# Credit Benchmark

# Recent Trends in Sovereign Credit Risk

David Carruthers
Barbora Makova
Sheliza Siddiqui

March 2019

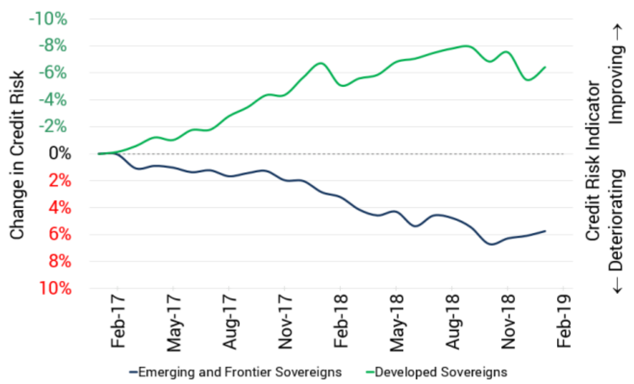
## Executive Summary

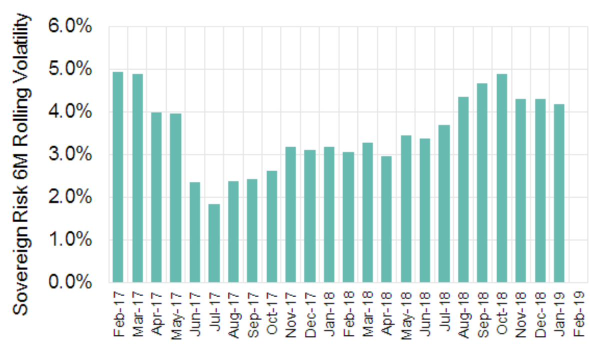
- *Developed economy Sovereign credit risk improved from early 2017 but has recently been deteriorating.*
- *Emerging and Frontier Sovereign risk deteriorated steadily over the same period but stabilized recently.*
- *Sovereign credit volatility rose steadily from early 2016 to late 2018.*
- *Median volatility has dropped in the past few months.*
- *Recent shifts in economic and strategic alliances are being reflected in credit risk:*
  - *OPEC has deteriorated 30% in the past 2 years; Latin America has improved.*
  - *Mexico and Brazil gap could narrow; Turkey and Greece converging.*
  - *China is deteriorating but banking sector is improving.*

## Overview

Sovereign credit risk is high-profile and sensitive, with wide-ranging implications. Changes in government borrowing rates can affect public funding of programs. Rating decisions can have significant impact on investment portfolios as Sovereign rating changes affect the credit standing of almost all other entities in a country. Recent economic developments have pushed Sovereign risk back into the spotlight due to a combination of global, regional and country-specific factors. The charts below (Figure 1) show recent trends in Sovereign credit risk across 41 Developed Countries and 107 Emerging and Frontier Countries.*

**Figure 1:** Key trends in Sovereign Credit Risk: Trends and Volatility



*Median across 100+*

* See Appendix 1 for classifications

## Introduction

Sovereign credit risk is often driven by country-specific factors, with the complex situation in Venezuela as a current example. It may be driven regionally, as in the 2011 Eurozone funding crisis (which followed the 2008/09 CDO crisis in the global banking system). Or, as in 1929/32, it can reflect global credit cycles, with easy money leading to excessive lending, followed by a credit drought, country defaults or bailouts, and a painful, protracted recovery.

Such recovery may be slow, but in a number of recent cases – Russia, Argentina, and Greece – the return to the credit club has been fairly quick.

Current Sovereign problems are concentrated in specific regions. In North Africa and the Middle East, local conflicts and superpower interventions have had severe implications for credit standing of certain countries. Countries in Central and South America have suffered from NAFTA trade disputes as well as exposure to the complete economic collapse currently occurring in Venezuela.

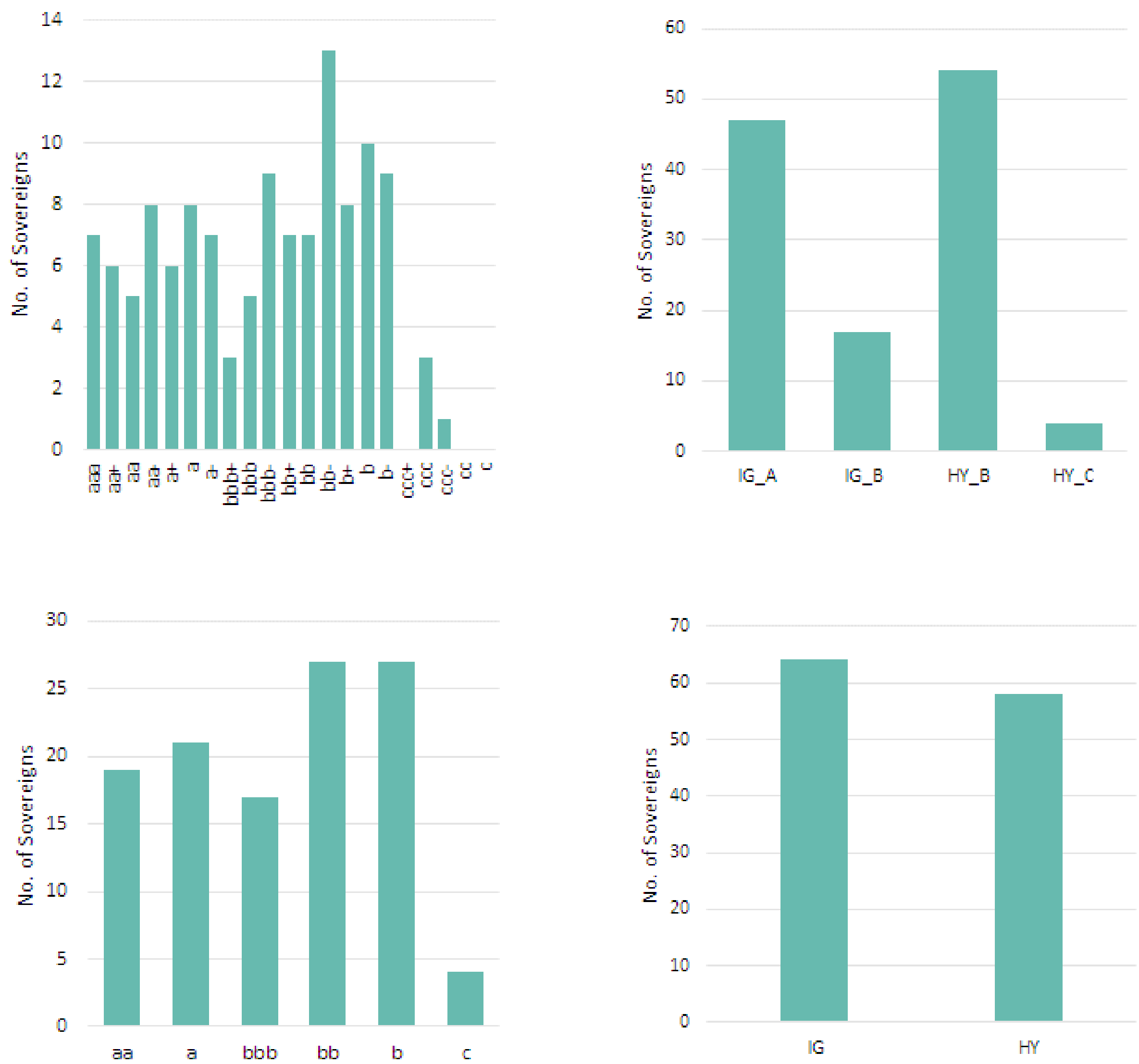
The tapering of Quantitative Easing has been an important short-term negative for developing economies, but changes to the globalization and trade infrastructure will have a more profound and far-reaching effect. Economic alliances, trade flows, and supply chains are changing or breaking down. New patterns are emerging, with winners and losers, but the overall environment for Sovereign credit is increasingly volatile.

This report is based on consensus credit data sourced from major financial institutions. It presents recent case studies and compares consensus ratings with key economic and financial indicators. It also provides an example of a Sovereign risk monitoring template based on monthly changes in consensus ratings.

## Sovereign Credit Risk Distributions

Compared with Corporates, Sovereign credit ratings have an unusual distribution, with concentrations in both upper investment grade and the BB-range, versus Corporates, which tend to have bell shaped-distribution. This difference partially reflects the fact that, by virtue of location, countries may not be able to diversify their economies as easily as a company can diversify its business. On the other hand, even a country with a severely mismanaged economy will continue to have taxable economic activity to support access to credit markets over time, whereas a company would be acquired or shut down.

**Figure 2:** Sovereign Credit Risk Distributions†




The charts in Figure 2 show the impact of these differences. The credit distribution is bimodal, with a peak in the upper Investment Grade category and another in the upper Non-Investment Grade category.

† See Appendix 2 for Unsecured Loss Given Default distribution.

## Sovereigns: Developed Economies vs. Emerging/Frontier Economies

Macroeconomic analysis usually divides economies into three high level categories – Developed, Emerging, and Frontier. For this report, Emerging and Frontier groups are merged.‡ Figure 3 compares the key metrics for the two groups, summarized as aggregates.

**Figure 3:** Sovereigns: Developed vs. Emerging / Frontier

Developed

Emerging and Frontier


**Credit Distributions:** Around 10% of the Developed Sovereigns are Non-Investment grade, and the proportion in **aaa** has dropped slightly over the past year. Around 25% of the Emerging and Frontier Sovereigns are Investment Grade.

**Improvements vs. Deteriorations:** The balance has been strongly positive for Developed economies, but mixed for Emerging / Frontier economies.

**Trends:** Developed economy credit risk improved steadily until late 2018 but has recently turned down. Emerging /Frontier risk shows a modest and fairly consistent deterioration, with a slight improvement in the last two months.

These charts powerfully illustrate the economic impact of global trade tensions and central bank policy decisions over the past few years. Emerging and Frontier economies have suffered as globalization has stalled, trade friction has increased, and interest rates have started to increase.

The overall impact on Sovereign credit risk has been negative, although the scale is modest; risk estimates have on average increased by about 5%. Developed economy credit risk has decreased by as much as 10%, although it has declined by a few percentage points in recent months.

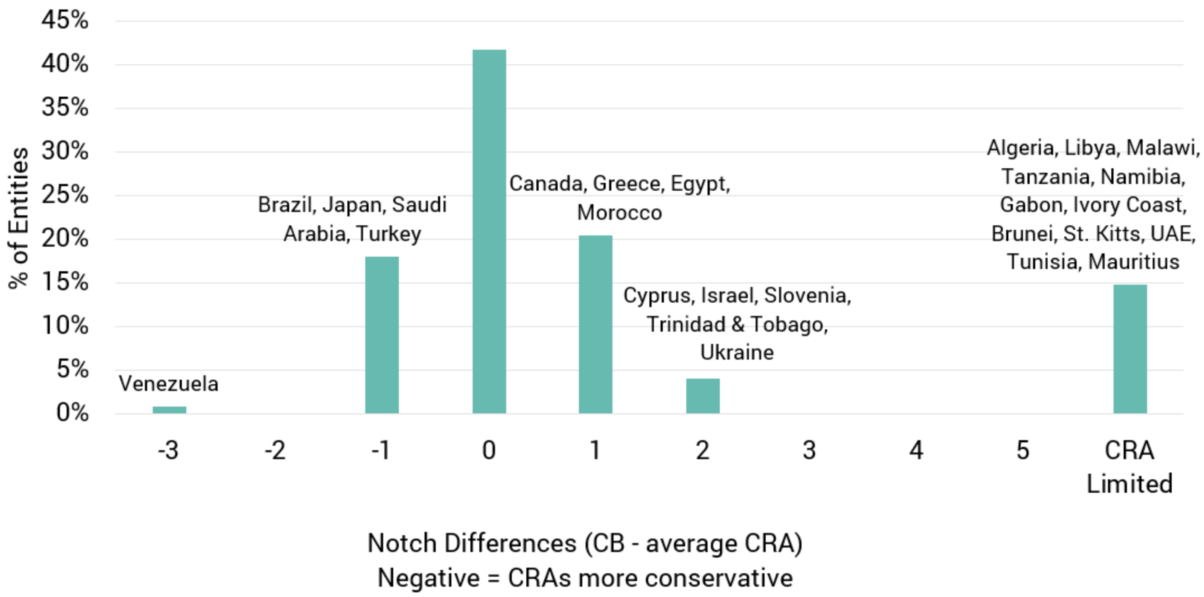
If these trends continue, they may suggest that Emerging and Frontier economy credit trends provide a type of leading indicator for Developed economy credit risk.

‡ See Appendix 1 for classification details.

## Comparison of Sovereign Consensus Ratings with Credit Rating Agencies

Where Sovereigns have multiple ratings from the main agencies, consensus data tends to be closely aligned. The main exceptions are for countries where at least one agency rates the Sovereign as being in some form of default (e.g. Selective Default) while others still assign non-default ratings. Figure 4 shows countries with the largest differences between the consensus ratings and ratings from the main agencies. It also highlights countries which have consensus ratings from Credit Benchmark (CB) while agency coverage is patchy or not available.

Figure 4: Highlights of differences in Consensus Sovereign Rating vs. main Credit Rating Agencies




Of the Sovereigns with a consensus rating, 40% are aligned with the main rating agencies and around 40% are within one notch on the 21-category scale. Consensus ratings are lower on Ukraine, Cyprus, Israel, Slovenia, and Trinidad and Tobago. The consensus rating is surprisingly higher on Venezuela.

A number of countries *(listed at the far right of the chart)* across Africa, the Middle East and the Caribbean are either unrated or patchily rated by the main agencies. This includes Libya, a good example of financial institutions acting as business pioneers in dealing with new regimes following periods of political instability.

Across the Sovereign consensus, the following names are on either side of the Investment Grade / Non-Investment Grade boundary:

**bbb-**: India, Romania, Uruguay, Colombia, Portugal, Indonesia, Russia, Bahamas, Trinidad & Tobago

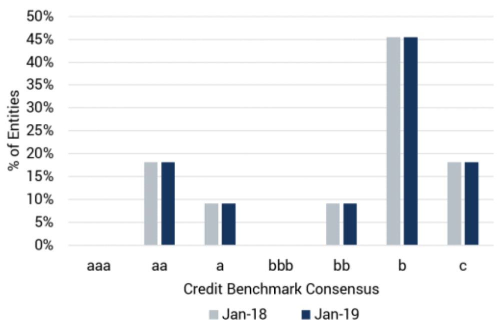
**bb+**: Oman, Croatia, Namibia, South Africa, Morocco, Kazakhstan, Hungary

## Case Study: OPEC Sovereign Risk

The Organization of the Petroleum Exporting Countries (OPEC) has had a difficult few years. The US is now energy self-sufficient due to fracking, and oil demand is dropping. It has been difficult for OPEC to maintain production cuts, and Qatar recently left the group. Venezuela, despite huge reserves, is in a state of near-total economic collapse. Saudi Arabia has shelved plans to float Saudi Aramco, and the window of opportunity for the float may have permanently passed. Saudi Arabia may need to tackle its current fiscal and social challenges more directly as a result. Figure 5 shows credit highlights for 11 of the 14 current OPEC members (12 countries are used in the time series charts, which include Iran before sanctions were imposed).

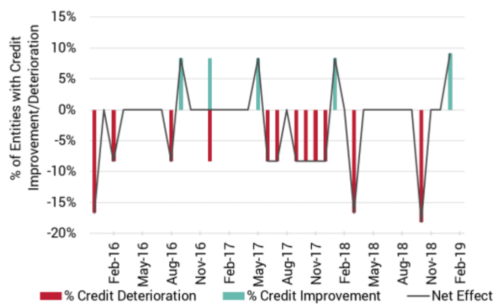
**Figure 5:** OPEC Sovereign Risk

### Credit Distribution




The Sovereign credit distribution for 11 of the OPEC members is bimodal. The distribution has been stable over the past year, although there have been some significant movements within the various credit categories. As in the time series charts below, this is an example of how incremental credit changes can have a major cumulative effect without any high-level category changes.

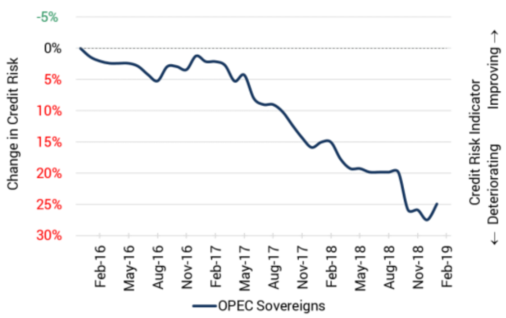
### Improvements vs. Deteriorations




The balance of improvements and deteriorations shows a number of months with no activity, and negative months outnumber positive months by 12 to 5.

The net effect of changes in credit views is predominantly negative, and the most recent decline was the largest in the past three years.

### Credit Trends



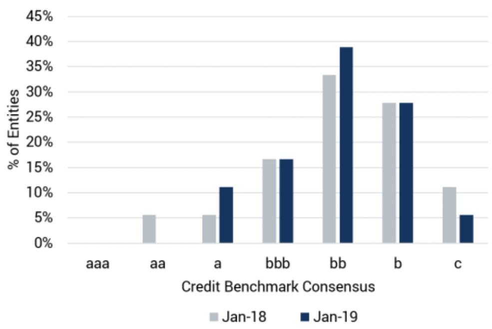

The strong trend towards deteriorations has had a major negative cumulative effect. Average Sovereign credit quality for OPEC members has declined steadily since the beginning of 2017 and the pace has, if anything, accelerated. *The cumulative deterioration is now nearly 30% over three years.*

## Case Study: Latin American Sovereign Risk

Latin America has had mixed fortunes in recent years. Brazil is in the early stages of major political change (see Figure 8) while the economic collapse in Venezuela is creating tensions and refugee problems in Colombia and Central America. Argentina is making a disciplined recovery from default, but elections this year will be critical. Overall, the continent is likely to see a significant increase in Chinese investment, and Chile, with the world's largest copper output, is an early beneficiary. Figure 6 shows Sovereign credit trends for 18 of the main Latin American countries.

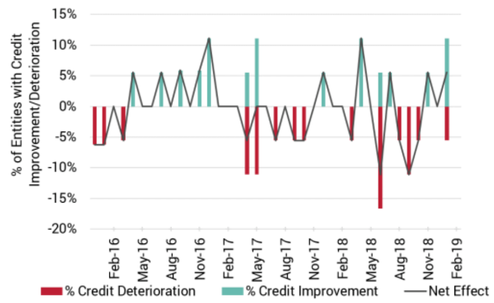
**Figure 6:** Latin American Sovereign Risk

### Credit Distribution



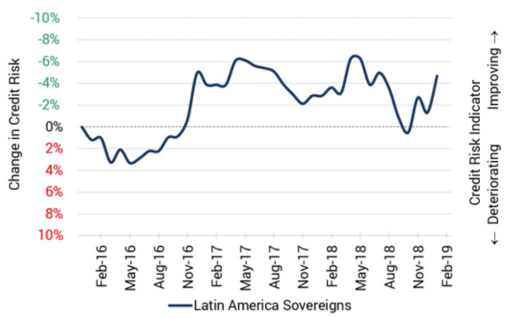

The Sovereign credit distribution is dominated by the **bb** category. The proportion of investment Grade countries is stable but credit has slightly deteriorated within that group over the past year. Non-investment grade countries show a slight improvement.

### Improvements vs. Deteriorations




The relative scale of individual improvements vs. deteriorations shows a slight negative trend, but the net effect is neutral.

### Credit Trends




Credit risk improved in 2016 and stabilized in 2017. It turned negative in the first half of 2018 but has recently improved, and the cumulative effect is still positive over the past three years.

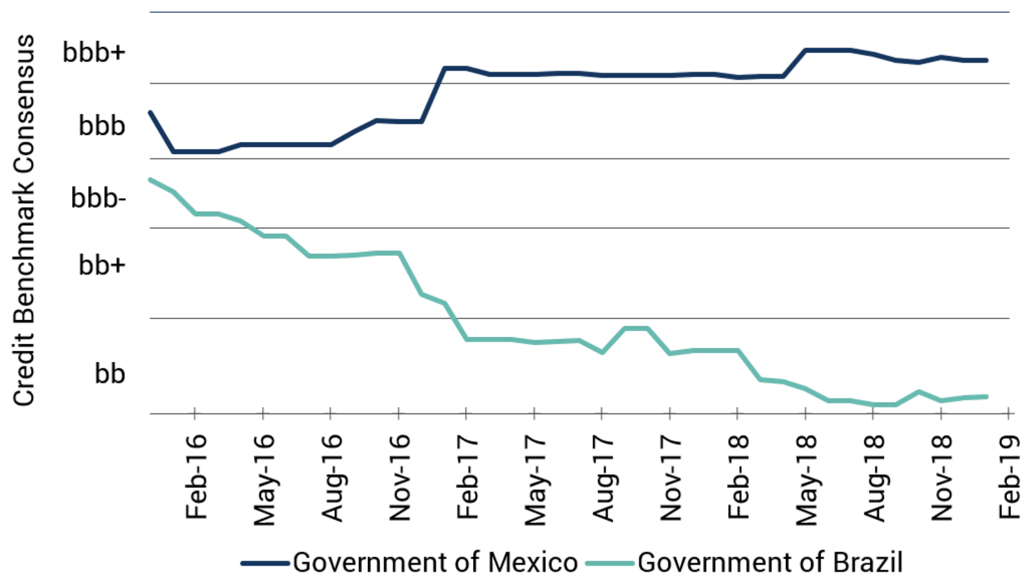
## Case Study: Brazil vs. Mexico Sovereign Risk

Brazil's stock market has risen more than 10% (in USD) so far this year, and the 10-year Government bond yield has dropped from over 11% since late 2018. After sluggish 1% growth in 2018, the 2019 forecast is for more than 2%. Incoming President Bolsonaro wants to tackle Brazil's infamously generous public pension system by raising the retirement age. His controversial vision and business-friendly agenda would present a decisive economic and social break from the country's left-wing past with potential to displace Mexico as the USA's closest ally in the region.

Mexico's stock market is up a more modest 6% since the start of the year, and bond yields have backed up slightly from 3.7% to 4.3%. US foreign and trade policies dominate the outlook, but President Obrador and Finance Minister Marquez are taking active steps to adapt to the new economic order. Mexico is now discussing tax cuts for the Mexican states in the border areas, less cooperation with the DEA, and a push for Foreign Investment (including, ironically, from the US). With a growing immigration problem of their own – mainly from Venezuela – the new administration are hoping to set an example to their Central and Southern American neighbours on how to tackle the underlying causes of migration. This involves ambitious plans for cultural changes to turn the tide of drug-related violence and related corruption.

Figure 7 shows recent Sovereign credit risk trends and notch changes for both economies.

**Figure 7:** Brazil vs. Mexico




The chart shows that, in sovereign risk terms, major financial institutions have been increasingly positive on Mexico and increasingly negative on Brazil over the past three years. Mexico now sits comfortably at **bbb+** in the Investment Grade zone; Brazil has slumped towards **bb**. With new political leaders and shifting alliances in the Americas, there may be some credit turning points ahead.

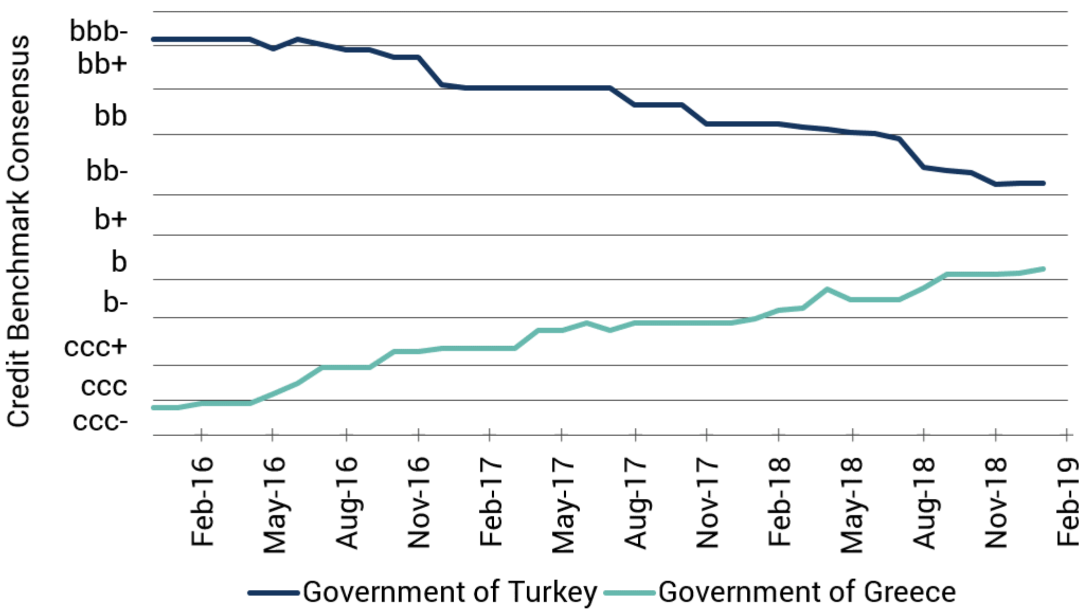
## Case Study: Turkey vs. Greece Sovereign Risk

Greece is recovering from the near-collapse of its economy and has endured but ultimately benefitted from the Troika stabilization programs. It has now exited these and successfully returned to the global bond market in March 2019. But steady progress on the Sovereign rating needs to be balanced by the legacy of a public and private debt overhang.

Turkey's government survived the 2016 coup attempt but has faced intermittent US sanctions and trade restrictions. Its struggles with the Kurdish PKK are a major reason for its continued involvement in the ongoing Syrian civil war. Turkey's geopolitical position has also brought it into periodic conflict with Russia, but the two countries have recently found common cause and, despite being a NATO member, Turkey has ordered Russian S400 missiles. Turkey's allegiances are clearly shifting and the implications for the country's economic and political future could be far-reaching.

Figure 8 shows the recent trends for Sovereign risk in both countries.

Figure 8: Turkey vs. Greece




The chart shows that Greek sovereign risk has recovered steadily from **ccc-** in 2016 to its current level of **b**. This is in direct contrast to the Turkish trend which has seen it move from **bbb-** (i.e. investment grade) to **bb-**. There is some way to go before the two trends meet, but it is looking like a less remote possibility.

## Case Study: Chinese Sovereign Credit Risk vs. Chinese Bank Credit Risk

China is critical to the global economy and is likely to become increasingly important in the decades to come. It is unique: a one party state which is still – nominally – communist, it has grown from 1960's rural subsistence to the world's second largest economy. But China is heavily dependent on exports to drive growth, so trade tensions and slowing global growth have taken the edge off recent GDP numbers.

China holds more than $1trn of US Treasury bonds – the largest international US creditor. But this is less than 10% of the outstanding stock of US Treasuries, so Chinese negotiating power vs. the US is sometimes overstated: and US tariff threats have pushed China into offering real concessions, such as a proposed increase in imports by $1trn over the next 6 years.

China has reduced bank reserve requirements to boost its economy and there are tentative signs that this may be having an effect. Although the official January Manufacturing PMI dropped further below the neutral boundary, the alternative Caixin-Markit measure bounced up and may move into expansionary territory next month.

Figure 9 shows consensus credit trends for Chinese banks compared with Chinese Sovereign risk.

Figure 9: Chinese Sovereign vs. Chinese Banks


Chinese bank risk showed a slight deterioration in 2016 and 2017, but has been steadily improving since the beginning of 2018. Sovereign risk has been erratic but the overall trend is down – consensus credit risk deteriorated by as much as 15% early last year but has recovered about half of that.

## Sovereign Risk Monthly Monitor

With growing geopolitical instability, it is increasingly important to monitor Sovereign risk. Figure 10 is part of a Credit Benchmark dashboard which provides comprehensive, monthly consensus credit monitoring for 122 Sovereigns.

**Figure 10:** Sovereign Credit Risk Monthly Monitor

| Region | Country | CB Consensus | 1M Change | 6M Change | Depth Indicator | Relative Standard Deviation | Skew |
|---|---|---|---|---|---|---|---|
| Africa | Algeria | bb- | ↘ | ↗ | 🟩 | 🟡 | |
| | Angola | b | ↗ | ⬆ | 🟩 | 🟢 | |
| | Botswana | a- | ↗ | ↘ | 🟩 | 🟡 | ⚪ |
| | Cameroon | b | | ↗ | 🟥 | 🟢 | |
| | Cote d'Ivoire | b+ | ↘ | ↗ | 🟩 | 🟢 | |
| | Ethiopia | b- | ↗ | ↗ | 🟨 | 🟡 | |
| | Gabon | b | ↗ | ⬇ | 🟥 | 🟡 | |
| | Ghana | b | ↘ | ⬆ | 🟩 | 🟢 | |
| | Kenya | b+ | ↘ | ↘ | 🟩 | 🟢 | |
| | Libya | ccc | ↗ | ↗ | 🟥 | 🟡 | ⚪ |
| | Malawi | ccc | ⬇ | ⬇ | 🟥 | 🟡 | |
| | Mauritius | bbb | ↘ | ⬇ | 🟩 | 🟢 | |
| | Morocco | bb+ | ↘ | ↘ | 🟩 | 🟡 | ⚪ |
| | Namibia | bb+ | ↗ | ↘ | 🟨 | 🟢 | |
| | Nigeria | b+ | ↘ | ↗ | 🟩 | 🟢 | |
| | Rwanda | b+ | | | 🟥 | 🟡 | ⚫ |
| | Senegal | bb- | ↗ | ⬆ | 🟩 | 🟢 | |
| | South Africa | bb+ | ↘ | ↘ | 🟩 | 🟢 | |
| | Tanzania | b | ⬇ | ⬇ | 🟨 | 🟢 | |
| | Tunisia | bb- | ↘ | ↗ | 🟩 | 🟢 | |
| | Uganda | b+ | ↘ | ↘ | 🟩 | 🟢 | |
| | Zambia | b- | ↘ | ⬇ | 🟩 | 🟢 | |
| ⋮ | | | | | | | |
| | Kuwait | aa- | ↗ | ⬆ | 🟩 | 🟡 | ⚪ |
| | Lebanon | b- | ⬇ | ⬇ | 🟩 | 🟡 | ⚪ |
| | Oman | bb+ | ↗ | ⬇ | 🟩 | 🟢 | |
| | Qatar | a+ | ↗ | ↗ | 🟩 | 🟡 | ⚪ |
| | Saudi Arabia | a | ↗ | ↗ | 🟩 | 🟢 | |
| | United Arab Emirates | aa- | ⬆ | ↗ | 🟩 | 🟡 | |
| North America | Bahamas | bbb- | ↗ | ↘ | 🟨 | 🟢 | |
| | Bermuda | a+ | ↗ | ↗ | 🟨 | 🟢 | |
| | British Virgin Islands | a | ↗ | ↗ | 🟥 | 🟢 | |
| | Canada | aa+ | ↗ | ⬇ | 🟩 | 🟡 | ⚪ |
| | Cayman Islands | aa- | ↗ | ↘ | 🟨 | 🟢 | |
| | Jamaica | b | ⬇ | ↗ | 🟥 | 🟡 | |
| | Mexico | bbb+ | ↗ | ↘ | 🟩 | 🟢 | |
| | Saint Kitts and Nevis | b+ | ↗ | | 🟥 | 🟡 | |
| | Trinidad and Tobago | bbb- | ↘ | ↘ | 🟩 | 🟢 | |
| | United States | aa+ | ↗ | ↗ | 🟩 | 🟡 | ⚪ |
| Pacific | Australia | aa+ | ↗ | ⬇ | 🟩 | 🟢 | |
| | New Zealand | aa | ↗ | ↘ | 🟩 | 🟢 | |

| Icon | Definition |
|---|---|
| ⬇ | Consensus downgrade resulting in a letter grade movement using the CBC-21 Scale |
| ↘ | Consensus deterioration that does not result in a letter grade movement using the CBC-21 Scale |
| ↗ | Consensus improvement that does not result in a letter grade movement using the CBC-21 Scale |
| ⬆ | Consensus upgrade resulting in a letter grade movement using the CBC-21 Scale |
| 🟥 | Consensus is based on a low number of observations (3 - 4 observations) |
| 🟨 | Consensus is based on medium number of observations (5 - 6 observations) |
| 🟩 | Consensus is based on a high number of observations (at least 7 observations) |
| 🟢 | Dispersion: Relative standard deviation of consensus is low (< 60%) |
| 🟡 | Dispersion: Relative standard deviation of consensus is medium (between 60% and 110%) |
| 🔴 | Dispersion: Relative standard deviation of consensus is high (>= 110%) |
| ⚫ | Skew of consensus is negative (< -1) |
| ⚪ | Skew of consensus is postive (>= 1.6) |

This report illustrates the value and power of monthly consensus credit updates. Many of the Sovereign risk views are aligned with the main agencies, but the short-term trends show considerable movement. If some of these persist, there could be a number of notch changes corresponding to agency upgrades or downgrades.

## Conclusion

Slower global growth, trade disputes, populism and geopolitical risks are some of the factors affecting Sovereign credit quality. Key conclusions:

- Developed economy Sovereign credit risk improved from the beginning of 2017 but has recently been deteriorating.
- Sovereign Risk in Emerging and Frontier economies deteriorated steadily over most of the past two years but has stabilized recently.
- Sovereign credit volatility rose steadily from early 2016 to late 2018, but median volatility has dropped in the past few months.
- Recent shifts in economic and strategic alliances are at least partly reflected in credit risk:
    - OPEC Sovereigns as a group have deteriorated 30% in the past 2 years.
    - Latin America is showing an erratic improvement.
    - Mexico and Brazil were similar in 2016 but Brazil is now 4 notches lower; this gap may start to close.
    - China is slipping as it grapples with economic challenges but its banks are improving.
    - Turkey has deteriorated while Greece is the latest rising star.

Monthly trend monitoring can uncover important clues to upcoming notch changes. Credit Benchmark provides monthly reports and alerts via the Credit Benchmark web app, Excel Add-In and data feeds.

## Appendix 1: Sovereign classifications used in aggregates

Table A.1 shows the classification used for the aggregates in Figure 1 at the beginning of this report. These aggregates include data which is not published for individual Sovereigns (because there are too few estimates to form a consensus) but where there is enough diverse data from MFIs to inform the aggregate. The full list of 150 countries that are used in the aggregates are listed below with the classification assigned to each country for the purposes of constructing the aggregates. (NB: The standard Credit Benchmark classification for single Sovereign names is slightly different).

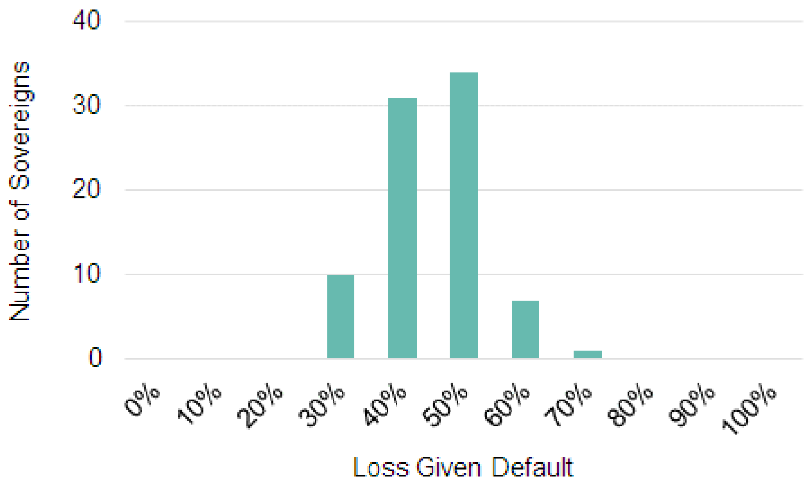
### Table A.1 Sovereign Classification used in Figure 1 Aggregates

| Developed Markets | Emerging Markets | Frontier Markets | Frontier Markets (cont.) | Frontier Markets (cont.)2 |
|---|---|---|---|---|
| Antigua and Barbuda | Albania | Algeria | Gabon | Namibia |
| Australia | Armenia | Angola | Georgia | Nepal |
| Austria | Bahamas | Argentina | Ghana | Nicaragua |
| Belgium | Bahrain | Azerbaijan | Guatemala | Nigeria |
| Canada | Barbados | Bangladesh | Guinea | Oman |
| Croatia | Belarus | Belize | Guyana | Pakistan |
| Cyprus | Brazil | Benin | Honduras | Papua New Guinea |
| Czech Republic | Chile | Bolivia, Plurinational State of | Iran, Islamic Republic of | Paraguay |
| Denmark | China | Bosnia and Herzegovina | Iraq | Romania |
| Estonia | Colombia | Botswana | Jamaica | Rwanda |
| Finland | Egypt | Brunei Darussalam | Jordan | Senegal |
| France | Grenada | Bulgaria | Kazakhstan | Serbia |
| Germany | India | Cambodia | Kenya | Sierra Leone |
| Greece | Indonesia | Cameroon | Lebanon | Sri Lanka |
| Hungary | Korea, Republic of | Congo | Lesotho | Sudan |
| Iceland | Kuwait | Congo, the Democratic Republic of t | Libya | Swaziland |
| Ireland | Macedonia, the former Yugoslav Rep | Costa Rica | Malawi | Tanzania, United Republic of |
| Israel | Malaysia | Cote d'Ivoire | Maldives | Togo |
| Italy | Mexico | Cuba | Mali | Trinidad and Tobago |
| Japan | Moldova, Republic of | Dominican Republic | Mauritania | Tunisia |
| Latvia | Montenegro | Ecuador | Mauritius | Uganda |
| Liechtenstein | Panama | El Salvador | Mongolia | Ukraine |
| Lithuania | Peru | Ethiopia | Mozambique | Uzbekistan |
| Luxembourg | Philippines | Fiji | | Venezuela, Bolivarian Republic of |
| Malta | Qatar | | | Viet Nam |
| Monaco | Russian Federation | | | Yemen |
| Netherlands | Saint Kitts and Nevis | | | Zambia |
| New Zealand | Saint Vincent and the Grenadines | | | Zimbabwe |
| Norway | Saudi Arabia | | | |
| Poland | South Africa | | | |
| Portugal | Thailand | | | |
| San Marino | Turkey | | | |
| Seychelles | United Arab Emirates | | | |
| Singapore | Uruguay | | | |
| Slovakia | | | | |
| Slovenia | | | | |
| Spain | | | | |
| Sweden | | | | |
| Switzerland | | | | |
| United Kingdom | | | | |
| United States | | | | |

## Appendix 2: Unsecured Loss Given Default / Recovery Rates for Sovereigns

In a Sovereign context, the concept of Loss Given Default ("LGD") is open to wide interpretation. Consensus data includes Unsecured LGD estimates. Each contributing financial institution will have a different view of the scope for recovering loans and taking possession of collateral in the event of a Sovereign default. Their own Government might have assets belonging to the defaulting sovereign; or loans to state-owned enterprises might be used to give leverage in negotiations. Some loans and lenders may be favored over others. Figure A.2 shows the distribution of LGD estimates across the Sovereigns in the consensus data set.

**Figure A.2** Distribution of Unsecured LGD




The highest proportion of estimates are clustered around 50%; and nearly all of the estimates are in the 30% to 60% range, with a small proportion in the 70% category. This is narrower than the equivalent distribution for corporates.

---

*Credit Benchmark brings together the credit views of experts to provide an entirely new source of consensus risk data and a unique measure of risk on 30,000+ entities globally. The published consensus ratings are based on a database of 500,000 monthly credit observations contributed by 30+ leading financial institutions. This database supports the calculation of aggregates including credit risk time series, credit transition matrices and other analytics. The current history represents nearly four years of monthly contributed data.*

**For more information, visit www.creditbenchmark.com, email info@creditbenchmark.com or contact:**

**US**
12 East 49th Street, 9th Floor
New York, NY 10017
Telephone: +1 646 661 3383

**UK**
131 Finsbury Pavement, 5th Floor
London EC2A 1NT
Telephone: +44 (0)207 099 4322