rankings and variable-level scores are summarised in **Annexes I** and **II**, underlying data organised by global region are available in **Annex III**, and a summary of the variables involved in composition of the framework is outlined in **Annex IV**. **Annex V** displays *aggregate* country external risk scores of this report presented against Scope's sovereign credit rating levels as well as against 5-year CDS – demonstrating correlation. *Aggregate* country scores based on this two-axis framework are premised on the arithmetic sum of the two axes-level scores.

Figure 3: External vulnerability and resilience two-axis grid: 2021



Source: Scope Ratings GmbH

The high-risk group: Quadrant I and Scope's 2021 risky-3

Scope's external risk framework identifies a 2021 "risky-3" of:

1) Lebanon
2) Zambia
3) Angola

These are three countries the most vulnerable *and* least resilient to external shocks. In addition, additional countries under a top 10 most at risk globally this year include Georgia, El Salvador, Belarus, Sri Lanka, Argentina, Armenia and Turkey – all reflected in **Figure 3** under the highest-risk grouping: **Quadrant I**. These 10 highest-risk economies span varying geographies from the Middle East to sub-Saharan Africa to the Commonwealth of Independent States (CIS) to south Asia but, despite differences locationally, share characteristics such as high foreign-currency exposure, volatility of currencies (except El

[7] Of 95 countries included under this report, Scope issues public sovereign credit ratings for 36 of the countries (and rates 38 nations overall including privately-rated).

Salvador, after adoption of the US dollar as legal tender since 2001), current-account deficits in frequent cases and exposure to severe capital outflow episodes.

Quadrant I economies display underlying vulnerabilities to external crisis and weaknesses in being able to withstand crises

Big picture, Quadrant-I economies demonstrate not only vulnerabilities to experiencing balance of payment crisis but underlying weaknesses in comparative capacity to withstand such crises due to lesser reserve adequacy and/or more significant maturing external debt. At the same time, more substantial outstanding government debt stocks and refinancing requirements, deficits in soundness of institutions and governance, and dependence upon volatile hot-money inflow impact contingent risks of such economies under global or regional crisis scenarios. Lebanon, Argentina and Zambia all defaulted on their foreign debt since 2020. Zambia's missed bond payments have come amid ongoing debt-restructuring negotiations under the G20 and Paris Club's Covid-19 crisis debt relief programme. Georgia and Armenia, ranked fourth and ninth most at risk globally under this year's framework, hold track records, however, of sound access to IMF and other official-sector concessional financing – providing a cushion against otherwise elevated external risk exposure, anchoring confidence of international investors. Turkey reveals substantive institutional weaknesses and risk of more severe balance of payment crisis as lira reaches fresh record lows, but for the present a strong domestic Turkish banking system continues to provide a significant reservoir of foreign-currency liquidity to the sovereign and central bank – easing immediate risk of non-repayment of debt.

The 2021 sturdy-3 and the Quadrant III nations

At the opposite end of the spectrum, Scope's framework reveals a "sturdy-3" of most resilient economies[8] this year to external crises of:

1) Switzerland
2) Malta
3) Japan

Of these three, Malta is an inaugural entrant to the sturdy-3, while China edges out of the top three to fourth, due to some weakening in current account and net portfolio flow dynamics. The sturdy-3 economies are presented under **Quadrant III** of **Figure 3** – this group defined as countries not only less vulnerable to the onset of balance of payment crisis but also best positioned to deal with a crisis were one nevertheless to take place. Germany, Belgium, Singapore, Italy, Slovenia and Norway are economies rounding out a top ten of economies least in danger globally to external risk, each reflected under Quadrant III.

Quadrant II: Less vulnerable economies but also less resilient should a crisis occur

Quadrant II in **Figure 3** displays countries that are less *vulnerable* to external shock but also less resilient in the case of a crisis. This group includes upper-middle-income economies such as Bulgaria, Romania and Peru as well as high-income economies like Croatia. Bulgaria and Croatia hold balanced current accounts and limited historical exchange-rate volatility given fixed or managed floating exchange rate systems against the euro – supporting lesser vulnerability to external shocks under definitions of this report, but also reveal contingent risks were a currency crisis – despite closely-managed exchange rate policies – nonetheless to occur. This contingent risk under any "break" from managed exchange-rate ranges reflects, ultimately, highly-euroised government and banking-system balance sheets, presenting risk in case currency fixes (under an unlikely scenario) be put to the test under Exchange Rate Mechanism II (ERM II) trial years.

Peru (in Quadrant II) similarly holds a balanced current account – reducing external vulnerabilities, but also a vulnerable currency in the sol and high foreign-currency-denomination and foreign-ownership of government debt – curtailing resilience during crisis.

[8] Taiwan drops out from the dataset this year – after being the #1 ranked economy globally in 2021 – due to data inadequacies.

Quadrant IV: Vulnerable to crisis but *resilient* in crisis

Conversely as compared with Quadrant II nations, **Quadrant IV** portrays a set of countries that could be more vulnerable to crisis but comparatively *resilient* in any event of crisis. This category includes under its remit the United States, Australia, and Spain – reserve currency economies, which can bridge global external shocks even in view of their outstanding vulnerabilities such as wide current account deficits and/or large net international investment *liability* positions – with such economies' resilience to currency crisis rooted in FXs' international safe-haven statuses.

As a Quadrant IV country from the space of emerging markets, Russia, despite outstanding external vulnerability to capital flight, recurring risk to an economic growth engine from western economic and financial-system sanctions, and historical volatility of the rouble, reveals nevertheless resilience under crisis scenarios via enhanced official-reserve stocks and limited foreign-currency and foreign-held government debt – via a government policy of de-dollarisation and increasing economic self-sufficiency. Brazil, Mexico, South Africa, Greece and Portugal are additional examples of Quadrant IV nations, with Brazil, Mexico and South Africa being economies that display underlying external risk from capital outflow episodes, volatile exchange rates and/or net external liability positions but resilience in crisis such as asserted via lesser outstanding foreign-currency-denomination in government debt and in domestic bank lending systems.

External vulnerability and resilience rankings: results by region

Results: Central & Eastern Europe, Caucasus, and Central Asia (CEECCA)[9]

In 2021, a CEECCA "fragile-4" of Georgia, Belarus, Armenia and Turkey

Among economies of the region, we identify a 2021 CEECCA "fragile-4" of:

1) Georgia
2) Belarus
3) Armenia
4) Turkey

The above are the four riskiest economies of this enlarged region: Georgia was the overall most risky economy across an original 63-global country sample in 2018 and 2020 publications of this report and came in a smidgeon outside the global risky-3 in 2021 under an expanded 95-country format, supported also by improvements in Georgia's scores. Turkey was, similar to Georgia, a member country of the global risky-3 under previous 2018 and 2020 reports, coming in tenth from the bottom under the expanded 95-country sample this year. Belarus and Armenia round out a 2021 CEECCA fragile-4 in inaugural years of reflection in our annual framework. These fragile-4 economies on aggregate share traits of significant net international investment liability positions and elevated government debt denominated in foreign currency, but also display significant *disparities* in their metrics, which we discuss further under a dedicated **CEECCA fragile-4 in focus** segment.

Ukraine and Azerbaijan are likewise among highly at-risk economies, while Hungary, Russia and Poland display comparatively stronger resilience in face of external crisis

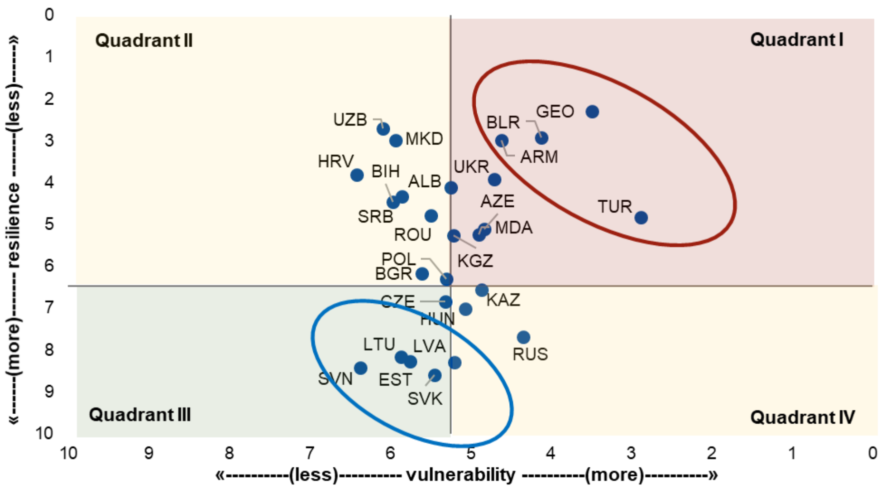
Ukraine and Azerbaijan are likewise Quadrant I countries as highly at-risk economies with below-global median external vulnerability and resilience scores, although Ukraine's performance has continued to notably improve (tiered 80th of 95 countries in 2021, after being on the risky-3 of 63 nations under an original 2018 report). We walk through Ukraine and other non-2021 fragile-4 CEECCA countries in **greater detail** in this report.

High-risk economies of CEECCA categorised under Quadrant II (of **Figure 4**, next page) due to somewhat lesser vulnerabilities to crisis episodes include Croatia, Uzbekistan and Poland. Romania has average marks on vulnerability and resilience axes. Hungary and

[9] CEECCA in this report is composed of: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, North Macedonia, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Turkey, Ukraine, and Uzbekistan.

Russia are depicted in Quadrant IV with external vulnerabilities but also display scoring suggestive of resilience in event of external crises such as meaningfully curtailed foreign-currency risks in domestic economies and/or upgraded reserve stocks. The Czech Republic is the only non-euro economy of CEECCA under the strongest Quadrant III of global economies with its lesser external vulnerabilities and comparatively higher resilience. The five euro-area member states of CEE are each under the strongest Quadrant III of **Figure 4** below. Scores in CEECCA on average declined on the external-vulnerability axis but improved on external resilience since last year's reporting.

Figure 4: External vulnerability and resilience two-axis grid: only CEECCA (CEECCA fragile-4 circled in red; euro-area countries circled in blue)



The dividing lines between quadrants reflect the median country scores on each of the two (vulnerability and resilience) respective axes across the full 95-country sample.

Source: Scope Ratings GmbH

CEECCA's 2021 fragile-4 *in focus*

Georgia is a Quadrant I economy and fourth most at-risk economy globally under an expanded country sample, improving nevertheless from last year when it was ranked the riskiest economy internationally

Georgia (rated by Scope Ratings a sub-investment grade BB/Stable Outlook) is a Quadrant I economy under this framework, displaying elevated external-sector risk (as the 9th most vulnerable and second *least* resilient economy of 95). On aggregate, Georgia ranks as the fourth most at risk country globally in 2021, improving from being the riskiest nation globally under Scope 2018 and 2020 reports (due *significantly* to entrance in 2021 to the global sample of the three nations (Lebanon, Zambia, Angola) that compose the 2021 risky-3 but also owing to underlying improvements in Georgia's performance under this framework). Improvements in Georgia's scoring relate to pick-up in non-FDI capital inflows, some moderation since 2020 crisis peaks in volatility of the lari in addition to build-up of official-sector reserves.

Despite fundamental improvements, Georgia's continued significant external vulnerabilities associate with structural current-account deficits (of 12.4% of GDP in 2020 – albeit *temporarily* higher than normal in 2020 with anticipated improvement to 5.5% by 2026). Georgia's current-account deficits represent the elevated investment needs of a developing economy with low inherent domestic savings alongside a narrow export base, including significant reliance upon tourism-sector receipts. The deficits have in the past, however, been met via reliable net FDI inflow. These FDI flows declined over the crisis to cover only 28% of the current-account deficit in 2020, from 90% pre-crisis over 2015-19 – exposing latent external vulnerabilities and requiring an increase in external debt financing.

Georgia's external government debt amounted to an elevated 82% of aggregate public debt as of September 2021 and is denominated in hard currency (mostly USD and EUR), resulting in balance-sheet vulnerabilities to exchange-rate vicissitude. While the Georgian lari appreciated around 3.5% against USD since the start of this year, downside risk to the FX – similar to that experienced over a spring 2021 political crisis – remains elevated. However, over two-third of external public debt being in form of concessional multilateral loans, reflecting prolonged engagement with the IMF and other donor institutions, creates an important cushion during crisis – representing reliable sources of financing under stressed scenarios. International reserves stood at USD 4.0bn as of October 2021, near records, covering over 100% of short-term external debt. Moreover, constructively, during April 2021, Georgia issued a five-year, USD 500mn Eurobond, representing a successful reintroduction to global capital markets after a 10-year respite. Scope revised the long-term rating Outlook of Georgia to Stable, from Negative, in September.

Belarus debuts on Scope's external risk framework as member of the CEECCA fragile-4

Belarus (unrated) debuts in Scope's external-risk rankings this year on the CEECCA fragile-4, displaying the 18th most significant vulnerabilities to external shocks (of 95 countries) and 5th lowest resilience in event of crisis. Belarus' marks are impaired by capital outflows, a net international investment liability position (of 48.4% of GDP as of Q2 2021), inadequate reserve coverage and significant government debt outstanding in foreign currency (mainly denominated in dollar and euro) and held by the non-resident sector – curtailing resilience under adverse economic scenarios. After escalating violence and political repression subsequent to 2020 presidential elections, spiraling economic and financial-system sanctions against Belarus have increased the nation's seclusion and reduced external-sector resilience.

Armenia likewise debuts in Scope's external-risk framework on 2021's CEECCA fragile-4

Armenia (unrated) likewise debuts in Scope's external-risk framework in 2021 on the CEECCA fragile-4. Armenia displays poor scores especially on external-sector resilience (6th least resilient of 95), although (only) 27th most vulnerable. Resilience is impaired by almost three-quarters of government debt denominated in foreign currency and externally owned, plus half of bank loans denominated in foreign currency, resulting in risk concerning public- and private-sector balance sheets from fluctuation in the dram. The value of the dram has, however, been recovering since Q2 2021. Refinancing risks are curbed by more than half of government debt being owed to multilateral and bilateral creditors under concessional borrowing terms, sturdy reserve adequacy (international reserves of USD 3.2bn as of October 2021, equal to over four times short-term external debt), and uninterrupted access of Armenia to international debt capital markets despite geopolitical events such as the conflict with Azerbaijan in 2020.

Turkey remains one of the ten riskiest countries under this year's global rankings as well as on the CEECCA fragile-4

Turkey (rated B/Negative for foreign-currency long-term debt; B+/Negative for local-currency long-term debt) remains one of the ten riskiest economies globally under the 2021 ranks (on the two axes: #5 *most vulnerable* economy of 95, but 26th least resilient of 95). On aggregate, Turkey's scores observed weakening since 2020 – a function of deterioration of the current-account balance (to -3.1% of GDP in the year to August 2021, an improvement from -5.1% in the year to February 2021 but compared against a 0.7% of GDP surplus achieved pre-crisis in 2019) as well as heightened volatility of lira amid recurrent crises. The Turkish lira is, at time of writing, >28% weaker compared with mid-February 2021 (trading near record lows at 9.7 against the dollar). This represents a problem given significant private-sector net FX *liabilities* and acknowledging 58% of outstanding central government debt being denominated in foreign currency – a share that continues rising as the currency depreciates. Moreover, non-residents holding 38% of Turkey's government debt represents a capital-outflow concern during external crises.

Turkish official reserves, however, did significantly improve to USD 123.8bn as of 31 October, compared against USD 87bn at April 2021 lows, embedding a USD 6.4bn boost from the IMF's historic special drawing rights allocation. This has enhanced reserve coverage of short-term external debt (on an original maturity basis) to around 99%, from lows of 61% late in 2020 – supporting external-sector resilience. However, gross reserves remain off 2013 peaks of USD 135bn, and, netting out dependence on short-term FX borrowing from domestic state-owned banks, international reserves net of short-run bank swaps remain near all-time lows of *negative* USD 44.6bn as of September. Nevertheless, Turkey's moderate government debt stock and support in government debt markets via the bond purchases of local banks buoy resilience in crisis.

Turkey's external sector risk profile is being exacerbated by extensive economic mismanagement, driven by the consolidation of power of President Recep Tayyip Erdoğan. 300bps in rate cuts since September (with more cuts appearing possible on the horizon) have epitomised interventions of the President in central banking – reducing Turkey's real policy rate to -3.3%, among the most negative across emerging markets globally – raising inflation and capital outflow risk. Overly lax monetary policy has given rise to pressure on the FX, feeding into import inflation and external imbalances. Scope downgraded Turkey's foreign-currency ratings to B in November 2020, driven by external-sector concerns.

Results: Rest of CEECCA

Ukraine's marks have improved since 2018, keeping Ukraine off CEECCA's 2021 fragile-4

Ukraine (unrated)'s dependence on international financial institutions in anchoring the financing of large external debt repayments and assuring investor confidence remains a core vulnerability. Nevertheless, Ukraine's marks improved substantively across both assessment pillars since original inclusion in 2018's global risky-3 (of 63 countries), this year transitioning to a comparatively *stronger* 16th most at risk of *95* countries (19th least resilient and 32nd most vulnerable), including sidestepping the CEECCA fragile-4. Current-account dynamics have bettered (although 2020's 3.4% of GDP current-account surplus is anticipated to prove temporary with a return to deficits moving ahead), hryvnia volatility has been momentarily attenuated, the net international investment position has strengthened (to -14% of GDP in Q2 2021) while economy-wide foreign-currency exposures have been reduced, although there was some rollback in curtailment of currency risks on the sovereign balance sheet in 2020. 52% of general government debt remains, however, held by the non-resident sector – as Ukraine pursues gradual enhancement of liquidity of domestic debt capital markets under a financial-system development strategy to 2025 to raise the resident sector's capacity to finance domestic borrowing.

International reserves increased to USD 29.7bn in October 2021, buoyed by an IMF SDR grant of USD 2.7bn, compared against a nadir of USD 5.6bn in February 2015 during the 2014-15 geopolitical and economic crisis. However, still inadequate FX reserves covering around half of external debt maturing within 12 months impair resilience scoring under our framework. Continued progress along anti-corruption and judicial reforms have proven key in reaching staff-level agreement with the IMF over a first review enabling expected disbursement of USD 700mn of an 18-month IMF Stand-By Arrangement – upon which further World Bank and EU funding also stands contingent, plus consideration of an extension of the IMF programme to end-June 2022, which could abet short-run resilience.

Russia displays stronger resilience to crisis but vulnerabilities to experiencing crisis

Russia (BBB+/Stable), as a Quadrant IV economy, displays comparatively stronger resilience in crisis (23rd *most* resilient of 95) but vulnerabilities in experiencing such external crisis (20th most vulnerable), including vis-à-vis commodity-price cycle exposures – resulting in an overall middling rank. Russia's scores have worsened since 2020. The economy's reorientation in direction of autarky of past years – adopted in response to risk sourced in international sanctions – has strengthened its resilience against external crises. This includes reflection via foreign investors' reduced ownership shares of rouble-denominated treasury bonds – to around 21% as of September, from 35% in March 2020 – as financing needs are growingly met vis-à-vis the domestic banks. General government debt is low, of around 20% of GDP, and mostly denominated in rouble. International reserves rose to USD 622bn as of 22 October, equivalent to nearly five times external debt maturing under one year, supported by the rise in Urals crude prices. Economic vulnerabilities associated with oil prices have been trimmed after introduction of the fiscal rule of 2017 saving excess oil and natural gas revenue. However, US and European sanctions remain a constraint as concerns foreign direct investment inflows, damage confidence in rouble and impede an already fragile business and investment climate. The risk of additional external sanctions remains elevated. Nevertheless, Russia's enhanced resilience to external crisis contributed to a credit rating upgrade to BBB+ last month.

Uzbekistan debuts this year as a Quadrant II economy

Uzbekistan (unrated) debuts in 2021 in the framework as a Quadrant II economy with weaknesses on resilience to balance of payment crises. Uzbekistan's overall score (18th weakest of 95 countries globally) is curtailed by high dollarisation of the economy, underdeveloped capital markets (although the government is pursuing an ambitious 2021-25 strategy for developing Uzbek markets) and elevated commodity-export dependence (gold, petroleum), exposing the economy to exchange rate and/or commodity price variations. Nearly all government debt is denominated in foreign currency (mostly in dollar) and externally owned, alongside half of banking system loans being disbursed in foreign currency. However, Uzbekistan's sturdy net international investment position of 29% of GDP as of Q2 2021, adequate government cash cushion (government deposits of 10% of GDP alongside liquid assets of Uzbekistan's Fund for Reconstruction and Development of 15% of GDP) and favourable structure of government debt (mostly comprising official-sector loans) mitigate refinancing risks.

Kazakhstan debuts in this year's rankings around the middle of global tables

Kazakhstan (unrated) displays average marks (displayed in Quadrant IV of **Figure 4**) on this framework (as the 50th strongest economy of 95), supported by ample external and budgetary buffers but restricted by high economic dependence upon commodity exports (mainly oil). The central bank's international reserves plus assets of the national oil fund amounted to USD 90.6bn as of September 2021 (vs USD 90.5bn in January 2020), or a sizeable 51% of rolling one-year GDP. Government debt held externally amounts to 42% of total government debt, with this share declining over 2020 as debt was raised on domestic markets. However, considerable current-account deficits (-3.7% of GDP in 2020) and exposure of the sovereign balance sheet to oil price changes heighten vulnerabilities.

Azerbaijan is a Quadrant I nation

Azerbaijan (unrated) debuts in this report as a Quadrant I nation – signalling high risk (29th most at risk overall of 95 countries). Azerbaijan's scores are restrained by high government debt denominated in foreign currency, an elevated share of public debt held by the non-resident sector and comparative weakness of its net international investment position.

EU CEE countries' scores vary, but economic resilience has generally been strengthened over recent years

Marks concerning the **EU's 11 CEE member states (CEE-11)** diverge. However, over recent years, CEE-11 has *generally* increased economic resilience against external crises.[10] Domestic demand and investment have become more substantive drivers of economic growth, somewhat curtailing dependence on export-sector performance. Recovery of European supply chains and frontloading of Next Generation EU funding for many regional economies support external sectors. Among the CEE-11, **Croatia** (BBB-/Stable) still scores the poorest under Scope's ranking system: 17th least resilient although 21st least vulnerable for a cumulative rank of 34th weakest of 95 international countries. This under-par performance attributes to high euroisation plus dependence on Croatia's tourism sector, although risks to Croatia's external resilience have also *decreased* after entrance to ERM II in July 2020, an achievement that Scope acknowledges under this framework via an automatic uplift in the currency-status sub-score to 5.05 – halfway to revision to 10 upon medium-run euro adoption (see **Annex IV** for more information concerning this). This is likewise true of **Bulgaria** (BBB+/Stable), a Quadrant-II country with comparatively higher scores under this risk framework as the 38th least vulnerable and 53rd

[10] See, per example, Scope's June 2021 Central and Eastern Europe Interim Sovereign Outlook.

most resilient of 95 – Bulgaria's external-resilience scores were, similar to those of Croatia, supported in this year's rankings after entrance in 2020 to the Exchange Rate Mechanism.

Romania (BBB-/Stable), the 35th riskiest of 95 countries, is weakened by significant current-account deficits predominantly met via debt-creating inflow. The Romanian leu, however, is momentarily anchored by an ECB euro liquidity line to the central bank of up to EUR 4.5bn in the period to March 2022. Scope revised the Outlook of Romania's credit ratings to Stable, from Negative, in May. **Poland** (A+/Stable), **Hungary** (BBB+/Stable) and the **Czech Republic** (AA/Stable) display above-average external-risk scores, aligning with current-account surpluses in cases of Poland and the Czech Republic, lowering balance-of-payment risk of the two economies, and acknowledging strong reserves in a case of Hungary. Outstanding government debt in foreign currency restrains resilience marks of Poland and Hungary, while the Czech Republic is the only *non-euro* economy in CEECCA to reside in the strongest Quadrant III of **Figure 4** (page 7). Institutional risk in Poland and Hungary – after a Constitutional Court challenge in Poland to the primacy of European law and resulting further potential European fines as reprisal and, in Hungary, European penalties over a controversial LGBT law threaten further delays of critical EU funding and might increase turmoil in currency markets should disagreements not be addressed.

Euro-area CEE countries are displayed under the safest Quadrant III

The five euro-area member states (**Estonia** (AA-/Stable), **Latvia** (A-/Stable), **Lithuania** (A/Stable), **Slovakia** (A+/Negative), **Slovenia** (A/Stable)) of CEE are displayed under the safest Quadrant III – with comparatively lower external-sector risks anchored by their euro-area memberships (with an automatic score of 10 on the resilience against currency crises variable due to the euro as safe haven), lesser currency volatility of the euro as their domestic currency alongside more restricted foreign-currency denomination of debt and loans of economies. Net capital outflows, net external debtor positions and high foreign ownership of government debt represent challenges to their scores.

Results: Africa

Of 32 nations from the African continent that Scope has adopted under its sovereign quantitative rating model since October 2020, 12 presented requisite data for integration under this year's external risk framework and report. This compares with, prior to expansion of the global country sample in the sovereign rating model, two countries of the continent (South Africa, Egypt) represented under last year's external-risk report.

Africa "risky-3" of Zambia, Angola and Gabon

Of these 12 economies, we identify a 2021 Africa regional "risky-3" of:

1) Zambia
2) Angola
3) Gabon

These are the three riskiest economies of the region with Zambia and Angola being in parallel members of 2021's *global* risky-3. Zambia and Angola are participating nations of the DSSI, with Zambia having furthermore sought more comprehensive debt restructuring under the G20's Common Framework for Debt Treatments beyond the DSSI ("Common Framework") – entering default late in 2020. Gabon, among Africa's risky-3, is another Quadrant-I economy with fragilities across vulnerability and resilience axes. These three economies share traits of volatile exchange rates in the cases of Zambia and Angola, net external debtor positions and significant foreign-currency and foreign-ownership shares of general government debt. We review these countries under a **Africa risky-3 in focus**.

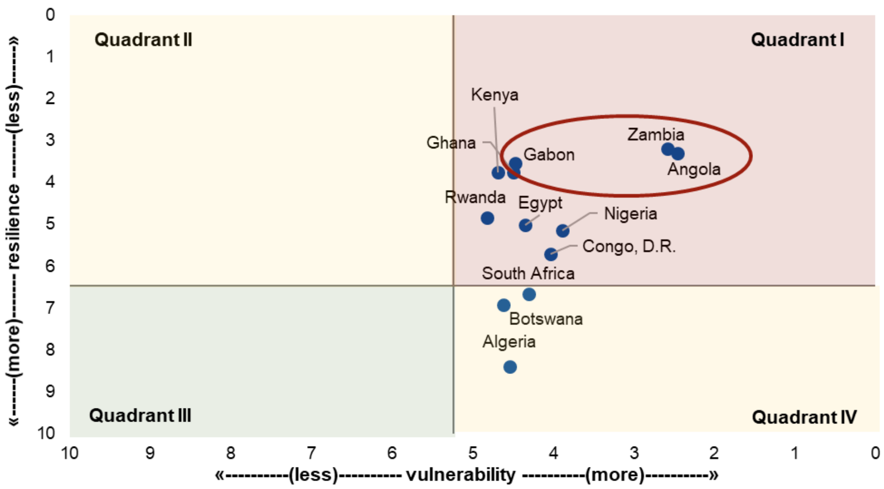
Unlike in CEECCA, where countries are comparatively more spread out across Quadrants I through III in **Figure 4**, most African countries are presented more uniformly in **Figure 5** (next page) in Quadrant I – the highest-risk grouping with, accordingly, higher comparative symmetry across external vulnerabilities and a lack of external resilience. Half of all sub-

Saharan African sovereigns were at high risk of or already under debt distress before the Covid-19 pandemic.[11]

In this report, the two strongest countries of the Africa region are Algeria and Botswana

The strongest two countries of the region are Algeria and Botswana under this year's conclusions – depicted in **Figure 5** in Quadrant IV with external vulnerabilities but comparatively higher resilience in event of international shocks. We review the nine *non*-Africa-risky-3 countries of the continent in this section of the report.

Figure 5: External vulnerability and resilience two-axis grid: only Africa (Africa risky-3 circled in red)



The dividing lines between quadrants reflect the median country scores on each of the two (vulnerability and resilience) respective axes across the full 95-country sample.

Source: Scope Ratings GmbH

Africa's risky-3 *in focus*

Zambia and Angola are members of the 2021 *global* risky-3

Zambia (unrated) debuts on our external risk framework this year with the second weakest score of 95 nations, after only that of Lebanon. **Angola** (unrated) likewise debuts in 2021 after Zambia also on the global risky-3.

Both nations have recently faced imminent risk of or experienced default since 2020 as their economies contracted, commodity-export revenues dropped (copper revenues in case of Zambia; oil revenue in the case of Angola), currencies depreciated making repayment of hard-currency debt service more onerous to meet, and Eurobond markets closed – cutting out of the picture critical sources of foreign currency. Angola reprofiled bilateral debt with Chinese creditors, and participates in the DSSI, allowing the government to postpone external debt servicing payments of USD 8.6bn over 2021 and 2022 (7.3% of GDP in 2021, 4.6% in 2022). The latest and expected final extension of the DSSI[12], until the end of 2021, aids Angola and other African governments with liquidity shortages over the remainder of the year but will also result in more significant debt servicing requirements medium term as debt service is transferred to 2022-27 on net-present-value neutral bases.

The Ministry of Finance of Angola has stated it does not foresee, at the present time, any need to engage in further debt restructuring, beyond DSSI terms. By contrast, in November 2020, Zambia *defaulted* on a USD 42.5mn Eurobond payment – becoming the first African nation to default on debt since the crisis. Zambia has not serviced the Eurobonds pending

[11] Griffiths, J. (2019), "Low-income country debt: three key trends", Overseas Development Institute.
[12] See Shen, D. and T. Vasse. (2021), "Africa's solvency crisis: coordinated debt restructuring needed despite relief from DSSI extension", Scope Ratings GmbH.

formalisation of a more comprehensive debt restructuring and requested in February debt treatment under the G20's Common Framework – with negotiations ongoing.

Angola's kwanza and Zambian kwacha are trading around 20% weaker against the dollar compared with start-2020. Over this period, gross international reserves of Angola declined around 8.5%, while Zambia's remain modest around USD 3.0bn, even after an allocation of IMF SDRs of USD 1.3bn. Inadequate reserves impair capacity to repay public debt in foreign currency, which amounts to around two-third of aggregate public debt of the two nations. An approval of an IMF programme is one key as regards Zambia to meeting future external debt payment requirements. The government's default has elevated concerns surrounding repayment risk associated with other highly indebted countries with borrowing from China, such as Angola. An estimated 75% of Angola's debt to China is secured via oil export revenue – raising external vulnerabilities under scenarios when oil prices drop. Multilateral support for Angola and disbursement of USD 772mn under an IMF Extended Fund Facility in June curtail immediate debt sustainability risk, however.

Under this external-risk framework, Angola and Zambia's scores are dragged especially by net capital outflows, volatile, less-globally traded domestic currencies, large net international liability positions, inadequate reserves and high foreign ownership and foreign-currency-denomination of their government debt.

Gabon rounds out an Africa regional risky-3

Gabon (unrated), entering Africa's risky-3 as debutante under this framework, demonstrates especially risk on the external resilience axis with average scores on vulnerability (for an overall 12th most at risk positioning of 95). High public gross financing requirements of around 8% of GDP over 2021 and 2022, and high dependence on oil revenue, increase risks such as were the current steep rally of oil prices to reverse. The Bank of Central African States' liquidity support for Gabon mitigates short-term refinancing risks; however, a prudent medium-run debt strategy and more stable access to external financing sources are needed to address elevated debt-servicing obligations.

Results: Rest of Africa

South Africa is not on Africa's risky-3, holding weak scoring on external vulnerability although average scores on resilience

South Africa (unrated) is not on the Africa risky-3, displaying weak scoring on the external vulnerability axis (19th most vulnerable of 95) but stronger marks on external resilience (43rd best). South Africa's vulnerability scores are undermined by sizeable capital outflows over 2020 and elevated currency volatility with the rand losing over a quarter of its value against the dollar at onset of the crisis before rallying since April 2020 to trade moderately off levels pre-crisis. The share of non-resident holdings of domestic government bonds declined to 29% in September 2021, from over 37% in January 2020. This share, however, remains high. However, a very long average term to maturity of government debt securities (circa 13 years), low share of foreign-currency-denominated government debt (10%) and flexible exchange rate are shock absorbers – supporting external-sector resilience. South Africa's *vulnerability* scores are aided, moreover, by the (temporary) current-account surplus of 2020 – due last year to favourable terms of trade as regards export prices (gold, platinum) against prices of imports (oil) – and a net international investment *asset* position. While reserves increased to USD 57.1bn in September, buoyed by a USD 4.2bn allocation under the IMF SDR programme, reserves coverage of short-term external debt remains inadequate.

Nigeria and Ghana are categorised under Quadrant I in Figure 5

Nigeria (unrated) exhibits external risks as a Quadrant I economy (and 21st most at risk of 95 internationally). Nigeria's comparatively lesser dependence upon financing in foreign currency (with external debt accounting for 38.7% of total public debt) plus liquid domestic debt markets support resilience marks. However, persistent high inflation (16.6% YoY in September, against a target range of 6-9%) has resulted in overvaluation of the naira – even after May's significant devaluation and transition in direction of a single exchange rate. This sustained overvaluation represents a risk for foreign-currency reserves ahead of further convergence between the Nafex rate and the official rate. **Ghana** (unrated) is, meanwhile, 13th riskiest of 95 global nations. Nonetheless, Ghana's external risk profile benefits from the Ghanaian cedi having depreciated only around 3.6% in 2021 against the USD. While foreign-currency public debt is very elevated of around 223% of government revenue as of 2021, reflecting Ghana's modern-history dependence upon Eurobond issuance, the share of external debt in aggregate public debt declined to 48.6% in 2020, from 51.7% in 2019, due to increased budgetary financing on the domestic market.

Kenya and Rwanda are comparatively higher risk

Kenya and **Rwanda** (both unrated) are higher risk (14th and 25th most at risk overall). Kenya displays poor scores on resilience and closer to average marks on the vulnerability axis. The former representing a track record of significant current-account deficits, averaging 5.1% of GDP over 2018-20, which have mostly been met via debt-creating capital inflow. Inadequate reserves coverage (0.6x short-term external debt) and high foreign ownership and foreign-currency-denomination of government debt represent problems on the resilience axis. Outstanding external risks, however, are mitigated by IMF extended arrangements as well as relief provided via the DSSI, which Kenya made a U-turn concerning and participates under this year. Nevertheless, Kenya did not make a first instalment payment (on a dams' loan) to Italian Bank Intesa San Paolo[13], amid an ongoing probe over suspected irregular transfer of funds regarding two dams.

Meanwhile, Rwanda has below-average marks on the two axes (33rd most vulnerable; 27th least resilient). This considers significant current-account deficits, averaging around 11.5% of GDP over 2018-20, buoying external indebtedness. External deficits, however, are mostly being financed via IMF and other concessional donor financing, reducing risk associated with the refinance-ability and cost of debt incurred. A net external debtor position and high foreign ownership and foreign-currency-denomination of government debt are constraints regarding Rwanda's scoring. Against this, adequate reserve coverage and lesser volatility of the Rwandan franc support scores.

DRC displays weak scores on vulnerability and below-average marks on resilience

Democratic Republic of the Congo (DRC) (unrated) displays weak marks on vulnerability (16th most vulnerable), and below average scores on external resilience (40th least resilient), the latter boosted by moderate public debt of around 12% of GDP as of end-2021, with DRC's capacity to issue on international capital markets constrained by a fragile political situation and weak track record of public debt management. Debt repayment risk is mitigated by available lines of concessional external financing. However, external buffers remain inadequate due to modest reserves and insufficient capital inflow.

Botswana is among strongest economies of the continent

Botswana (unrated) is among the strongest economies of Africa, with robust scoring on external resilience (34th most resilient) but is vulnerable to external shocks (28th most vulnerable) due to dependence on the diamond sector, which produces around a quarter of output. As a result, the current account recorded a deficit of 10.3% of GDP in 2020 but is projected to moderate to a 3% of GDP deficit over 2021-22. Botswana's vulnerability-axis scores are supported by a net external creditor position of 33% of GDP and underpinned by a predictable institutional framework and conservative resource management. A crawling peg exchange rate system (pula is pegged to a basket of currencies comprising the South African rand and the IMF SDR) anchors inflation management but trims monetary flexibility. Very strong reserves coverage (of 5x short-term external debt) and low public- and private-sector debt outstanding in foreign currency abet external resilience.

Egypt displays weak scores, while Algeria is a Quadrant IV economy with strong resilience

In North Africa, **Egypt** (unrated) displays weak scores on vulnerability and resilience (as the 23rd riskiest on aggregate of 95). Current-account deficits, a net external debtor position

[13] See Kenya defaults on Sh19.6bn Arror, Kimwarer dams loan (Business Daily).

and significant debt denominated in foreign currency represent challenges. **Algeria** (unrated) is a Quadrant IV country with strong resilience scores owing to adequate reserves and limited debt outstanding in foreign currency or that is foreign held, results of long-standing preference of the government against borrowing internationally. But significant current-account deficits weigh on vulnerability-axis performance.

Results: Middle East

Lebanon is the #1 riskiest nation under 2021's international rankings

Lebanon (unrated) debuts in Scope's framework as the riskiest country internationally under expanded 2021 country rankings – as the single most vulnerable and third least resilient of 95 nations on the framework axes. Lebanon has been in default since March 2020 – with the financial and economic crisis *possibly* one of the three worst financial crises since the mid-nineteenth century according to the World Bank – with three quarters of the population at this stage in poverty[14]. Lebanon's crisis arose after public debt had reached above USD 90bn (amounting to a very elevated 170% of GDP), with around 37% of this being denominated in foreign currency. The government stopped servicing outstanding Eurobond debt pending restructuring, while continuing to service local-currency government debt to private creditors as it decides upon an approach for domestic-debt restructuring. After formation of a new government in September, important will be reaching agreement on domestic debt restructuring and a financial and economic reform package, in order to unlock an IMF programme as well as other multilateral and international donor support, plus unlock negotiations with holders of defaulted Eurobond debt.

The Lebanese pound lost over 90% of its nominal value on the informal market over the past two years and food prices rose 281% YoY in September (headline inflation rate of 144% YoY). Lebanon's vulnerability scores are weighed down by large-scale net capital outflows (of an estimated 33.3% of GDP in 2020 (reflecting net portfolio and other investment outflows)) plus a large net external liability position (of an estimated 167.7% of GDP in 2019). Resilience is dragged by inadequate reserve levels (declining to USD 38.1bn in August, covering around 0.6x short-term external debt) and very significant government and banking-system loans denominated in dollar.

Saudi Arabia displays below-average external vulnerability

In the rest of the region, **Saudi Arabia** (unrated) displays strong marks on vulnerability though average scores on resilience. The former is supported by a significant net external creditor position of around 78% of GDP as of Q2 2021 and lesser volatility of the Saudi riyal. Reliance upon petroleum revenue and drawdown of international reserves since 2014 represent concerns, but the reserve coverage ratio remains very high.

Results: Latin America

Of 17 countries of the Latin America region included by Scope under the sovereign quantitative rating model (see: methodology), 14 presented requisite data for integration under this year's external risk report – an increase from the six (Argentina, Brazil, Chile, Colombia, Peru, Venezuela) embedded under last year's reporting.

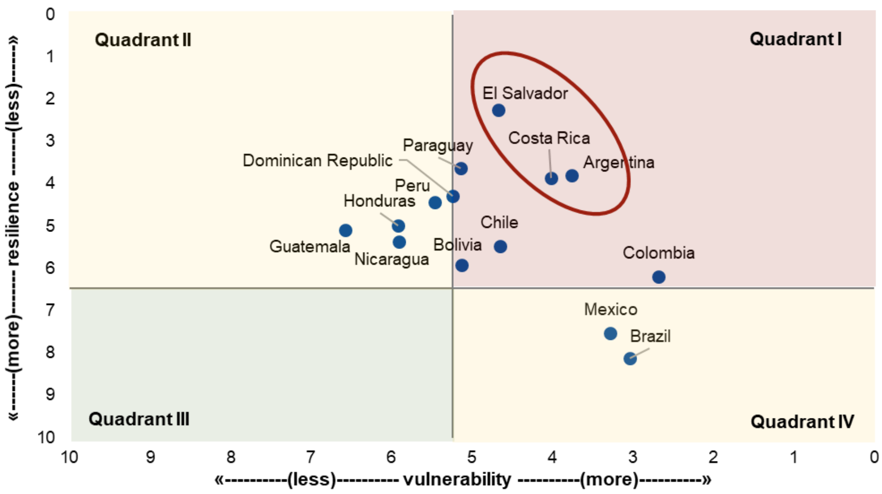
Latin America's "risky-3" composed of El Salvador, Argentina and Costa Rica

Of the 14 economies, we identify a 2021 Latin America "risky-3"[15] of:

1) El Salvador
2) Argentina
3) Costa Rica

[14] World Bank. (2021), "Lebanon Sinking into One of the Most Severe Global Crises Episodes, amidst Deliberate Inaction".
[15] Venezuela drops out from the dataset this year – after being among the riskiest of the Latin America region in 2020's framework – due to data inadequacies. Venezuela and Taiwan are the two economies that were reflected under last year's report but excluded this year due to data limitations.

Figure 6: External vulnerability and resilience two-axis grid: only Latin America (Latin America risky-3 circled in red)



The dividing lines between quadrants reflect the median country scores on each of the two (vulnerability and resilience) respective axes across the full 95-country sample.

Source: Scope Ratings GmbH

On aggregate, nations of Latin America exhibit below-average marks under our two-axis framework, with countries of the region concentrated in Quadrants I and II in **Figure 6**. Performance of major economies such as Brazil and Argentina have weakened since 2020.

High risk of another external default as concerns Argentina

Argentina (unrated) is among the weakest economies of the Latin America region (and 8th weakest of 95 countries globally – after being a member of the global risky-3 in 2020's rankings), reflecting continued poor capacity to repay foreign-currency debt amid curtailed market access. After credit events in 2019 and 2020, risk of another default remains elevated in lieu of a new funding agreement with the IMF, even despite short-run reserves relief after an IMF SDR allocation of around USD 4.4bn (used to make loan payments to the IMF) and after recent agreement with the Paris Club for settlement of USD 2.4bn owed to the group enabling Argentina to sidestep immediate non-payment. Economic policy uncertainty is significant as a new deal with the IMF is negotiated – sought for agreement no later than March 2022. The high share of government debt denominated in foreign currency (of circa 75%) makes the public balance sheet vulnerable to exchange-rate depreciation. International reserves stood at USD 42.7bn as of early November, compared with USD 39.4bn at end-2020 – but still covering well under 1x short-term external debt. Capital outflow and the peso's extreme instability remain outstanding vulnerabilities.

Many nations of Latin America display external-sector vulnerability

Brazil and **Mexico** (unrated) (52nd and 57th strongest of 95) are Quadrant IV countries displaying vulnerabilities with net external debtor positions, capital outflow sensitivities and volatile FXs in the real and peso. However, they also display more robust resilience in event of crisis acknowledging adequate reserve coverage ratios, lesser system-wide debt and loans in foreign currency and more moderate foreign ownership of public debt in the case of Brazil. **Chile**, **Peru** and **Colombia** (ranked 65th, 68th and 77th of 95) display external risks in currencies prone to sell-off, net external debtor positions and significant foreign ownership of their government debt. Meanwhile, **El Salvador** and **Costa Rica** (unrated) are economies, alongside Argentina, on the Latin America risky-3 with net external debtor positions and significant economy-wide debt denominated in foreign currency[16]. El

[16] Debt in dollar included as "foreign-currency debt" in case of El Salvador even recognising the nation's adoption of the US dollar as legal tender since 2001 due to incapacity of the Central Reserve Bank of El Salvador to issue dollars due to lacking an independent monetary policy.

Salvador became the first nation internationally to adopt bitcoin as a form of legal tender – a decision that likely heightens financial-stability risks.

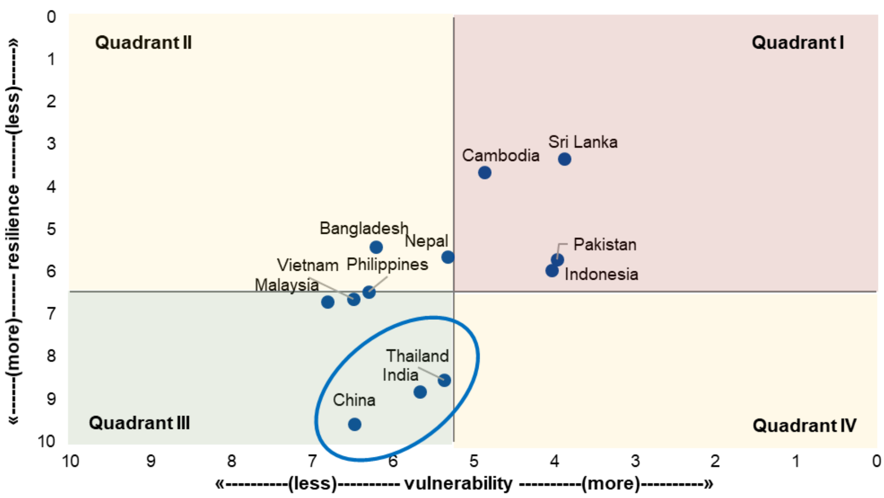
Results: Developing Asia

Asia "resilient-3" of China, India and Thailand – including a nation in China that had, in the past, been a perennial member of the global "sturdy-3"

In the Developing Asia region, we identify a 2021 Asia "resilient-3" of:

1) China
2) India
3) Thailand

Figure 7: External vulnerability and resilience two-axis grid: only Developing Asia (Developing Asia resilient-3 circled in blue)



The dividing lines between quadrants reflect the median country scores on each of the two (vulnerability and resilience) respective axes across the full 95-country sample.
Source: Scope Ratings GmbH

The Asia resilient-3 for 2021 includes China – which was a two-time member of Scope's global sturdy-3 of the three strongest nations internationally to external risk under 2018 and 2020 reporting – as the *only developing country* included in those years in the international sturdy-3. Compared with other developing-economy regions, Asia displays, on aggregate, stronger scores under our external-risk framework, with many countries falling under quadrants II and III of **Figure 7**.

China remains among strongest economies against external-sector risk

China (A+/Stable) dropped off the top three ranks globally in 2021 that China was previously under due to slightly weaker vulnerability scores in this year – attributing to slight weakening of the current account surplus and capital flow dynamics as well as in China's net international investment asset position. Nevertheless, the economy remains among the strongest economies globally with the fourth highest overall score under this year's reporting. This includes status as the single most resilient economy within a 95-country sample to external stress – repeating a #1 rank on the resilience axis from 2020. China's foreign currency reserve stock of USD 3.2trn as of October 2021 presents the People's Bank of China an abundant recourse to preserving renminbi and macro-economic stability, especially as active state objectives to address underlying financial-sector and leverage-related risk result in testing of financial and economic stability short run, exemplified in the Evergrande crisis and defaults of some smaller property sector developers. Increased use of renminbi in the global economy enhances China's significant external-sector strengths. 2.6% of global allocated reserves were denominated in renminbi as of Q2 2021, versus 2.1% a year before. Long-run gains in renminbi as reserve currency and China's external-sector strengths contributed to Scope's decision to revise China's credit rating Outlook to Stable, from Negative, in July 2021.

Thailand and India are members of Asia's resilient-3 with strong marks on the resilience axis

Thailand and **India** (both unrated), as countries on the Asia resilient-3 of 2021, have robust scores on the resilience axis (11th and 6th most resilient of 95) due to adequate reserve coverage, low shares of non-resident holdings of government debt (12.7% and 4.5%), and low economy-wide exposure to debt in foreign currency, but display more average scoring on the vulnerability axis (42nd and 37th least vulnerable, respectively).

The rest of Asia presents stronger Quadrant III and Quadrant II countries as well as weaker Quadrant I countries

Sri Lanka, **Cambodia** and **Pakistan** (unrated) display the poorest scores of the Asia region (7th, 15th and 26th most at risk of 95). **Indonesia** (unrated) is similarly in Quadrant I as a higher-risk country, with especially weak vulnerability scores (17th most vulnerable), reflecting elevated variation in the value of the Indonesian rupiah during spring 2020 heights of the pandemic crisis and dependence upon external financing. However, Indonesia does observe better although still middle-of-the-road scoring on resilience (54th best of 95). **Malaysia**, **Vietnam** and **Philippines** (unrated) hold stronger marks (26th, 32nd and 36th strongest of 95 overall) in Quadrant III, supported by current account surpluses in 2020, lesser currency volatility, moderate foreign ownership of their government debt and comparatively lesser shares of foreign currency in public debt and banking systems.

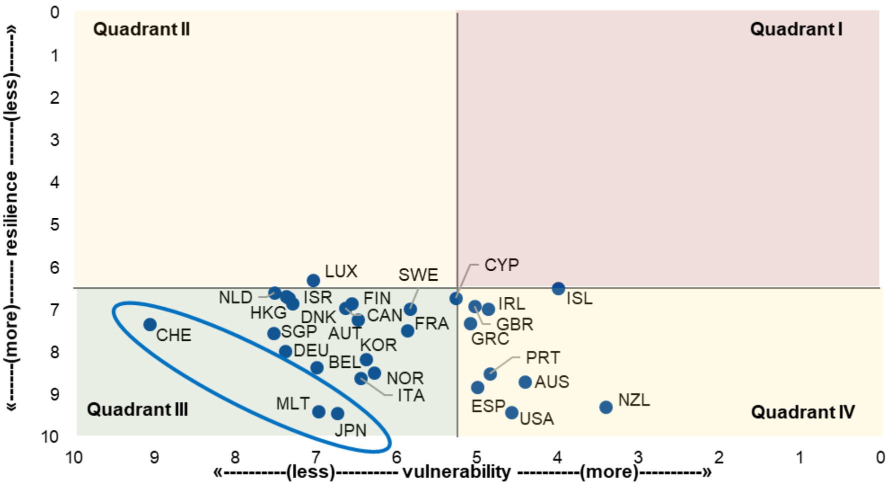
Results: Advanced Economies[17]

Advanced economies generally rank in the strongest Quadrant III, including 2021's global sturdy-3 of Switzerland, Malta and Japan

Advanced economies generally receive strong scores under this annual external risk evaluation framework – especially under the external resilience axis as reserve currencies and status as issuers of global benchmark safe-haven treasuries buoy resilience during global risk-off periods, such as during heights of the Covid-19 crisis – as safe-haven currencies hold proclivity to *appreciate* rather than depreciate under such conditions and, given much more developed domestic banking systems, advanced economies demonstrate significantly reduced if not outright eliminated foreign-currency exposure in economic structures. The global sturdy-3 of 2021: Switzerland, Malta and Japan all fall under this grouping[18] (over past years, among developing countries, only China was represented in the past in the global sturdy-3 due to its exceptional current-account surpluses, a closed capital account and ownership of the globe's largest reserves stockpile (still accounting for 25% of *all* global foreign-exchange reserves) making up for comparative weaknesses associated with volatility of the renminbi alongside outstanding capital-outflow vulnerabilities). **Figure 8** (next page) displays, nevertheless, that there are, likewise, advanced economies with external vulnerabilities such as via current-account deficits and a net external debtor position of the United States – placing certain advanced economies under the slightly weaker Quadrant IV (or Quadrant II in case of Luxembourg). Importantly, in the past, external vulnerabilities via current-account deficits and/or capital outflows *have* triggered crises even in advanced economies – such as in cases of Quadrant IV nations such as Ireland, Greece, Portugal and Spain when the European Central Bank did not step in to stop market failure at the start of the euro-area sovereign crisis of the early 2010s with the reserve currency status of the euro as an assurer of external resilience "compromised" in monetary union absent a central bank acting as lender of last resort.

[17] We acknowledge that several countries included in the CEECCA region of this report (Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia) are high-income economies under latest World Bank definitions.
[18] Taiwan drops out from the global sample this year – after being the #1 ranked economy globally within 2021's reporting – due to data inadequacies.

Figure 8: External vulnerability and resilience two-axis grid: only Advanced Economies (global sturdy-3 circled in blue)



The dividing lines between quadrants reflect the median country scores on each of the two (vulnerability and resilience) respective axes across the full 95-country sample.

Source: Scope Ratings GmbH

Euro-area economies are anchored by the euro's reserve-currency status

Euro area economies are anchored by the euro's global safe haven status (20.5% of global allocated reserves being held in euro as of Q2 2021) and comparatively modest volatility of the euro against that of most currencies – supporting reduced external vulnerability. **Germany** (AAA/Stable) ranks well overall as the #4 *least* vulnerable global economy (up from 7th in 2020) – anchored by a current account surplus of 7.5% of GDP in the year to Q2 2021 although above-average marks on the resilience axis are dragged in part due to elevated non-resident holdings of German government bonds (of over 40%). **France** (AA/Stable) ranks as the 33rd least vulnerable and 26th most resilient economy of 95 countries, with current-account deficits and a net international investment liability position trimming its vulnerability-axis score. **Italy** (BBB+/Stable) continues strong performance on this report this year, ranking as the eighth strongest of 2021 of 95 countries on aggregate (20th least vulnerable while 9th most resilient) – after ranking thirteenth of 63 countries in 2020. Italy's current-account surpluses (4.3% of GDP in the year to Q2 2021) ease external-sector vulnerability, while a high share of Italy's government debt held domestically (70%) vis-à-vis the domestic banking system anchors resilience during global crises – offering a stable source of demand for the government's securities. Achievement of a modest net international investment asset position marks a provenance of improvement in Italy's ranking from that last year. Meanwhile, **Spain** (A-/Stable) is a Quadrant IV economy and receives a weaker mark under the vulnerability axis (40th most vulnerable), enervated by a large negative net external liability position (-78.4% of GDP as of Q2 2021), but receiving a strong score on resilience (7th globally, ranking ahead of Italy).

The majority of the euro-area periphery are Quadrant IV nations

Ireland (AA-/Stable), **Greece** (BB+/Stable) and **Portugal** (BBB+/Stable) are, like Spain, under Quadrant IV – displaying somewhat weaker scores on the vulnerability axis, lowered by net portfolio and other investment outflows in cases of Ireland and Portugal as well as in view of still-very significant net external debtor positions (of over 100% of GDP). High foreign ownership of government bonds in cases of Greece and Ireland acts as a drag on otherwise steely resilience-axis performance. Reductions of economic risks relevant to Ireland's very open, interconnected economy nevertheless supported a credit rating upgrade in May to AA-. Meanwhile, **Cyprus** (BBB-/Stable) is a borderline Quadrant III economy with comparatively average marks on vulnerability (46th least vulnerable) and resilience (40th best) axes.

Malta enters 2021's global sturdy-3 of the three strongest economies internationally

Malta (A+/Stable) enters 2021's global sturdy-3 as the fourth most resilient economy internationally and 11th least vulnerable (for an overall second-ranked placement). This score recognises large-scale net FDI inflow, a net external creditor position (of 61.1% of GDP) and moderate levels of government debt. Among other euro area economies, **Belgium** (AA-/Stable) stands out as – similar to Italy – a highly-indebted euro-area country but with a comparatively strong external sector (10th least vulnerable, 16th most resilient for sixth globally on aggregate, including placed third on aggregate within the euro area after Malta and Germany), anchored by a net external creditor position (of 52.1% of GDP as of Q2 2021).

The UK is a weaker economy on external-sector risk

The **UK** (AA/Stable) is a Quadrant IV economy with outstanding external vulnerabilities (current account deficits, a net international debtor position, significant external financing requirements compared with current-account receipts), ranked as the 41st most vulnerable economy this year. Exceptional volatility in pound sterling, driven by Brexit uncertainty, of recent years, is also considered within this below-average vulnerability-axis performance. Furthermore, the UK's resilience scores are middle of the range (35th best globally), with sterling's reserve currency status providing an anchor against an economy's substantive external vulnerabilities but also reflecting resilience risks from significant lending in the UK banking system in foreign currency. The UK's external risks represent a continued credit rating constraint despite stabilisation in June of the issuer's sovereign rating Outlook.

Switzerland is this year's #1 strongest nation to external-sector risk. Strong scores in Nordics except Iceland.

Switzerland (AAA/Stable) is 2021's #1 ranked country globally under our framework (as the least vulnerable country globally as well as 27th most resilient) – returning to its #1 positioning from an original 2018 report, after finishing third in last year's rankings. Switzerland's current-account surpluses (3% of GDP in the year to Q2 2021), capital inflows, safe-haven status of the franc and net external creditor position (98.4% of GDP as of Q2 2021) support scoring; significant domestic bank lending in foreign currency is a prime constraint as regards external resilience. In the Nordic region, **Norway**, **Denmark** and **Sweden** (all rated AAA/Stable) are under the safest Quadrant III of **Figure 8** with especially strong scores with respect to Norway and Denmark. Denmark has the sixth strongest score on the vulnerability axis globally, although (only) 39th on resilience. Strong scores of these three Nordic nations are buoyed by persistent significant current account surpluses as well as large net external asset positions (especially for Norway of over 300% of GDP, anchored by sovereign wealth fund savings). **Finland** (AA+/Stable) also demonstrates strong external-risk scores under an international comparison, although only average scores under this framework compared with other advanced economies, while **Iceland** (unrated), in Quadrant IV, has the weakest scores of advanced economies (58th best internationally on aggregate, including 14th most vulnerable).

The US is a Quadrant IV economy with external vulnerabilities but stronger resilience

The **United States** (AA/Stable) is depicted under Quadrant IV of **Figure 8** (previous page) as the 26th most vulnerable (of 95 nations) to external crisis – in view of persistent current account deficits (3.3% of GDP in the year to Q2 2021) and a negative net international investment position of -68% of GDP as of Q2 2021. Nevertheless, latent risks derived from external imbalances are mitigated by the US' third highest rank globally on the resilience axis, due to dollar hegemony (*59.2%* of all global allocated reserves were held in dollar as of Q2 2021, albeit this share having reached post mid-1990s lows, after peaks of over 70% as of the early 2000s) – and lack of exposure of the US economy to business done in foreign currency. **Canada** (unrated) is in the middle of the pack as far as advanced economies on external risk, ranked 24th best globally.

Japan returns to the global sturdy-3 of the three strongest economies globally in 2021

In Asia-Pacific, **Japan** (A/Stable) is positioned in 2021's sturdy-3 of the world's three strongest countries to external-sector risk (anchored by the second-best resilience score of 95 plus 13th strongest score under the vulnerability axis) – as such, Japan returns to the sturdy-3 that it was originally a founding member of in 2018, after dropping off this list in

2020. Yen's status as a stable global reserve currency, significant home bias via large-scale purchase and holdings of Japanese government debt by domestic banks and the Bank of Japan, and limited borrowing in foreign currency support the economy's strong resilience to external crisis. Robust vulnerability-axis marks reflect current-account surpluses and a strong net external creditor position of Japan (of 69.3% of GDP in Q2 2021). While Scope downgraded Japan's sovereign credit ratings one notch in June to A, it referenced Japan's sound external sector as a continued credit strength.

Singapore, South Korea, Hong Kong among 15 strongest countries globally; Australia and New Zealand exhibit external vulnerabilities

Singapore, **South Korea** and **Hong Kong** (all unrated) are all among the 15 strongest economies globally this year – performing especially robustly on the vulnerability axis, supported by current account surpluses, comparatively stable exchange rates, significant net external creditor positions and modest levels of government debt denominated in foreign currency or held abroad. **Australia** and **New Zealand** (both unrated) are Quadrant IV nations with outstanding external-sector vulnerabilities – tying to capital outflows, volatility of the Aussie and Kiwi dollars and net external debtor positions – but made up for by strong resilience scoring given limited economy-wide debt denominated in foreign currency.

Annex I: 2021 external risk framework country scores and ranks, by axis and overall

Rank (2021)	Rank change vis-à-vis 2020[1]	Country	Vulnerability Score	Vulnerability Rank	Resilience Score	Resilience Rank	Total Score
1	1	Switzerland	9.1	1	7.3	27	16.4
2	2	Malta	7.0	11	9.4	4	16.4
3	5	Japan	6.7	13	9.4	2	16.2
4	-3	China	6.5	18	9.6	1	16.1
5	11	Germany	7.4	4	8.0	22	15.3
6	9	Belgium	7.0	10	8.3	16	15.3
7	-2	Singapore	7.5	2	7.5	25	15.1
8	4	Italy	6.4	20	8.6	9	15.0
9	8	Slovenia	6.4	22	8.4	14	14.8
10	14	Norway	6.3	25	8.5	13	14.7
11	-1	South Korea	6.4	23	8.1	20	14.5
12	-1	India	5.7	37	8.8	6	14.5
13	6	Hong Kong	7.3	7	6.8	36	14.1
14	12	Netherlands	7.5	3	6.6	45	14.1
15	-6	Denmark	7.3	6	6.7	39	14.0
16	-10	Israel	7.4	5	6.7	42	14.0
17	13	Lithuania	5.9	32	8.2	19	14.0
18	10	Slovakia	5.4	41	8.6	10	14.0
19	-5	Estonia	5.8	36	8.3	18	14.0
20	-7	United States	4.6	70	9.4	3	14.0
21	-18	Thailand	5.4	42	8.5	11	13.9
22	21	Spain	5.0	56	8.8	7	13.8
23	8	Austria	6.5	19	7.2	29	13.7
24	10	Canada	6.6	14	6.9	33	13.6
25	N	Saudi Arabia	7.1	8	6.4	49	13.5
26	0	Malaysia	6.8	12	6.7	41	13.5
27	9	Latvia	5.2	50	8.3	17	13.5
28	9	Finland	6.6	16	6.8	38	13.4
29	-1	Portugal	4.8	61	8.5	12	13.3
30	-7	France	5.9	33	7.5	26	13.3
31	-23	Luxembourg	7.0	9	6.3	51	13.3
32	-11	Vietnam	6.5	17	6.6	44	13.1
33	6	Australia	4.4	74	8.7	8	13.1
34	N	Algeria	4.5	71	8.4	15	12.9
35	-10	Sweden	5.8	35	7.0	32	12.8
36	-1	Philippines	6.3	24	6.5	48	12.8
37	2	New Zealand	3.4	88	9.3	5	12.7
38	8	Greece	5.1	53	7.3	28	12.4
39	-16	Czech Republic	5.3	44	6.8	37	12.1
40	1	Hungary	5.1	54	7.0	30	12.1
41	-21	Russia	4.3	76	7.7	23	12.0
42	13	Cyprus	5.3	46	6.7	40	12.0
43	0	United Kingdom	5.0	55	6.9	35	11.9
44	-13	Ireland	4.9	60	7.0	31	11.8
45	-3	Bulgaria	5.6	38	6.2	53	11.8
46	N	Guatemala	6.6	15	5.1	66	11.7
47	N	Bangladesh	6.2	26	5.4	60	11.6
48	-2	Poland	5.3	45	6.3	50	11.6
49	N	Botswana	4.6	68	6.9	34	11.5
50	N	Kazakhstan	4.9	58	6.6	46	11.4
51	N	Nicaragua	5.9	31	5.4	61	11.3
52	-13	Brazil	3.0	90	8.1	21	11.2
53	N	Bolivia	5.1	52	5.9	55	11.0
54	N	Nepal	5.3	43	5.6	58	11.0
55	-1	South Africa	4.3	77	6.7	43	11.0
56	N	Honduras	5.9	30	5.0	68	10.9
57	3	Mexico	3.3	89	7.5	24	10.8
58	N	Iceland	4.0	82	6.5	47	10.5
59	N	Kyrgyzstan	5.2	49	5.3	62	10.5
60	N	Bosnia & Herzegovina	6.0	28	4.5	72	10.4
61	-2	Romania	5.5	39	4.8	71	10.3
62	0	Croatia	6.4	21	3.8	79	10.2
63	2	Serbia	5.8	34	4.3	74	10.2
64	N	Moldova	4.9	57	5.2	63	10.1
65	0	Chile	4.6	67	5.5	59	10.1
66	4	Indonesia	4.0	79	6.0	54	10.0
67	N	Azerbaijan	4.8	62	5.1	65	9.9
68	-6	Peru	5.5	40	4.4	73	9.9

69		N	Congo (DR)	4.0	80	5.7	56	9.7
70		0	Pakistan	4.0	83	5.7	57	9.7
71		N	Rwanda	4.8	63	4.8	69	9.7
72		N	Dominican Republic	5.2	48	4.3	75	9.5
73		0	Egypt	4.4	75	5.0	67	9.4
74		-8	Albania	5.2	47	4.1	76	9.4
75		N	Nigeria	3.9	84	5.1	64	9.0
76		N	North Macedonia	5.9	29	3.0	89	8.9
77		0	Colombia	2.7	92	6.2	52	8.9
78		N	Uzbekistan	6.1	27	2.7	92	8.8
79		N	Paraguay	5.1	51	3.6	84	8.8
80		0	Ukraine	4.7	64	3.9	77	8.6
81		N	Cambodia	4.9	59	3.6	83	8.5
82		N	Kenya	4.7	65	3.7	82	8.4
83		N	Ghana	4.5	72	3.8	81	8.3
84		N	Gabon	4.5	73	3.5	85	8.0
85		N	Costa Rica	4.0	81	3.9	78	7.9
86		1	Turkey	2.9	91	4.8	70	7.7
87		N	Armenia	4.6	69	3.0	90	7.6
88		-1	Argentina	3.8	86	3.8	80	7.6
89		N	Sri Lanka	3.9	85	3.3	86	7.2
90		N	Belarus	4.1	78	2.9	91	7.0
91		N	El Salvador	4.7	66	2.3	95	6.9
92		0	Georgia	3.5	87	2.3	94	5.8
93		N	Angola	2.5	94	3.3	87	5.8
94		N	Zambia	2.6	93	3.2	88	5.8
95		N	Lebanon	1.2	95	2.3	93	3.5

[1] Change in rank since 2020 Report defined on basis of the country's 2021 rank under a more-restricted 63-country sample adopted in 2020's Report to allow for comparability of ranks. Rank changes adjusted to discard 2020 ranks of two economies dropped in 2021's Report (Taiwan, Venezuela) due to data limitations. Displays "N" if country was not included in 2020's Report.

Source: Scope Ratings GmbH.

Annex II: External vulnerability score (sorted by axis rank) & resilience score (sorted by axis rank)

Rank	Country	Vulnerability score (10=least vulnerable, 0=most vulnerable)				
		Current account + net foreign direct investments, % of GDP, 2020 Q3 – 2021 Q2 or the latest four quarters of available data	Net portfolio and other investment flows, % of GDP, 2019 Q3 – 2021 Q2 (or latest eight quarters of available data) weighted average	Standard deviation of three-year monthly changes in nominal effective exchange rate	Net international investment position, % of GDP, 2021 Q2 or the latest data	Vulnerability score
		25%	25%	25%	25%	100%
1	Switzerland	8.0	10.0	8.2	10.0	9.1
2	Singapore	10.0	0.1	10.0	10.0	7.5
3	Netherlands	10.0	0.1	10.0	10.0	7.5
4	Germany	9.8	1.0	9.8	8.8	7.4
5	Israel	10.0	5.3	6.5	7.7	7.4
6	Denmark	8.3	1.4	10.0	9.6	7.3
7	Hong Kong	10.0	0.1	9.1	10.0	7.3
8	Saudi Arabia	5.9	3.5	8.9	10.0	7.1
9	Luxembourg	0.1	10.0	10.0	8.0	7.0
10	Belgium	5.3	4.6	9.8	8.3	7.0
11	Malta	10.0	0.1	8.9	8.8	7.0
12	Malaysia	10.0	2.6	9.2	5.5	6.8
13	Japan	6.1	5.1	6.4	9.3	6.7
14	Canada	4.0	6.5	6.9	9.1	6.6
15	Guatemala	9.0	4.1	8.7	4.5	6.6
16	Finland	5.7	6.0	9.6	4.9	6.6
17	Vietnam	9.9	4.8	8.8	2.5	6.5
18	China	7.4	4.2	8.6	5.8	6.5
19	Austria	3.8	6.2	10.0	5.9	6.5
20	Italy	7.4	3.0	10.0	5.4	6.4
21	Croatia	5.8	7.7	10.0	2.2	6.4
22	Slovenia	10.0	0.9	10.0	4.6	6.4
23	South Korea	8.0	3.5	7.2	6.8	6.4
24	Philippines	6.9	5.2	8.3	4.8	6.3
25	Norway	7.2	4.4	3.5	10.0	6.3
26	Bangladesh	4.8	6.8	9.0	4.2	6.2
27	Uzbekistan	2.5	9.2	5.6	7.1	6.1
28	Bosnia & Herzegovina	4.2	6.8	10.0	2.8	6.0
29	North Macedonia	4.6	8.1	10.0	1.0	5.9
30	Honduras	7.2	5.4	10.0	1.1	5.9
31	Nicaragua	10.0	3.7	9.8	0.1	5.9
32	Lithuania	9.5	0.1	9.5	4.3	5.9
33	France	3.7	6.8	10.0	2.9	5.9
34	Serbia	8.2	5.1	10.0	0.1	5.8
35	Sweden	9.3	0.5	7.3	6.2	5.8
36	Estonia	9.5	0.1	10.0	3.4	5.8
37	India	6.7	5.8	5.9	4.2	5.7
38	Bulgaria	5.8	3.0	10.0	3.7	5.6
39	Romania	2.3	7.6	10.0	2.0	5.5
40	Peru	6.5	6.8	5.9	2.5	5.5
41	Slovakia	4.4	6.1	10.0	1.3	5.4
42	Thailand	3.0	5.9	7.1	5.5	5.4
43	Nepal	0.1	9.4	6.6	5.2	5.3
44	Czech Republic	8.0	2.5	6.2	4.5	5.3
45	Poland	7.8	3.8	7.2	2.5	5.3
46	Cyprus	9.8	1.6	9.6	0.1	5.3
47	Albania	4.0	5.9	9.7	1.5	5.2
48	Dominican Republic	6.1	7.1	7.4	0.4	5.2
49	Kyrgyzstan	10.0	6.5	4.2	0.1	5.2
50	Latvia	8.0	0.3	9.3	3.1	5.2
51	Paraguay	8.7	6.3	2.2	3.4	5.1
52	Bolivia	5.1	4.8	6.8	3.8	5.1
53	Greece	1.6	8.6	10.0	0.1	5.1
54	Hungary	4.9	7.0	6.3	2.1	5.1
55	United Kingdom	5.3	5.8	5.7	3.3	5.0
56	Spain	5.1	4.7	10.0	0.2	5.0
57	Moldova	0.1	10.0	7.2	2.3	4.9
58	Kazakhstan	2.7	8.8	5.6	2.3	4.9
59	Cambodia	0.1	10.0	9.3	0.1	4.9
60	Ireland	10.0	0.1	9.2	0.1	4.9
61	Portugal	6.5	2.8	10.0	0.1	4.8
62	Azerbaijan	6.4	3.5	7.8	1.6	4.8
63	Rwanda	0.1	10.0	8.1	1.1	4.8
64	Ukraine	6.6	3.6	4.5	4.2	4.7
65	Kenya	1.7	7.5	7.5	2.0	4.7
66	El Salvador	5.1	3.1	9.9	0.7	4.7
67	Chile	4.7	6.2	3.4	4.4	4.6
68	Botswana	1.1	1.4	8.9	7.0	4.6
69	Armenia	4.5	8.4	5.5	0.1	4.6
70	United States	2.5	7.7	7.2	0.8	4.6
71	Algeria	0.1	4.4	7.3	6.4	4.5
72	Ghana	4.3	6.8	4.8	2.1	4.5
73	Gabon	7.7	0.1	10.0	0.1	4.5
74	Australia	7.8	3.2	4.5	2.2	4.4
75	Egypt	2.9	6.2	6.8	1.5	4.4
76	Russia	7.4	2.9	0.1	7.0	4.3
77	South Africa	9.1	1.2	0.1	6.8	4.3
78	Belarus	7.4	1.6	5.4	2.1	4.1
79	Indonesia	5.9	4.9	1.8	3.5	4.0
80	Congo (Democratic Republic)	4.6	5.0	4.4	2.2	4.0
81	Costa Rica	4.7	3.9	6.4	1.0	4.0
82	Iceland	2.1	3.9	2.5	7.4	4.0
83	Pakistan	5.0	5.8	2.7	2.3	4.0
84	Nigeria	3.5	5.9	2.1	4.0	3.9
85	Sri Lanka	4.1	3.9	6.2	1.3	3.9
86	Argentina	6.5	2.2	0.1	6.2	3.8
87	Georgia	0.1	10.0	3.8	0.1	3.5
88	New Zealand	4.4	1.8	5.5	1.9	3.4
89	Mexico	8.4	2.9	0.1	1.7	3.3
90	Brazil	5.3	3.8	0.1	3.0	3.0
91	Turkey	2.9	5.9	0.1	2.7	2.9
92	Colombia	3.0	5.7	0.2	1.8	2.7
93	Zambia	10.0	0.1	0.1	0.1	2.6
94	Angola	5.0	2.5	0.1	2.2	2.5
95	Lebanon	4.5	0.1	0.1	0.1	1.2

Source: Scope Ratings GmbH

2021 External Vulnerability and Resilience rankings: Risks for emerging economies amid rising inflation, rates

Rank	Country	Resilience score (10=most resilient, 0=least resilient)				
		Resilience against currency crisis	Share of non-resident holding in general government debt, 2021 or the latest data	General government foreign-currency-denominated debt, % of general government revenue, 2021	Foreign-currency-denominated loans, % of GDP, 2021 Q2 or the latest data	Resilience score
		25%	25%	25%	25%	100%
1	China	10.0	9.6	10.0	8.8	9.6
2	Japan	10.0	8.6	10.0	9.0	9.4
3	United States	10.0	7.6	10.0	10.0	9.4
4	Malta	10.0	8.2	9.7	9.6	9.4
5	New Zealand	10.0	7.4	10.0	9.7	9.3
6	India	7.2	9.6	9.3	9.1	8.8
7	Spain	10.0	5.7	10.0	9.6	8.8
8	Australia	10.0	5.9	10.0	8.8	8.7
9	Italy	10.0	7.0	9.9	7.5	8.6
10	Slovakia	10.0	4.7	9.7	10.0	8.6
11	Thailand	6.4	8.7	9.8	9.2	8.5
12	Portugal	10.0	5.1	9.3	9.5	8.5
13	Norway	10.0	5.0	10.0	8.8	8.5
14	Slovenia	10.0	4.3	9.6	9.8	8.4
15	Algeria	5.1	9.8	9.9	8.8	8.4
16	Belgium	10.0	4.5	10.0	8.9	8.3
17	Latvia	10.0	3.2	10.0	9.9	8.3
18	Estonia	10.0	3.1	10.0	10.0	8.3
19	Lithuania	10.0	3.1	9.5	10.0	8.2
20	South Korea	7.2	8.6	9.8	7.1	8.1
21	Brazil	6.8	8.8	9.0	7.9	8.1
22	Germany	10.0	5.8	9.8	6.3	8.0
23	Russia	6.9	7.8	9.4	6.7	7.7
24	Mexico	7.2	6.2	7.2	9.5	7.5
25	Singapore	10.0	10.0	10.0	0.1	7.5
26	France	10.0	5.2	9.9	4.8	7.5
27	Switzerland	10.0	9.2	10.0	0.1	7.3
28	Greece	10.0	1.7	9.5	8.0	7.3
29	Austria	10.0	3.7	9.9	5.4	7.2
30	Hungary	6.2	6.8	7.1	8.0	7.0
31	Ireland	10.0	3.6	10.0	4.2	7.0
32	Sweden	10.0	8.0	9.7	0.1	7.0
33	Canada	10.0	7.7	10.0	0.1	6.9
34	Botswana	5.1	5.2	7.7	9.7	6.9
35	United Kingdom	10.0	7.5	10.0	0.1	6.9
36	Hong Kong	10.0	8.6	8.7	0.1	6.8
37	Czech Republic	3.9	6.8	9.7	6.9	6.8
38	Finland	10.0	4.0	9.6	3.7	6.8
39	Denmark	10.0	6.8	10.0	0.1	6.7
40	Cyprus	10.0	1.9	10.0	4.9	6.7
41	Malaysia	1.8	7.6	8.8	8.5	6.7
42	Israel	2.0	8.6	8.0	8.1	6.7
43	South Africa	3.6	6.8	7.7	8.5	6.7
44	Vietnam	5.0	6.0	7.4	8.1	6.6
45	Netherlands	10.0	6.3	10.0	0.1	6.6
46	Kazakhstan	5.1	5.8	5.9	9.4	6.6
47	Iceland	4.3	7.5	7.9	6.2	6.5
48	Philippines	6.0	7.3	3.8	8.8	6.5
49	Saudi Arabia	5.7	5.7	5.5	8.7	6.4
50	Poland	3.6	7.0	7.4	7.2	6.3
51	Luxembourg	10.0	5.1	10.0	0.1	6.3
52	Colombia	4.4	5.0	5.8	9.6	6.2
53	Bulgaria	7.5	5.2	6.4	5.6	6.2
54	Indonesia	6.2	5.3	3.3	9.0	6.0
55	Bolivia	5.1	8.5	0.1	10.0	5.9
56	Congo (Democratic Republic)	1.6	3.5	8.8	8.9	5.7
57	Pakistan	3.4	6.5	3.0	9.8	5.7
58	Nepal	5.1	4.5	3.5	9.6	5.6
59	Chile	4.6	7.1	4.0	6.2	5.5
60	Bangladesh	5.2	2.5	3.9	10.0	5.4
61	Nicaragua	5.1	3.2	9.7	3.6	5.4
62	Kyrgyzstan	3.5	1.6	8.0	8.0	5.3
63	Moldova	3.0	4.3	4.9	8.8	5.2
64	Nigeria	3.3	6.3	1.9	9.1	5.1
65	Azerbaijan	5.1	4.5	3.7	7.2	5.1
66	Guatemala	5.1	6.0	1.9	7.4	5.1
67	Egypt	5.2	7.5	0.1	7.3	5.0
68	Honduras	5.1	2.9	6.4	5.5	5.0
69	Rwanda	5.1	2.2	2.6	9.5	4.8
70	Turkey	2.5	7.1	5.0	4.7	4.8
71	Romania	1.4	5.7	3.8	8.2	4.8
72	Bosnia & Herzegovina	4.3	2.8	8.3	2.4	4.5
73	Peru	5.1	3.2	1.8	7.6	4.4
74	Serbia	5.1	4.3	4.3	3.7	4.3
75	Dominican Republic	5.1	3.2	0.1	8.8	4.3
76	Albania	5.1	5.6	0.1	5.7	4.1
77	Ukraine	0.5	4.8	2.1	8.3	3.9
78	Costa Rica	3.1	7.6	0.1	4.7	3.9
79	Croatia	6.7	6.8	0.8	1.0	3.8
80	Argentina	0.3	5.0	0.1	9.8	3.8
81	Ghana	1.1	4.4	0.1	9.5	3.8
82	Kenya	0.4	4.9	1.3	8.4	3.7
83	Cambodia	5.1	0.1	9.3	0.1	3.6
84	Paraguay	5.1	1.8	1.6	6.1	3.6
85	Gabon	1.0	3.1	0.1	10.0	3.5
86	Sri Lanka	0.4	5.4	0.1	7.4	3.3
87	Angola	1.2	3.2	0.1	8.8	3.3
88	Zambia	0.1	3.6	0.1	9.0	3.2
89	North Macedonia	1.9	3.4	1.8	4.9	3.0
90	Armenia	5.1	2.7	0.1	4.1	3.0
91	Belarus	0.6	2.1	3.4	5.6	2.9
92	Uzbekistan	5.1	1.0	0.1	4.6	2.7
93	Lebanon	0.5	8.7	0.1	0.1	2.3
94	Georgia	2.6	2.0	2.0	2.6	2.3
95	El Salvador	3.7	5.2	0.1	0.1	2.3

Source: Scope Ratings GmbH

Annex III: Vulnerability/resilience grid by components, hard figures (sorted by world region)

	Region**	Country	Current account + net foreign direct investments, % of GDP, 2020 Q3 – 2021 Q2 or the latest four quarters	Net portfolio and other investment flows, % of GDP, 2019Q3 – 2021Q2 (or the latest eight quarters) weighted average	Standard deviation of three-year monthly changes in nominal effective exchange rate	Net international investment position, % of GDP, 2021 Q2 or the latest data	Log of turnover of over-the-counter (OTC) FX instruments, 2019 daily averages, in USD bn*	Reserves ÷ short-term external debt, 2021 or the latest data	Share of non-resident holding in general government debt, 2021 or the latest data	General government foreign-currency-denominated debt, % of general government revenue, 2021	Foreign-currency-denominated loans, % of GDP, 2021 Q2 or the latest data	External risk aggregate score, 2021
Emerging Market and Developing Economies (EMDE)	Central & Eastern Europe, Caucasus, and Central Asia	Albania	-1.5	1.1	0.6	-58.2	-0.5	3.8	44.0	143.6	18.8	9.4
		Armenia	-0.8	4.7	1.6	-85.0	-0.6	4.3	74.0	174.3	25.5	7.6
		Azerbaijan	2.0	-2.2	1.0	-55.4	0.0	3.6	56.0	75.5	12.6	9.9
		Belarus	3.3	-4.8	1.6	-48.4	0.1	0.7	80.2	79.5	19.2	7.0
		Bosnia & Herzegovina	-1.2	2.5	0.3	-35.8	-0.4	1.8	72.6	20.8	32.4	10.4
		Bulgaria	1.1	-3.0	0.5	-22.3	0.3	2.0	48.9	44.0	19.3	11.8
		Croatia	1.1	3.7	0.4	-46.5	0.1	1.7	32.1	110.8	38.3	10.2
		Czech Republic	4.2	-3.6	1.4	-9.0	1.4	1.3	32.1	5.0	13.6	12.1
		Georgia	-8.5	9.9	2.0	-154.3	-0.5	1.2	81.0	96.6	31.6	5.8
		Hungary	-0.2	2.8	1.4	-47.8	1.4	3.0	32.6	36.0	9.2	12.1
		Kazakhstan	-3.3	5.3	1.5	-43.7	0.6	2.8	42.1	49.3	3.2	11.4
		Kyrgyzstan	9.4	2.1	1.9	-98.9	-0.8	1.5	85.0	25.4	9.1	10.5
		Moldova	-10.1	12.0	1.2	-44.1	-0.6	1.4	57.6	62.2	6.0	10.1
		North Macedonia	-0.6	4.3	0.4	-64.9	-0.6	1.0	66.7	99.0	22.2	8.9
		Poland	3.9	-1.8	1.2	-41.4	1.6	1.1	30.6	31.7	12.5	11.6
		Romania	-3.9	3.6	0.5	-48.6	0.8	0.9	43.3	74.6	8.1	10.3
		Russia	3.4	-3.1	3.0	31.2	1.9	4.6	22.6	8.7	14.5	12.0
		Serbia	4.5	0.0	0.5	-90.7	0.0	2.2	57.4	69.4	27.2	10.2
		Turkey	-3.1	1.2	4.2	-38.6	1.9	0.7	29.1	60.8	22.8	7.7
		Ukraine	2.1	-2.0	1.8	-13.8	0.5	0.6	52.3	95.5	7.7	8.6
		Uzbekistan	-3.6	5.8	1.5	32.6	0.1	9.0	90.5	120.0	23.3	8.8
	Africa	Algeria	-9.5	-0.9	1.1	21.0	0.5	30.7	2.0	2.1	6.0	12.9
		Angola	-0.1	-3.6	3.6	-45.5	0.3	0.8	69.0	196.9	6.0	5.8
		Botswana	-5.5	-5.1	0.8	32.0	-0.4	5.0	48.0	28.9	2.0	11.5
		Congo (DR)	-0.7	-0.1	1.8	-46.6	0.0	1.0	65.5	15.6	5.6	9.7
		Egypt	-3.0	1.6	1.2	-57.0	0.8	2.1	24.9	128.9	12.2	9.4
		Gabon	3.7	-8.1	0.4	-83.0	-0.5	0.8	70.0	136.2	0.3	8.0
		Ghana	-1.1	2.4	1.7	-48.0	0.1	0.8	56.6	222.8	3.1	8.3
		Kenya	-4.8	3.5	1.1	-48.7	0.3	0.6	52.0	104.3	7.4	8.4
		Nigeria	-2.2	1.2	2.3	-16.7	1.0	1.3	37.7	97.2	4.5	9.0
		Rwanda	-9.5	8.6	0.9	-63.5	-0.7	2.6	78.9	89.3	2.9	9.7
		South Africa	5.8	-5.5	3.4	28.2	1.9	1.0	32.7	28.0	7.1	11.0
		Zambia	18.4	-14.9	4.8	-145.0	-0.3	0.4	64.5	125.7	5.2	5.8
	Developing Asia	Bangladesh	-0.3	2.4	0.7	-13.5	0.8	2.8	75.4	73.9	0.3	11.6
		Cambodia	-16.4	8.7	0.7	-96.3	-0.3	5.0	100.0	9.2	131.5	8.5
		China	3.3	-1.2	0.8	12.0	2.5	-	4.0	1.4	6.0	16.1
		India	2.4	1.0	1.4	-13.2	2.1	2.1	4.5	8.9	4.4	14.5
		Indonesia	1.2	-0.2	2.4	-25.2	1.4	2.1	47.8	80.4	5.0	10.0
		Malaysia	9.2	-3.5	0.7	7.5	1.0	0.9	24.1	14.8	7.1	13.5
		Nepal	-7.9	6.1	1.3	2.1	-0.2	14.8	55.7	78.6	2.6	11.0
		Pakistan	0.0	1.0	2.2	-44.1	0.7	1.5	35.0	84.0	1.7	9.7
		Philippines	2.5	0.3	0.9	-4.2	1.3	4.4	27.4	74.7	5.8	12.8
		Sri Lanka	-1.3	-1.6	1.4	-60.7	0.2	0.6	46.0	285.9	11.8	7.2
		Thailand	-3.0	1.2	1.2	7.8	1.5	3.4	12.7	3.0	4.1	13.9
		Vietnam	6.8	-0.3	0.8	-41.2	0.8	1.9	40.0	32.4	8.9	13.1
	Latin America	Argentina	2.1	-4.0	4.6	18.2	0.6	0.6	50.5	190.8	1.5	7.6
		Bolivia	0.0	-0.3	1.3	-19.7	-0.1	2.3	15.0	118.7	0.8	11.0
		Brazil	0.3	-1.7	3.9	-33.3	1.9	2.0	11.7	13.5	9.5	11.2
		Chile	-0.6	1.6	2.0	-10.8	1.3	1.6	29.2	71.9	16.9	10.1
		Colombia	-2.9	0.9	2.8	-52.7	1.1	1.6	50.8	50.7	2.5	8.9
		Costa Rica	-0.4	-1.6	1.3	-65.0	0.1	1.4	24.0	181.5	22.9	7.9
		Dominican Republic	1.4	2.9	1.1	-74.6	0.3	3.4	68.3	220.7	6.0	9.5

		El Salvador	0.0	-2.8	0.5	-70.9	-0.3	0.8	48.9	134.9	60.2	6.9
		Guatemala	5.5	-1.3	0.8	-8.7	0.2	3.7	40.0	97.4	11.8	11.7
		Honduras	3.1	0.4	0.4	-64.1	-0.3	7.4	71.4	43.3	19.6	10.9
		Mexico	4.8	-3.1	3.6	-54.2	2.1	2.3	38.2	34.3	3.0	10.8
		Nicaragua	7.4	-1.9	0.5	-110.1	-0.6	2.5	68.8	4.9	27.6	11.3
		Paraguay	5.1	1.7	2.3	-26.0	-0.1	3.1	82.8	101.4	17.1	8.8
		Peru	2.1	2.5	1.4	-40.6	0.7	5.2	68.3	98.4	10.7	9.9
	Middle East	Lebanon	-0.8	-21.3	13.2	-167.7	0.0	0.6	13.0	499.7	105.8	3.5
		Saudi Arabia	1.2	-2.2	0.7	83.7	1.1	9.0	43.0	54.2	6.1	13.5
Advanced economies		Australia	3.8	-2.6	1.8	-46.3	2.7	-	41.3	0.0	5.9	13.1
		Austria	-1.7	1.6	0.3	13.5	3.3	-	64.1	2.7	20.0	13.7
		Belgium	0.3	-0.7	0.5	52.1	3.3	-	55.9	1.0	5.3	15.3
		Canada	-1.5	2.0	1.2	66.0	2.5	-	23.3	1.5	74.5	13.6
		Cyprus	6.7	-4.9	0.6	-134.2	3.3	-	81.9	0.0	22.0	12.0
		Denmark	4.7	-5.1	0.5	73.2	1.6	-	32.7	1.1	66.9	14.0
		Estonia	6.4	-7.8	0.5	-26.6	3.3	-	70.0	0.0	0.3	14.0
		Finland	1.0	1.3	0.6	-1.8	3.3	-	60.8	6.1	26.9	13.4
		France	-1.8	2.5	0.5	-35.0	3.3	-	48.8	2.6	22.4	13.3
		Germany	6.7	-5.7	0.5	61.3	3.3	-	42.9	3.4	16.2	15.3
		Greece	-4.9	5.1	0.4	-183.1	3.3	-	83.8	6.7	9.2	12.4
		Hong Kong	21.8	-13.1	0.7	613.1	2.4	-	14.5	16.8	163.9	14.1
		Iceland	-4.2	-1.6	2.2	38.8	-0.3	1.8	25.6	25.8	16.5	10.5
		Ireland	8.6	-15.5	0.7	-153.9	3.3	-	64.3	0.0	25.0	11.8
		Israel	9.3	0.3	1.3	42.3	1.3	0.8	14.0	25.2	8.7	14.0
		Italy	3.3	-2.9	0.5	5.2	3.3	-	30.0	2.2	11.4	15.0
		Japan	1.5	0.0	1.3	69.3	3.0	-	13.8	0.0	4.8	16.2
		Latvia	4.2	-6.7	0.7	-31.0	3.3	-	68.2	0.0	1.3	13.5
		Lithuania	6.3	-8.2	0.6	-11.5	3.3	-	69.5	6.6	0.1	14.0
		Luxembourg	-68.3	43.1	0.3	48.2	3.3	-	50.0	0.0	384.7	13.3
		Malta	64.5	-70.7	0.7	61.1	3.3	-	18.2	4.2	2.5	16.4
		Netherlands	17.7	-14.9	0.5	102.2	3.3	-	37.8	1.1	51.7	14.1
		New Zealand	-0.9	-4.5	1.5	-51.4	2.1	-	26.2	0.0	2.0	12.7
		Norway	3.0	-1.0	2.0	303.2	2.1	-	50.2	0.0	5.7	14.7
		Portugal	2.0	-3.2	0.3	-101.4	3.3	-	49.0	8.8	3.0	13.3
		Singapore	35.9	-11.0	0.5	299.6	2.1	-	0.0	0.0	105.0	15.1
		Slovakia	-1.0	1.5	0.3	-60.9	3.3	-	53.6	4.9	1.0	14.0
		Slovenia	7.0	-5.9	0.3	-7.5	3.3	-	57.5	6.4	1.7	14.8
		South Korea	4.1	-2.2	1.1	27.9	2.1	1.9	14.5	3.4	13.1	14.5
		Spain	0.0	-0.5	0.4	-78.4	3.3	-	43.9	0.3	2.6	13.8
		Sweden	6.1	-6.5	1.1	19.0	2.1	-	20.0	4.6	42.1	12.8
		Switzerland	4.2	12.1	0.9	105.7	2.5	-	8.4	0.0	128.6	16.4
		United Kingdom	0.3	1.0	1.5	-28.4	2.9	-	25.4	0.6	174.1	11.9
		United States	-3.6	3.7	1.1	-68.1	3.8	-	24.0	0.0	0.0	14.0

Source: IMF, Eurostat, Bank for International Settlements (BIS), Bloomberg, Bruegel, External Wealth of Nations (EWN) database, national central banks, national statistical offices, ministries of finance, Macrobond, Scope Ratings GmbH; *for currencies not covered by BIS, reflects our interpolation based on the turnover of "Other" currencies in the BIS dataset alongside the relative shares of countries' GDPs in global GDP; **Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia are high-income economies under latest World Bank definitions, in Annex III we display under EMDE to follow geographical categorisations.

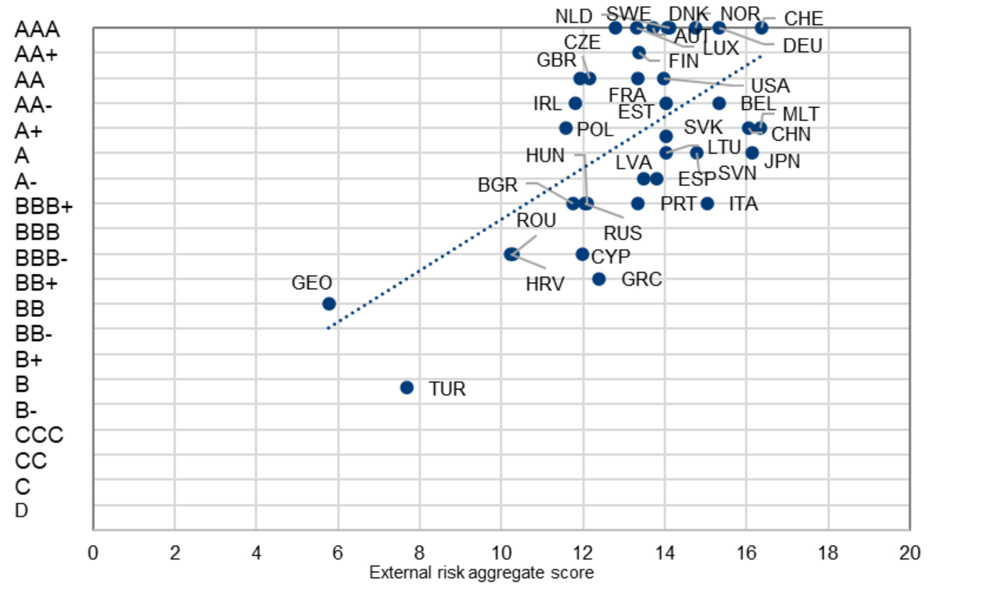
Annex IV: Indicator definitions and rationale

Indicator	Definition	Rationale	Source
Current account + net foreign direct investments, % of GDP, 2020 Q3 – 2021 Q2 or the latest four quarters	Current account balance is the sum of net exports of goods and services, net primary income, and net secondary income. Foreign direct investments are the sum of equity capital, reinvestment of earnings, other capital as presented in the balance of payments.	Large current account deficits signal a risk of unsustainable economic policies and excess domestic demand, deficits in external competitiveness, and/or the risk of further depletion of net foreign-exchange reserves. Foreign direct investment offers a comparatively stable cushion of possible inflow, less prone to sharp reversal in moments of global economic distress, to finance current account deficits and could offset some risks to official reserves.	IMF International Financial Statistics (IFS), national central banks and national statistical offices
Net portfolio and other investment flows, % of GDP, 2019 Q3 – 2021 Q2 (or latest 8 quarters) weighted average	Portfolio and other investments include transactions in equity securities, debt securities and other debt instruments.	Sustained net inflows of portfolio and other debt investment flows over a multi-year period signal a stable supplement to domestic savings. Conversely, sustained capital *outflows* over a multi-year period indicate a deficit of confidence with domestic and/or international investors and risk of future sudden stops in capital flows precipitating currency and/or debt crises.	IMF IFS, national central banks and national statistical offices
Standard deviation of three-year monthly changes in nominal effective exchange rate	The nominal effective exchange rate of a currency is a weighted average of nominal bilateral rates between the currency and a basket of the foreign currencies of trading partners.	Significant fluctuations in exchange rates signify risk of future sharp devaluation or appreciation and associated disruptions to economic and financial-system stability, whereas lower currency volatility tends to nurture investor confidence and promote sustainable inward investment.	Bruegel, national central banks
Net international investment position, % of GDP, 2021 Q2 or the latest data	Net international investment position is the difference between an economy's external financial assets and external liabilities.	Large net external liabilities make an economy more exposed to developments in international financial markets and can lead to liquidity crises. Large net external asset positions can, meanwhile, indicate open, competitive economies.	Eurostat, IMF, EWN, national central banks and national statistical offices
Resilience against currency crisis	Two-step scoring: i) if the FX is a reserve/safe-haven currency, then an automatic maximum scoring of 10; if not (e.g., if a country does not possess a safe-haven currency), then ii) the score is based 50% on the currency's "importance": the log of the currency's 2019 BIS OTC turnover (the score is automatically uplifted to 5.05 if a country is a non-reserve-currency country in ERM II) and based 50% on international reserves ÷ short-term external debt to capture reserve adequacy if a currency's global status alone does not represent an adequate safeguard against external risks.	Reserve currency countries enjoy meaningful protection from global risk routs and can frequently see currency appreciation and capital inflows during such times. Non-reserve-currency countries must frequently defend themselves in the event of external shocks, with countries that have large arsenals of FX reserves better shielded against balance of payment crises than those without.	BIS, IMF, national central banks and national statistical offices
Share of non-resident holding in general government debt, 2021 or the latest data	Gross debt includes liabilities that require future payment of interest and/or principal by the debtor to the creditor. This includes debt liabilities in the form of special drawing rights, currency, deposits, debt securities, loans, insurance, pension, standardised guarantee programmes and other accounts payable. A unit is non-resident if its centre of economic interest is not in the economic territory of a country.	A high share of government debt held by the foreign sector could reduce resilience as foreign investors may head for the exits once signs of a crisis or instability become clear.	IMF, Eurostat, national ministries of finance and central banks
General government foreign-currency-denominated debt, % of general government revenue, 2021	Foreign-currency debt is all money borrowed by the general government, internationally and under domestic markets, in a currency not in the currency of national legal tender.	A large stock of foreign-currency debt exposes a government to sudden deterioration in repayment capacity should the currency devalue and debt service of this FX debt commensurately increases in degree of difficulty.	Bloomberg, IMF, national ministries of finance and central banks
Foreign-currency-denominated loans, % of GDP, 2021 Q2 or the latest data	Foreign-currency-denominated loans include interbank and non-interbank loans to the central bank, the general government, other financial corporations, other domestic sectors and non-residents in foreign currency.	A highly dollarised or euroised financial system potentially makes an economy less resilient to a currency shock via borrowers suddenly seeing repayment capacities weakened on their foreign-currency loans, which must be repaid via local-currency-denominated financial resources. In addition, a high level of foreign currency lending reduces efficacy of monetary policy, restricting ability of the central bank to fluidly govern monetary conditions.	IMF IFS, national central banks and national statistical offices

Source: Scope Ratings GmbH

Annex V: External risk score vs Scope public sovereign ratings and against 5-year CDS

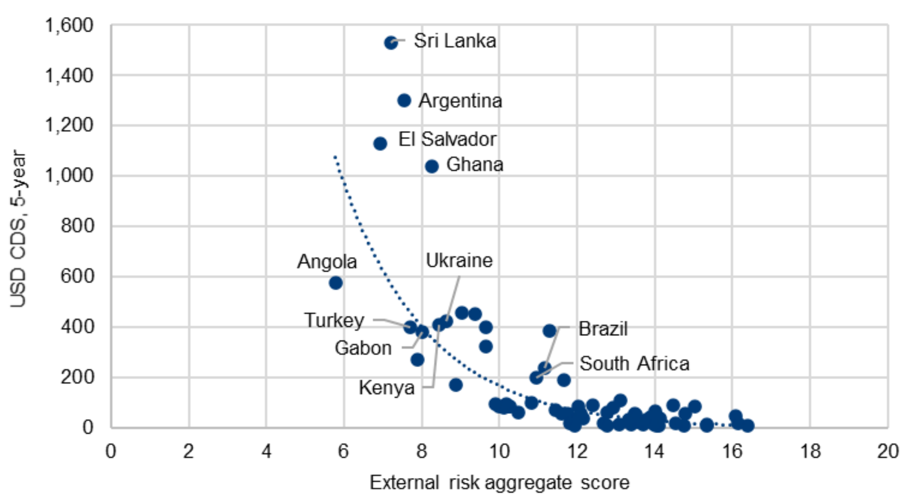
Against Scope's public foreign-currency long-term sovereign ratings*



*Displayed are the 36 sovereigns that Scope rates publicly (ratings as of 5 November 2021).

Source: Scope Ratings GmbH.

Versus USD 5-year CDS, bps (as of 5 November 2021)



All the 95 ranked countries under this report that present the requisite CDS data displayed.

Source: Bloomberg, Scope Ratings GmbH.

Annex VI: Sovereign credit defaults, 2020-2021

Sovereign borrower and year of credit event	Default description	Cause (description)
Argentina (twice in 2020)	Failure to pay interest on foreign-currency bonds	Fiscal distress due to weak revenue and high expenditure exacerbated by the pandemic crisis, lack of sufficient fiscal adjustment, constraints on foreign-currency liquidity and unfavourable conditions in external debt capital markets
Belize (2020 and 2021)	Restructuring of foreign-currency bonds; failure to pay interest on foreign-currency bond	Economic shock and liquidity constraints exacerbated by the pandemic crisis, as the latter impaired revenue in a tourism-reliant economy
Ecuador (2020)	Delay of interest payments on global bonds in USD (Ecuador uses USD as legal tender)	Economic shock and liquidity pressures caused by oil price decline and economic implications of the pandemic
Suriname (twice in 2020 and once in 2021)	Restructuring of foreign-currency bond; failure to pay interest on foreign-currency bonds	Economic shock and liquidity pressures caused by the oil price decline and economic implications of the pandemic
Lebanon (2020)	Failure to pay principal on foreign-currency bonds	Consequences of very severe political, financial-system and external-sector pressure
Zambia (2020)	Failure to pay interest on foreign-currency bond	Curtailed access to foreign-currency liquidity and external financing, compounded by implications of the pandemic crisis

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