Trustworthy Digital Society Hub UNSW May 2025

**A Global Trust Index for Sovereign & Sub-Sovereign Assessments**

# Introduction

The governing institutions of a country, region, or municipality express their effectiveness through the quality of public services that they deliver. Institutions translate policy into practice through planning, funding, implementing, and maintaining service operations that fulfil complex social and economic needs. Standards of public services enjoyed by different populations reflect the competence, reliability, adaptability, innovation, and accountability of their respective governments. The capacity of governments to deliver necessary services to individuals – both on a general basis and during individuals’ critical life-events – forms a basis for their popular legitimacy. Credit ratings agencies, in their assessments of sovereign and sub-sovereign borrowers, may reasonably consider the quality of government services to inform evaluations of institutional trustworthiness.

Digital transformation enables increasingly real-time monitoring of institutional performance. Digital public service platforms support the generation of voluminous data on service quality: objective metrics for processes and outcomes, and subjective metrics for user experience and trust. Measures of public service quality constructed from this data may be able to proxy as indicators for institutional credibility at the national, regional, and local levels of government. A benchmarking indicator that standardises the measurement of government service quality – leveraging data on user-experience and public trust – could be designed for use as an input in sovereign and sub-sovereign credit assessments. This indicator – a ***global trust index*** – would be a statistic constructed to summarise quality and performance metrics across public-service portfolios of debt-issuing governments. In addition to standards of service, the index would incorporate formal assessments of the trustworthiness of digital systems underlying government service provision, capturing an emerging element of critical institutional risk.[[1]](#footnote-1)

This note will describe current assessment methodologies of the three major credit ratings agencies – Moody’s, Standard & Poor’s, and Fitch – before considering the role that a global trust index could play in supporting credit assessments in the digital age.

# Assessment Frameworks

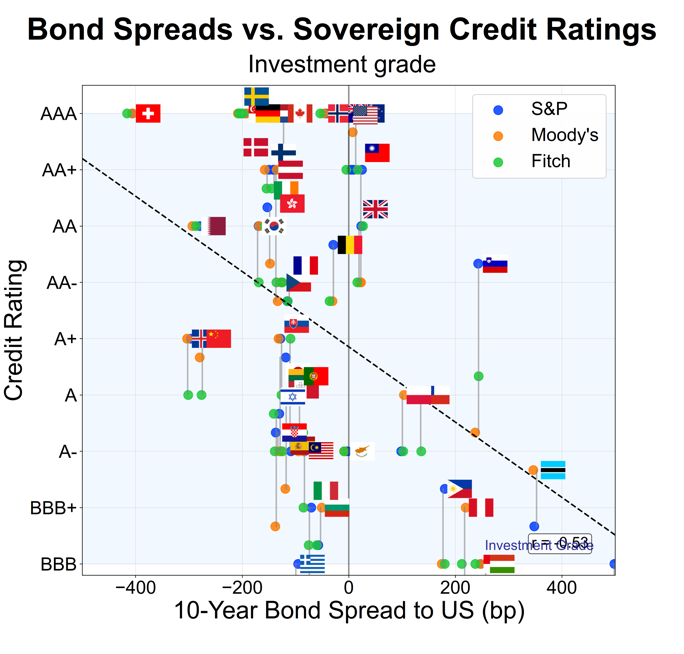
The three major credit ratings account for about 95% of credit ratings industry market share. These agencies categorise long-term debt instruments into *investment* (higher-price, lower-yield) and *speculative* (lower-price, higher-yield) grades (**Table 1**). Major agency ratings significantly affect governments’ financing costs, with prices of bonds and credit default swaps highly sensitive to the potential of major agency upgrades or downgrades. In addition to assigning ratings to government debt-instruments, agencies may also assign a positive or negative *outlook* in their assessments – indicating the direction of an expected future rating change. **Figures 1 and 2** show sovereign ratings currently assigned by the three major agencies and their negative correlation to ten-year sovereign yield spreads. Agency ratings grades have here been converted into to a common scale, with fractional adjustments for *positive* and *negative* outlooks.

***Table 1.*** *Ratings Agency Grades*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Grade | Description | S&P / Fitch | Moody’s | Countries (Averages) |
| Investment | *Prime* | AAA | Aaa | 🇨🇭 🇸🇬 🇳🇴 🇳🇱 🇩🇪 🇦🇺 🇸🇪 🇩🇰 🇨🇦 |
| *High Medium Grade* | AA+ | Aa1 | 🇳🇿 🇺🇸 🇫🇮 🇦🇹 |
| AA | Aa2 | 🇶🇦 🇹🇼 🇮🇪 🇰🇷 🇭🇰 |
| AA- | Aa3 | 🇬🇧 🇧🇪 🇨🇿 🇫🇷 |
| *Upper Medium Grade* | A+ | A1 | 🇮🇸 🇸🇮 🇯🇵 🇨🇳 |
| A | A2 | 🇱🇹 🇲🇹 🇨🇱 🇵🇹 🇸🇰 |
| A- | A3 | 🇵🇱 🇪🇸 🇭🇷 🇨🇾 🇮🇱 🇲🇾 |
| *Lower Medium Grade* | BBB+ | Baa1 | 🇧🇼 🇧🇬 |
| BBB | Baa2 | 🇵🇭 🇮🇹 🇮🇩 🇵🇪 🇰🇿 🇲🇽 |
| BBB- | Baa3 | 🇭🇺 🇬🇷 🇮🇳 🇲🇺 🇷🇴 |
| Speculative | *Speculative* | BB+ | Ba1 | 🇨🇴 🇷🇸 🇲🇦 🇻🇳 |
| BB | Ba2 | 🇧🇷 |
| BB- | Ba3 | 🇿🇦 🇯🇴 🇳🇦 🇹🇷 |
| *Highly Speculative* | B+ | B1 | 🇧🇩 |
| B | B2 | 🇧🇭 |
| B- | B3 | 🇺🇬 🇳🇬 🇪🇬 🇰🇪 |
| *Substantial Risk* | CCC+ | Caa1 | 🇵🇰 |
| CCC | Caa2 |  |
| CCC- | Caa3 | 🇱🇰 |
| *Extremely Speculative* | CC | Ca |  |
| C | 🇿🇲 🇺🇦 |
| *In Default* | D | C |  |
| No Rating |  |  |  | 🇷🇺 |

***Figure 1. Figure 2.***

A graph of different countries/regions

Description automatically generated 

Varying levels of detail on assessment frameworks have been made public by the three major agencies, although the precise methods used to determine credit ratings are proprietary and subject to regular change. All three agencies assign ratings based on similar sets of factors, making extensive use of primary data from established international sources including the International Monetary Fund (IMF), the World Bank, national statistics offices, and central banks. These can be supplemented using secondary (external) data sources, which commonly provide the indicative metrics used to score the qualitative institutional characteristics of governments.

## Moody’s

Moody's sovereign ratings are the outcome of a committee process that applies qualitative judgement to a quantitative scorecard. The scorecard is based on four factors:

1. **Economic Strength.** Assesses the inherent strength and resilience of the sovereign's economy using Gross Domestic Product (GDP) statistics for *Economic Scale (35%), Income Level (25%), Growth (30%)* and *Volatility (10%).*[[2]](#footnote-2)
2. **Institutions & Governance Strength.** Assesses more qualitative properties of sovereigns:

* the quality of legislative and executive institutions *(20%)*
* the strength of civil society and the judiciary *(20%)*
* the effectiveness of fiscal policy *(30%)*
* the effectiveness of monetary and macroeconomic policy *(30%)*.

Although these are qualitative properties, they are measured using quantitative external indicators, primarily the **World Bank Worldwide Governance Indicators (WGI).** The WGI include indicators for *Regulatory Quality*, *Government Effectiveness*, *Voice & Accountability, Rule of Law,* and *Control of Corruption*. The World Economic Forum (WEF) Global Competitiveness Index (CGI) has also been referenced for components relating to market efficiency, infrastructure, innovation, and education, and the IMF referenced for information on data adequacy for surveillance and assessments. World Bank Country Policy and Institutional Assessments (CIPA) have also been referenced, along with other independent external sources. Assessments of **Institutions & Governance Strength** are adjusted according to government default history and track record of arrears.

1. **Fiscal Health.** Assesses the sustainability of government finances using g*overnment debt burden (50%)* – the average of debt-to-GDP and debt-to-revenue ratios – and g*overnment debt affordability (50%)* – the average of the ratios of interest-payments-to-GDP and interest-payments-to-revenue. Adjustments to this factor are made according to expected changes in debt burden, the share of foreign-currency-denominated debt, and the value of public assets (including sovereign wealth funds).
2. **Susceptibility to Event Risk.** Assesses vulnerability to sudden, disruptive events, using four sub-factors:

* ***Political Risk:*** domestic political and geopolitical instability. Assessment refers to World Bank WGIs, along with socioeconomic indicators for unemployment and inequality.
* ***Government Liquidity Risk:***failure of government cash flow.
* ***Banking Sector Risk:***failure of national banking or payments systems.
* ***External Vulnerability Risk:***risks originating from current account position and its financing structure, sustainability of external liabilities, and access to hard currency. Risks from environmental factors also included.

Moody’s combines the **Economic Strength** and **Institutions & Governance Strength** factors with equal weights to produce an **Economic Resiliency** score. This is combined with the **Fiscal Health** factor to produce the **Government Financial Strength** assessment, with dynamic weights used that increase the relative importance of **Economic Resiliency** for wealthier sovereigns and increase the relative importance of **Fiscal Health** for less wealthy sovereigns. **Figure 3** shows weights typical for the wealthiest sovereigns (only one-quarter assigned to the **Fiscal Health** factor). The **Government Financial Strength** assessment can then be adjusted (*downward only*) according to the **Susceptibility to Event Risk** assessment, which uses a **minimum function** for aggregation that lets the weakest of its sub-factors determine its overall score. The final ratings decision is determined by the qualitative judgement of a **ratings committee**, which may consider various factors idiosyncratic to the sovereign.

***Figure 3.***

**Moody’s Sovereign Assessment Framework**

**Susceptibility to Event Risk**

Negative adjustment

(-2 to 0)

***worst of:***

**- political risk**

**- liquidity risk**

**- banking risk**

**- external vulnerability risk**

**Fiscal Health**

**- interest / revenue**

**- interest / gdp**

**- debt / revenue**

**- debt / gdp**

**Government Financial Strength**

*Dynamic weights ranging from* ***25:75*** *to*

***50:50*** *for* ***Fiscal Health : Economic Resiliency***

**Economic Resiliency**

**Institutions & Governance Strength**

**- legislative & executive institutions**

**- civil society & judiciary**

**- fiscal policy effectiveness**

**- monetary & macroeconomic policy effectiveness**

**Economic Strength**

**- scale**

**- income level**

**- growth rate**

**- volatility**

**Ratings Committee**

Qualitative Judgement

Sovereign

Rating

Moody's methodology for international sub-sovereign – Regional and Local Government (RLG) – ratings begins with a **Baseline Credit Assessment** of the sub-sovereign’s standalone credit strength, aggregating four **Weighted Factors**:

1. **Economy (25%):** *Regional Income* (15%, per capita GDP PPP), *Economic Growth* (5%), and *Economic Diversification* (5%, balance of local / regional economic activity across economic sectors).
2. **Institutional Framework and Governance (30%):**

* *Institutional Framework (15%):* the extent to which the prevailing framework for government powers and responsibilities is mature, robust, stable, and clearly defined in law; the process to change the framework is transparent and deliberate; and the framework provides for strong revenue-generating and expenditure flexibility.
* *Governance (15%):* the strength and transparency of fiscal planning and budget management.

1. **Financial Performance (20%):** *Operating margin* (10%), *liquidity ratio (5%), ease of access to funding (5%).*
2. **Leverage (25%):** *Debt burden* (15%) and *interest burden* (10%), as ratios to operating revenue.

The preliminary **Baseline Credit Assessment** is then adjusted according to:

* three ***Idiosyncratic Notching Factors:*** *Significant Pressures from Material Pension Obligations or Contingent Liabilities* (negative); *Ample Liquidity that Minimizes Borrowing Needs* (positive) and *Expected Trend in Fiscal Performance* (negative or positive); and
* a ***Macro Operating Assessment*** incorporating two factors: one for the influence of the Sovereign Rating on the Sub-sovereign; and an *Operating Environment* factor that considers the broader macroeconomic environment and institutional framework along with the extent of ordinary support from higher tiers of government.

The resulting **Baseline Credit Assessment** is evaluated together with an assessment of **Extraordinary Support**; the willingness and ability of a higher-tier government to support an RLG in financial stress beyond ordinary levels. The latter assessment is primarily based on five factors:[[3]](#footnote-3)

1. *Legal Framework / Policy*:the institutional requirements for (or barriers to) a higher-tier government providing support.
2. *Reputational Risk:* incentives for higher-tier government to mitigate the damage caused by the LRG default.
3. *Moral Hazard*: incentives for higher-tier government to avoid setting bailout precedents that may foster imprudent budgetary practices.
4. *Strategic Role:* attributes of the RLG that are relevant to the support decision.
5. *Bailout History*: the higher-tier government’s track record of providing extraordinary support.

Other factors – environmental, social, governance, liquidity, financial control, and event risk – may be considered by committee in final adjustments to the ratings decision (**Figure 4**). Unlike for sovereign assessments, Moody’s does not report on the use of external indicators for sub-sovereign assessments.

***Figure 4.***

**Moody’s Sub-Sovereign Assessment Framework**

International LGRs

**Weighted Factors**

**Idiosyncratic Notching Factors**

* Pension Obligations / Contingent Liabilities (-2 to 0)
* Liquidity (0 to +1)
* Expected Fiscal Trend

(-2 to + 2)

Sovereign Rating

**Baseline Credit Assessment**

**Leverage 25%**

**- debt burden**

**- interest burden**

**Economy 25%**

**- income**

**- growth**

**- diversification**

**Extraordinary Support**

**Likelihood of Support**

* Legal Framework / Policy
* Reputational Risk
* Moral Hazard
* Strategic Role

**Joint Default Analysis**

**Macro Operating Assessment**

**Financial Performance 20%**

**- operating margin**

**- liquidity ratio**

**- ease of access to funding**

**Sovereign Rating Threshold**

**Ratings Committee**

Qualitative Assessment

**Institutional Framework & Governance 30%**

**- institutional framework**

**- governance**

**Operating Environment**

* Macroeconomic Environment
* Institutional Framework
* Ordinary Support from Higher-Tier Governments

Sub-Sovereign Rating

Because the influence of the sovereign rating on the sub-sovereign rating is much less important for RLGs inside the United States than internationally, Moody’s uses different frameworks for credit assessments of sub-sovereigns inside the United States. The U.S. frameworks do not reference the sovereign rating, with no **Extraordinary Support** assessment made due to a long-standing precedent against U.S. federal bailouts of subnational governments. The same four **Weighted Factors** are used, with differences in weights and in the component sub-factors. One set is used for U.S. state (and territory) governments and another for municipal (city and country) governments, with alternative quantitative inputs for sub-factors leveraging the availability of consistent data based on U.S. financial reporting standards (**Table 2**). Lower weights for the **Institutional Framework** factor in U.S. sub-sovereign assessments reflects the country’s more homogenous institutional and legal environment, with the ***Macro Operating Assessment***also omitted.[[4]](#footnote-4)

***Table 2.*** *Moody’s Sub-Sovereign Weighted Factors Weights*

|  |  |  |  |
| --- | --- | --- | --- |
| Factor | International (non-U.S.) | U.S. States & Territories | U.S. Cities & Counties |
| Economy | **25%**   * *Regional Income / GDP PPP (15)* * *Growth (5)* * *Diversification (5)* | **30%**   * *Resident Personal Consumption Income (15)* * *Growth vs U.S. National Growth (15)* | **30%**   * *Resident Median Household Income (10)* * *Property Tax Base (10)* * *Growth vs U.S. National Growth (10)* |
| Institutional Framework & Governance | **30%**   * *Institutional Framework (15)* * *Governance (15)* | **20%**  *Qualitative assessment of fiscal planning & management, debt management, revenue expenditure and flexibility* | **10%**  *Qualitative assessment of fiscal planning & management, debt management, revenue expenditure and flexibility* |
| Financial Performance | **20%**   * *Operating Margin (10)* * *Liquidity Ratio (5)* * *Ease of Access to Funding (5)* | **20%**  *Qualitative assessment of fund balance levels, liquidity strength, and structural balance* | **30%**   * *Available Fund Balance Ratio (20)* * *Liquidity Ratio (10)* |
| Leverage | **25%**   * *Debt Burden (15)* * *Interest Burden (10)* | **30%**   * *Long-term Liabilities Ratio (20)* * *Fixed-costs Ratio (10)* | **30%**   * *Long-term Liabilities Ratio (20)* * *Fixed-costs Ratio (10)* |

## Standard & Poor’s (S&P’s)

The S&P’s sovereign assessment methodology is based on two profiles incorporating five assessments:

1. **Institutional and Economic Profile:** the average score from two assessments:

* ***Institutional Assessment:*** the capacity to deliver sustainable public finances and balanced economic growth, and to respond effectively to economic and political shocks.
* ***Economic Assessment:*** income levels (GDP per capita at PPP), economic growth prospects, and economic diversity and volatility (based on sectoral composition of production and exports).

1. **Flexibility and Performance Profile:** the average score from three assessments:

* ***External Assessment:*** external position and liquidity with the rest of the world; status of sovereign’s currency in international transactions
* ***Fiscal Assessment:*** sustainability of a sovereign's fiscal policy, with components *Fiscal Performance and Flexibility* (trends and vulnerabilities) and *Debt Burden* (structure of debt, funding access and contingent liabilities)
* ***Monetary Assessment:*** evaluation of monetary policy credibility, the exchange-rate regime and its impact on policy coordination, and the diversification of the financial system and capital markets.

The two profiles are combined using a **risk matrix,** which specifies a particular outcome for every possible combination of profile levels.[[5]](#footnote-5) The resulting ***indicative rating level*** may then be modified according to ***supplemental adjustment factors*** (such as liquidity positions or significant event risk) to determine the final sovereign credit rating. Unlike Moody’s, S&P does not prescribe specific external indicators for sovereign assessments, although explanatory documentation implies that similar sources (e.g. World Bank WGIs) are likely to be referenced.

S&P’s international sub-sovereign (LRG) assessments are based on two primary assessments:

1. **Institutional Framework Assessment:** a composite of three factors:
   * ***Predictability (25%):***stability and predictability of institutional framework; frequency and impact of changes in laws, regulations, and intergovernmental fiscal arrangements.
   * ***Revenue and Expenditure Balance (50%):***adequacy of revenue to cover mandated services, flexibility to adjust revenues and expenditures, and overall fiscal discipline.
   * ***Transparency and Accountability (25%):***quality of financial statements, level of disclosure, effectiveness of oversight mechanisms.
2. **Individual Credit Profile Assessment:** a composite of five equally-weighted factors:
   * ***Economy:***socioeconomic profile, economic diversification, and growth prospects.
   * ***Financial Management:*** managerial quality and political impact on willingness and ability to service debt.
   * ***Budgetary Performance:*** level and volatility of cash flows for debt service.
   * ***Liquidity:*** adequacy of internal and external liquidity sources relative to servicing needs.
   * ***Debt burden:*** debt and interest relative to consolidated operating revenues.

The **Institutional Framework Assessment** and **Individual Credit Profile Assessment** are combined using a risk matrix to create a preliminary rating, which may then be adjusted according to the influence of the sovereign rating and other supplemental factors to arrive at the final credit assessment. For the same reasons as Moody’s, S&P’s distinguishes the assessment methodology for sub-sovereigns inside the United States. The U.S. framework is similar but removes the influence of the sovereign rating, while employing a slightly modified set of factors and quantitative inputs for the **Individual Credit Profile**.[[6]](#footnote-6)

## Fitch

Fitch’s framework is based on a quantitative **Sovereign Rating Model** that incorporates eighteen macro-fiscal and external features. These features are organised into four categories and combined using variable weights:[[7]](#footnote-7)

1. **Structural Features (53.7%):** *Composite governance indicator (22);[[8]](#footnote-8) GDP per capita (11.8); Share in world GDP (14.3); Default / restructuring record (4.5); Money supply (1.1)*
2. **Macroeconomic Performance (9.9%):** *Real GDP growth volatility (4.5); Consumer price inflation (3.6); Real GDP growth (1.8)*
3. **Public Finances (18.8%):** *Gross government debt (9); Interest payments (4.6); Budget balance (2.1); Foreign-currency government debt (3.0)*
4. **External Finances (17.6%):** *Reserve currency flexibility (7.2); Sovereign net foreign assets (7.5); Commodity dependence (1.1); Official international reserves (1.3); External interest service (0.2); Current account plus net Foreign Direct Investment (0.3)*

The rating generated by the **Sovereign Rating Model** is then refined by a **Qualitative Overlay** which adjusts the four factors based on considerations including forward-looking governance, policy credibility, fiscal financing flexibility, event risk, and banking-sector liabilities. Final adjustments to the rating may be made based on **Extraordinary Considerations**, which includetail-events such as war or banking crises.

Fitch’s methodology for international Sub-Sovereigns is based on a risk-matrix combining:

1. **Risk Profile:** a composite of scores for six factors associated with risks to a borrower’s capacity to meet financial commitments; *Revenue robustness; Revenue adjustability; Expenditure sustainability; Expenditure adjustability; Liabilities-and-liquidity robustness; Liabilities-and-liquidity flexibility.*
2. **Financial Profile**: an evaluation of debts relative to funding resources, with different ratios and formulae used depending on the nature of government revenue structures (either municipalities or broad-taxing regions and provinces).

The risk matrix produces a **Standalone Credit Profile**, which may then be adjusted according to the sovereign rating, estimations of extraordinary support, and other considerations. Like the other two major agencies, Fitch uses an alternative methodology (without any risk matrix) to rate sub-sovereigns inside the United States. Assessments of U.S. state governments are based on four “key rating drivers”:

1. ***Revenue Framework:*** Long-term growth prospects and the ability to raise taxes or fees.
2. ***Expenditure Framework****:* Expected baseline spending growth versus revenue trend and the ability to cut or defer costs.
3. ***Long-Term Liability Burden:*** Net tax-supported debt plus unfunded retirement liabilities.
4. ***Operating Performance:*** Reserve levels, historical budget management, stress-test performance.

Analyst judgement – rather than a specific set of weights – is used to combine the four drivers, with a minimum function potentially used for aggregation. The RLG’s finances are stress-tested against a severe-but-plausible downturn scenario to determine a provisional rating, which may then be adjusted according to considerations such as event risk to arrive at a final rating. The methodology for states differs from local governments, with the latter substituting the four key drivers with a **Local Government Rating Model** – similar to Fitch’s **Sovereign Rating Model** – based on twelve standard metrics that capture the local government’s financial profile, demographic and economic strength, and long-term liability burden.

# Incorporating a Global Trust Index in Credit Assessments

Credit ratings of sovereigns are principally based on official (primary-source) economic and financial indicators, such as GDP, debt ratios, and fiscal balances, albeit with substantial variation between agencies in their selection and weighting. Ratings agencies recognise that these objective indicators cannot capture the full range of factors affecting a government’s creditworthiness, with the quality of institutions and governance – and the related prospect of political risk – also highly relevant. Credible borrowers are associated with effective and reliable institutions that support economic confidence and social cohesion: stable and transparent systems for law-making, reliable official data, judicial integrity, and professional public administrations. Although institutional and governance qualities cannot be directly measured, they are nevertheless assigned substantial shares in the quantitative assessment frameworks of all three major rating agencies (**Table 3**).

## Quantifying Institutional Properties

Institutional quality factors are included in ratings frameworks to indicate the effectiveness and reliability of governmental structures and processes, differentiating borrowers with otherwise similar macroeconomic and fiscal profiles. The prominence of institutional factors varies across agencies, but is consistently significant.

***Table 3.*** *Qualitative Components in Agency Frameworks*

|  |  |  |  |
| --- | --- | --- | --- |
| Factor | Moody’s | S&P | Fitch |
| Label in methodology |  |  |  |
| Direct share of the scorecard |  |  |  |
| Core sub-components |  |  |  |
| Primary external data feeds |  |  |  |
| Sub-sovereign treatment |  |  |  |
| Qualitative overlay / committee levers |  |  |  |
| Distinctive emphasis |  |  |  |

intended to represent the effectiveness and reliability of governmental structures and processes In Moody's methodology, the **Institutions & Governance Strength** factor represents approximately 20-30% of the initial sovereign assessment, with its influence extended through the ***Political Risk*** component. S&P's **Institutional Assessment** effectively represents around 25% of the preliminary rating calculation, while Fitch's *Composite Governance Indicator* is the single most significant feature in the **Sovereign Rating Model**, with 22% of overall explanatory power before Qualitative Overlays. Institutional quality factors are also important sub-sovereign assessment components – generally focusing on transparency and accountability in financial management practices – but carry lower explicit weights; around 10% to 30% depending on the jurisdiction and agency. In addition to the inclusion of institutional quality assessments as primary weighted components, all ratings frameworks allow discretion in their use as adjustment factors to final ratings.

Agencies cannot rely on primary data sources to quantify these intangible institutional qualities in their assessment frameworks. Instead, agencies rely on external indicators, primarily the **World Bank's Worldwide Governance Indicators (WGI)**;six composite indices that measure broad dimensions of governance for over 200 countries. Published annually since 1996 (with the latest data for 2023), the six indicators aggregate information from around 35 existing third-party sources, including representative surveys of citizens, households, and firms, and structured evaluations by subject-matter experts. [[9]](#footnote-9) The source indicators are grouped and aggregated to derive indices for:

1. ***Rule of Law:*** confidence in the legal framework, enforcement quality, judicial impartiality, and contract enforcement.
2. ***Control of Corruption:*** extent to which public power is exercised transparently, limiting corruption's detrimental impact.
3. ***Government Effectiveness:*** the quality of public services, civil service capacity, policy formulation, and implementation efficacy.
4. ***Political Stability and Absence of Violence/Terrorism:*** perceptions of government stability, likelihood of political unrest, and violence impacting governance continuity.
5. ***Voice and Accountability:*** the degree to which citizens can participate in governance, exercise freedom of expression, and hold governments accountable.
6. ***Regulatory Quality*** examines the government's capacity to establish and implement sound policies and regulations promoting private-sector development.

The Moody's methodology directly maps these WGI dimensions to numerical rating inputs.

Their explicit benchmarks define Legislative & Executive Institutions scores ranging from 1.5 for AAA-rated sovereigns to -1.5 for CA-rated entities, with this component representing 35% of the Institutions & Governance Strength factor. Civil Society & Judiciary Strength, similarly weighted at 20%, draws directly from WGI indicators for rule of law, corruption control, and accountability measures. Domestic and geopolitical risk assessments incorporate WGI political stability and voice/accountability metrics as fundamental inputs.

The Fitch Composite Governance indicator is based on a simple arithmetic mean of four of the six indicators; Political Stability/Absence of Violence and Regulatory Quality were dropped in the 2020 revision because they were highly collinear with other SRM variables and added little explanatory power.

However, the current reliance on WGI measures presents limitations that become particularly acute for sub-sovereign assessments. The WGI framework operates primarily at national levels, providing limited granular insight into regional and local institutional variations that can significantly impact sub-sovereign creditworthiness. This constraint may partially explain why institutional factors receive lower explicit weightings in sub-sovereign methodologies—not because institutional quality matters less for cities, states, or provinces, but because reliable data sources remain unavailable for systematic assessment.

Moreover, existing approaches emphasise governmental flexibility to reduce expenditures during fiscal stress, treating service-cutting capacity as a positive institutional attribute. Yet this perspective may fundamentally misunderstand the relationship between service quality and economic sustainability. The experience of municipalities like Detroit demonstrates that aggressive service reductions can accelerate rather than arrest economic decline, creating destructive cycles where reduced public services drive out residents and businesses, eroding the tax base and making fiscal recovery increasingly difficult.

## Observability of Institutional Quality

A reliable measure of government service quality—incorporating both service delivery effectiveness and user trust—could potentially provide a more accurate proxy for institutional quality than current methodologies allow. Such an approach would capture institutional effectiveness through observable outcomes rather than external perceptions, while providing the granular sub-national data that agencies currently lack. Rather than emphasising governments' capacity to reduce services, a service quality-based assessment would evaluate their capacity to maintain effective service delivery even under fiscal pressure—a more meaningful test of institutional resilience and a better predictor of long-term economic sustainability.

**Sovereign creditworthiness = institutionalised trust**

1. **What investors must trust**  
   *Credit risk is ultimately the risk that a government will* ***choose or be forced*** *to break its promises.* Rating agencies formalise two intertwined kinds of trust:
   * **Capacity trust** – confidence that the state can marshal resources (tax base, seigniorage, external liquidity).
   * **Willingness trust** – confidence that political and legal institutions will keep leaders from opportunistic default or policy lurches. S&P’s very first lines make this explicit: sovereign ratings gauge a government’s *“ability* ***and willingness*** *to service obligations”*.[S&P Global](https://www.spglobal.com/ratings/_division-assets/pdfs/021519_howweratesovereigns.pdf)
2. **How the big agencies quantify “willingness trust”**

| **Agency** | **Trust proxy inside the model** | **Where it sits in the rating mechanics** | **Why it matters** |
| --- | --- | --- | --- |
| **S&P Global** | *Institutional assessment* (rule‑of‑law, policy credibility, transparency) | One of five pillars; averaged with “Economic” pillar to form the **Institutional & Economic Profile** that sets the top half of the indicative rating matrix. A one‑score swing here typically shifts the final rating 1–2 notches.[S&P Global](https://www.spglobal.com/ratings/_division-assets/pdfs/021519_howweratesovereigns.pdf) | Directly captures how trusted the policy framework is to deliver “sustainable public finances” and respond to shocks. |
| **Moody’s** | *Institutions & Governance Strength* factor (four sub‑factors on legislative quality, judiciary, fiscal‑policy and monetary‑policy credibility) | Combined with economic data to create **Economic Resilience**; carries ≈ 25 % of the numeric scorecard weight before committee overlay.[Moody's Ratings](https://ratings.moodys.com/api/rmc-documents/395821) | Acts as both a ceiling (persistent arrears/defaults yank it down) and an early‑upgrade lever when governance reforms gain traction. |
| **Fitch** | Composite of the **World Bank Governance Indicators (WBGI)** | WBGI has the **single‑largest variable weight (20 %)** in Fitch’s Sovereign Rating Model—the heaviest of any input driving the initial SRM score.[Fitch Ratings](https://www.fitchratings.com/research/sovereigns/esg-remains-key-rating-driver-for-sovereigns-08-04-2019?utm_source=chatgpt.com) | Gives governance the decisive vote when macro numbers are similar across peers. |

 **Why trust shifts move markets—and ratings**

* Investor risk premia rise the moment the *narrative of trust* frays, even if debt ratios have not yet changed (e.g., Greek spreads in 2010, UK gilt sell‑off in 2022).
* Rating committees can act pre‑emptively: Scope has warned that sustained erosion of *trust in the US dollar’s “exceptional status”* would trigger a U.S. downgrade despite strong fiscal capacity—purely a trust (willingness) problem.[Reuters](https://www.reuters.com/markets/european-rating-agency-scope-sends-us-downgrade-warning-2025-04-15/)

 **Channels through which institutional trust translates into credit outcomes**

| **Channel** | **Trust‑rich sovereigns** | **Trust‑poor sovereigns** |
| --- | --- | --- |
| **Policy predictability** | Clear fiscal rules, independent central bank, transparent statistics. | Ad‑hoc budgets, politicised central bank, data opacity. |
| **Crisis response** | Rapid counter‑cyclical spending, credible debt‑management agency; markets accept higher temporary deficits. | Forced austerity or arrears; sudden‑stop in market access. |
| **Legal enforceability** | Strong courts and creditor rights deter unilateral restructuring. | History of selective default or retroactive legislation increases “willingness risk”. |
| **Social contract** | High domestic compliance with taxes; low default stigma if population trusts government stewardship. | Low compliance, populist backlash against external creditors. |

Credit analysts treat “institutional quality” as shorthand for the credibility, competence and predictability of a state’s policymaking apparatus. A well-constructed **Government-Service-Quality Index (GSQI)** can serve as a direct, observable proxy for those attributes and therefore slot naturally into existing ratings frameworks that already reward effective institutions. Here is how that would work in practice.

### 1 What the index would measure

A GSQI should capture the citizen’s experience of core public services that only the sovereign can deliver or regulate:

* **Ease, speed and transparency of administrative procedures** (e.g., time to register a business, obtain a passport, clear customs).
* **Reliability of critical utilities and digital infrastructure** (electricity-grid uptime, broadband coverage, cyber-resilience of public portals).
* **Outcome-oriented social services** (primary-health coverage, basic-education completion, vaccination logistics).
* **Public-finance interfaces** (online tax filing, open-budget portals, accuracy and punctuality of fiscal statistics).
* **Citizen-feedback or complaints-resolution systems** (percentage of grievances resolved within statutory deadlines).

Collected across countries on a consistent methodology, these indicators yield an annual composite score that rises when states modernise workflows, digitise back offices and embed service charters, and falls when capacity or probity deteriorates.

### 2 Why a service-quality gauge is a valid stand-in for institutional strength

Good service quality is impossible without clear rules, professional civil services, data-driven monitoring and political accountability—all of which underpin a sovereign’s willingness and ability to repay. Empirically, countries with high scores on the World Bank’s **Government Effectiveness** index or the OECD’s **Government at a Glance** metrics tend to enjoy lower bond spreads and higher credit ratings. A purpose-built GSQI refines that signal by focusing on deliverables the average citizen (and investor) can verify, thereby strengthening the behavioural link between day-to-day governance and macro-level repayment culture.

### 3 Embedding the GSQI in a ratings scorecard

| **Existing Moody’s factor** | **Where GSQI could fit** | **Practical integration step** |
| --- | --- | --- |
| **Institutions & Governance Strength** | Under the “quality of legislative & executive institutions” sub-factor | Re-scale GSQI to the same 0–100 percentile universe used for Worldwide Governance Indicators, map percentile bands to Moody’s six-point scale (“aaa” to “caa”), and weight alongside Government Effectiveness/Regulatory Quality. |
| **Susceptibility to Event Risk – political** | Early-warning overlay | A one- or two-year deterioration of ≥ 15 percentile points could trigger a committee discussion of heightened social-unrest or policy-reversal risk. |
| **Fiscal Strength – expenditure efficiency** | Qualitative notch | If GSQI shows sustained improvement at constant spending ratios, analysts could grant a +1 fiscal-management notch to reflect better value for money. |

For an investor’s proprietary model the same logic applies: regress historical GSQI levels (or changes) against subsequent bond-spread movements and default episodes, choose the coefficient that maximises out-of-sample predictive power, and translate the result into a basis-point adjustment.

### 4 Testing the link: data analytics blueprint

1. **Assemble a panel** of annual GSQI scores, sovereign credit ratings and control variables (debt-to-GDP, GDP growth, inflation, terms-of-trade shocks) for at least two decades.
2. **Run fixed-effects regressions** of rating notches (or EMBI spreads) on lagged GSQI, controlling for macro fundamentals. A materially negative coefficient on GSQI → spread indicates that better service delivery lowers perceived risk.
3. **Stress-test** by dropping high-income OECD members to ensure the relationship is not driven solely by income.
4. **Validate stability** across crises—e.g., does GSQI deterioration precede downgrades during the Arab Spring or COVID-19?
5. **Translate** the coefficient into a weight: if a 10-point GSQI gain historically tightens spreads by the same amount that a one-notch Moody’s upgrade does, then the GSQI deserves roughly a one-notch equivalence in the model.

### 5 Benefits and caveats

* **Timeliness**: Service-delivery data, especially when scraped from digital-government dashboards, update faster than multi-year governance surveys.
* **Granularity**: Because each component is observable, analysts can pinpoint which branch of the state is eroding trust.
* **Mitigation of perception bias**: Hard service metrics rely less on opinion polls (which can be noisy in polarised societies).
* **Coverage gaps**: Low-income or fragile states may lack consistent administrative data, requiring imputation or satellite-derived proxies (e.g., night-light stability for utilities).
* **Endogeneity**: Better services may themselves result from higher income; the statistical design must separate wealth effects from institutional effects—instrumental variables such as historical civil-service reforms help here.

**In short,** a Government-Service-Quality Index converts abstract notions of “good governance” into concrete, trackable evidence that the state can mobilise resources and execute policy—the very qualities that credit rating agencies and bond investors ultimately have to trust when they buy sovereign debt.

Several large-sample studies confirm that **observable service-delivery performance—captured statistically by “government effectiveness” or similar public-administration scores—shows up in the very outcomes that rating agencies and markets care about: credit ratings, CDS spreads and primary-market bond pricing.**

Early evidence came from IMF researchers analysing 104 emerging-market and developing economies between 1995 and 2013. After controlling for debt ratios, growth and global risk appetite, they found that countries in the top quartile of the World Bank’s *Government Effectiveness* index paid, on average, **140 basis points less** at issuance than peers in the bottom quartile, and that the same indicator was one of the few governance variables that remained significant in every robustness test. [IMF](https://www.imf.org/external/pubs/ft/wp/2015/wp15275.pdf)

A follow-up panel study covering 74 advanced and emerging economies between 2001 and 2016 used daily five-year CDS data and again reported a strong link: a one-standard-deviation improvement in government effectiveness lowered sovereign CDS spreads by roughly **12 %**; the effect was larger where baseline credit risk was already high, implying that good service provision becomes most valuable when macro fundamentals are weak. [ScienceDirect](https://www.sciencedirect.com/science/article/pii/S0378426618300736?utm_source=chatgpt.com)

More recently, a 2023 article in *Economic Modelling* re-estimated the classic Cantor-Packer credit-rating equation with modern political-economy variables and showed that **institutional-service quality alone accounts for about one-quarter of the explanatory power in Moody’s and S&P notch outcomes** once economic size and solvency ratios are included. Removing the variable caused out-of-sample rating errors to double. [ScienceDirect](https://www.sciencedirect.com/science/article/pii/S1544612323000302?utm_source=chatgpt.com)

Finally, evidence from the euro-area crisis literature points in the same direction. A panel of ten-year bond spreads for EU “convergence” countries found that, even after the Maastricht fiscal criteria were met, markets continued to discriminate on the basis of *Government Effectiveness*—spreads in new member states with weaker bureaucracies averaged **50–60 bp higher** than in peers with similar debt ratios but stronger public-service delivery. [European Central Bank](https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1093.pdf?utm_source=chatgpt.com)

Taken together, the findings validate the idea that a dedicated **Government-Service-Quality Index** would be more than a cosmetic add-on: it captures dimensions of trust and execution capacity that investors already price and that rating agencies increasingly formalise in their institutional-strength pillars.

1. See the accompanying TDS note *An Index for Trustworthy Government in the Digital Age.* [↑](#footnote-ref-1)
2. *Scale* is measured using Nominal GDP, the annual value of all final domestic production (production for final consumption, investment, or export) gross of capital depreciation and net of imports. *Income* is per capita GDP adjusted for Purchasing Power Parity (PPP). PPP accounts for price differentials between countries and generally raises real-income estimates for lower-income countries. *Growth* is ten-year centred-average GDP growth, using five-year future growth forecasts published by the annual IMF World Economic Outlook (WEO). *Volatility* is measured as the Median Absolute Deviation in GDP growth over ten years. [↑](#footnote-ref-2)
3. The five factors determine a ***Likelihood of Support*** assessment, which is considered jointly in the **Extraordinary Support** assessment with the higher-tier supporting government’s credit rating and a ***Joint Default Analysis*** which incorporates an estimate of the default correlation between the two entities. [↑](#footnote-ref-3)
4. Alternate ***Notching Factors*** – different for state and local governments – are used to adjust the preliminary assessment, with further adjustments potentially made for other considerations. The methodology for U.S. sub-sovereigns also includes **Instrument-Level Ratings**, adjustments to the Issuer Default Rating that are applied to rate the different types of securities issued in U.S. LRG debt markets; general obligation bonds (unlimited and limited tax), contingent obligations (appropriation, lease, and moral obligations), and special tax pledges. [↑](#footnote-ref-4)
5. Combining two indicators in a risk matrix means that the resulting assessment score does not need to be a simple function of the component scores, such as a weighted average. [↑](#footnote-ref-5)
6. The Individual Credit Profile for U.S. sub-sovereigns incorporates a range of standardised U.S. financial reporting metrics and places more importance on RLG cash reserves and retirement liabilities. [↑](#footnote-ref-6)
7. Fitch Sovereign Rating Model weights are regularly updated, based on feature coefficients yielded by multi-regression modelling. The given weights are the most-recently published (for 2025 assessments). [↑](#footnote-ref-7)
8. The *Composite Governance Indicator* is based on the World Bank WGI. [↑](#footnote-ref-8)
9. Sources include the *Gallup World Poll*, the *World Economic Forum’s Executive Opinion Survey*, the *IMD World Competitiveness Yearbook* survey, the *World Justice Project (WJP) Rule of Law Index*, and the *World Bank’s Enterprise Surveys* and *Country Policy and Institutional Assessment (CPIA)*. Expert assessments are provided by analysts (using standardised rubrics ) working for organisations including Freedom House, Reporters Without Borders, the Bertelsmann Transformation Index, the Varieties of Democracy (V-Dem) Project, the Political Risk Services (PRS) International Country Risk Guide, and various multilateral development banks. The WGI are updated annually, with a one year lag; the 2023 WGIs were published in November 2024. They are explicitly incorporated in the sovereign assessment frameworks of Moody’s and Fitch and implicitly incorporated in the sovereign assessment framework of Standard & Poor’s. [↑](#footnote-ref-9)