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]

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.

[1] See the accompanying TDS note *An Index for Trustworthy Government 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 agency rating 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.

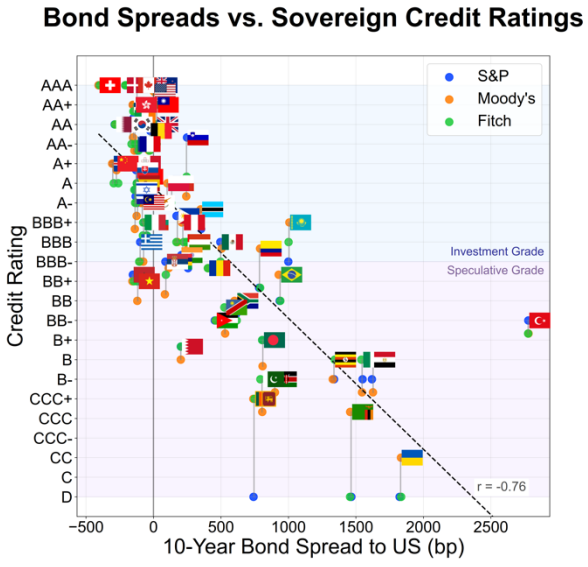
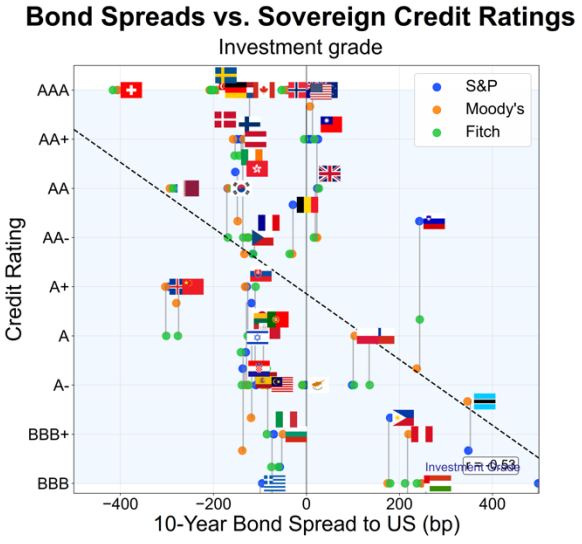


Figure 2.



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]
2. **Institutions & Governance Strength.** A weighted average of four sub-factors:
    - 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%).*

    These qualitative characteristics of sovereigns are scored using quantitative external indicators, with the main source being the World Bank Worldwide Governance Indicators (WGI). This annual publication assigns ratings to nations for properties that include the rule of law, government effectiveness and regulatory quality. The World Economic Forum (WEF) Global Competitiveness Index (CGI) has also been referenced for components relating to market efficiency, infrastructure, and education, and the IMF referenced for information on standards of data availability. 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.
3. **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

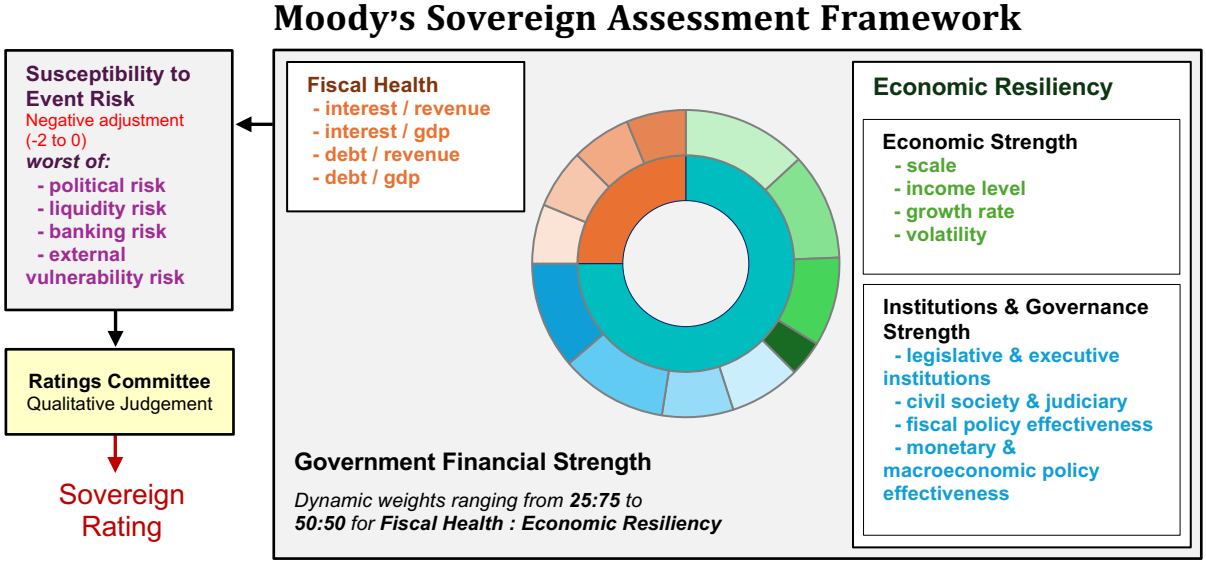
[2] *Scale* is measured using Nominal GDP, the annual value of all final domestic production (production for final consumption, investment, or export) gross of capital depreciation and net of imports. *Income* is per capita GDP adjusted for Purchasing Power Parity (PPP). PPP accounts for price differentials 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.

foreign-currency-denominated debt, and the value of public assets (including sovereign wealth funds).

4. **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 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.
3. **Financial Performance (20%):** *Operating margin* (10%), *liquidity ratio (5%), ease of access to funding (5%).*
4. **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]

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.

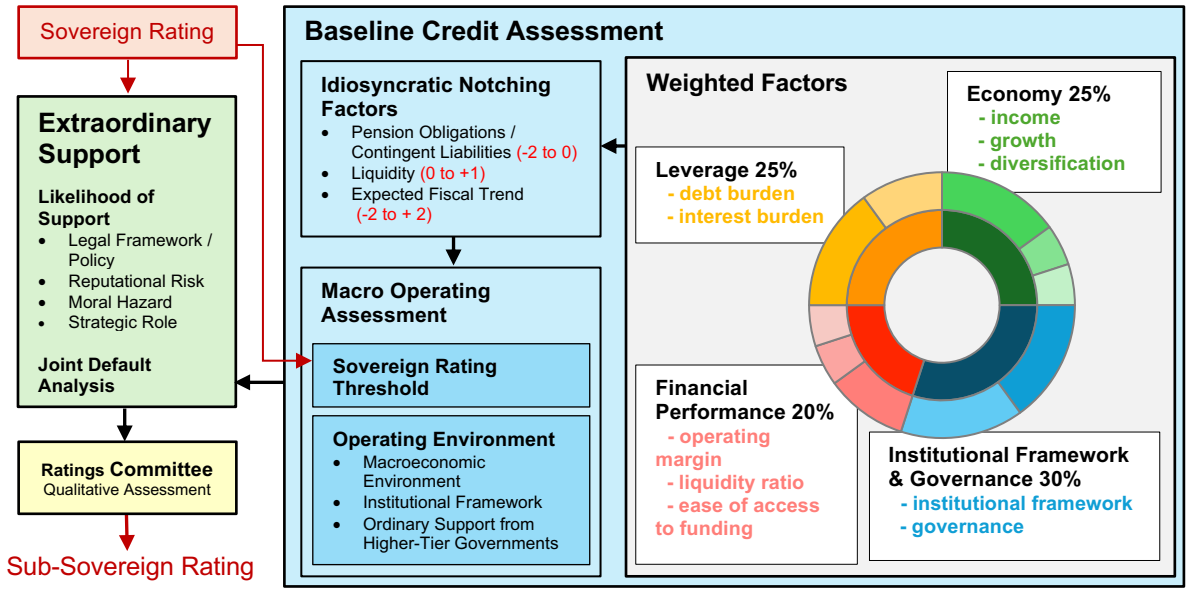
[3] The five factors determine a ***Likelihood of Support*** assessment, which is considered jointly in the **Extraordinary Support** assessment with the higher-tier supporting government's credit rating and a ***Joint Default Analysis*** which incorporates an estimate of the default correlation between the two entities.

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



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 U.S. sub-sovereigns. These 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 factor weights and in the component sub-factors. One set of weights and sub-factors is used for U.S. state (and territory) governments, and another for municipal (city and country) governments (**Table 2**).

Table 2. *Moody's Sub-Sovereign Weighted Factors Weight*

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)*

Alternative quantitative inputs for sub-factors leverage the availability of consistent data based on U.S. financial reporting standards. 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, and alternate ***Notching Factors*** used to adjust the preliminary assessment.[4]

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).
2. **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] 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.

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[4] Notching factors differ for state and local governments. As with other assessments, final adjustments may be made based on various 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.

[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.

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]

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]

1. **Structural Features (53.7%):** *Composite governance indicator (22);*[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)*

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[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.

[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).

[8] The *Composite Governance Indicator* is based on the World Bank WGI.

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 include tail-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.

Institutional and Governance Quality in Credit Assessments

Ratings agencies recognise that 'objective' statistical measures - official economic and financial indicators, such as GDP, debt ratios, and fiscal balances - do not capture the full range of factors relevant to a government's ability and willingness to meet obligations to creditors. Effective and reliable institutions - stable and transparent systems for law-making, judicial integrity, and professional public administrations - are also important elements of creditworthiness, although they defy direct measurement. While official statistics comprise the primary basis of sovereign assessments, the quality of institutions and governance are nevertheless assigned substantial importance in the frameworks of all three major rating agencies (**Table 3**).

Table 3. *Qualitative Components in Agency Frameworks*

Assessment Dimension	**Moody's**	**S&P**	**Fitch**
Framework component	**Institutions & Governance Strength** scorecard factor; ***Poltical risk*** scorecard sub-factor	***Institutional Assessment*** factor in **Institutional and Economic Profile**	*Composite Governance Indicator* in **Structural Features** factor of **Sovereign Rating Model**
Direct Weighting	*~20-30%* *Varies due to dynamic weights*	*~25%* *Varies due to risk matrix*	*~22%* *Varies due to Qualitative Overlay*
Sub-components	- Legislative & Executive Institutions (20%) - Civil Society & Judiciary Strength (20%) - Fiscal Policy Effectiveness (30%) - Monetary Policy Effectiveness (30%) - Political Risk within Event Risk assessment	- Policy effectiveness and predictability - Transparency and accountability - Debt payment culture - Security risks assessment *Specific weights not publicly disclosed*	Single composite score incorporating: - Governance quality - Rule of law - Political stability - Corruption control
External data sources	- World Bank Worldwide Governance Indicators (WGI) and Country Policy & Institutional Assessments - World Economic Forum Global Competitiveness Index - IMF data adequacy assessments	*Specific indicators not publicly disclosed but documentation suggests similar sources to other agencies*	Composite governance indicator *directly incorporates WGI scores with specific benchmarks for rating categories*
Sub-sovereign treatment	Institutional Framework & Governance (30% international, 20% US states, 10% US cities) *Macro Operating Assessment incorporates evaluation of institutional framework*	Institutional Framework Assessment (25%): *- Predictability;* *- Revenue/Expenditure Balance;* *- Transparency & Accountability*	Risk Profile assessment *Governance considerations integrated into revenue and expenditure adjustability factors*
Methodological features	*Higher institutional strength weighting in Government Financial Assessment for wealthy sovereigns. Institutional weakness penalises multiple rating components.*	*Combines institutional and economic profiles through risk matrices rather than weighted averages.*	*Governance integrated into regression-based sovereign rating model using transparent governance factor, directly incorporating simple average of four WGIs*
Qualitative adjustment process	*Ratings committee can make qualitative adjustments to scorecard output based on institutional factors not captured in quantitative metrics*	*Institutional considerations can modify indicative rating level through supplemental factors*	*Forward-looking governance assessments, policy credibility, and institutional flexibility can adjust model-generated ratings*

Quantifying Qualitative Factors

Scores for institutional and governance quality comprise weighted ('scorecard') components of all three agencies' sovereign ratings frameworks, representing various intangible factors taken to differentiate the creditworthiness of borrowers with similar economic and financial profiles. The Moody's framework assigns the **Institutions & Governance Strength** factor approximately 20-30% of the initial sovereign assessment (varying due to dynamic scorecard weights), with additional influence coming through the ***Political Risk*** sub-component of the **Susceptibility to Event Risk** factor. S&P's **Institutional Assessment** effectively represents about 25% of the preliminary rating calculation,[9] while a *Composite Governance Indicator* is the single most significant feature in Fitch's **Sovereign Rating Model**. Institutional quality factors are also important sub-sovereign assessment components, though carrying lower explicit weights; around 10% to 30% depending on the jurisdiction and agency.[10] In addition to the inclusion of institutional quality assessments as primary weighted components, all ratings frameworks allow them as discretionary adjustment factors to final ratings.

Agencies cannot rely on primary data sources to quantify these institutional qualities in their assessment frameworks, instead relying on external ('secondary data') indicators, primarily the World Bank **Worldwide Governance Indicators (WGI)**.[11] Published annually since 1996, these composite indices measure six broad dimensions of governance for over 200 countries: *Rule of Law, Control of Corruption, Government Effectiveness*, *Political Stability & Absence of Violence/Terrorism*, *Voice & Accountability,* and *Regulatory Quality*.[12] The WGIs aggregate information from around 35 existing third-party (public- and private-sector) sources, including representative surveys of citizens, households, and firms, and structured evaluations by subject-matter experts.[13] Score indicate *relative* performance in each year, averaged around zero. **Table 4** summarises the six WGI and basic details of their derivation.

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[9] The Institutional Assessment is 50% of S&P's **Institutional and Economic Profile**. This yields the preliminary rating together with the **Flexibility and Performance Profile**, but because the two profiles are combined using a risk-matrix, weightings of individual component assessments will be variable.

[10] Qualitative institutional and governance factors also influence international sub-sovereign assessments through the significant influence of the corresponding sovereign rating. The direct incorporation of institutional factors into sub-sovereign assessment framework is generally focused on the transparency and accountability of RLG financial management practices.

[11] The WGI are explicitly incorporated in the sovereign assessment frameworks of Moody's and Fitch, and implicitly incorporated in the less transparent sovereign assessment framework of Standard & Poor's.

[12] The WGI are updated annually with a one-year lag. The latest available WGIs are for 2023 and were published in November 2024.

[13] Sources include the *Gallup World Poll*, the *World Economic Forum's Executive Opinion Survey*, the *IMD World Competitiveness Yearbook (WCY)* survey, the *PRS International Country Risk Guide (ICRG)*, the *World Justice Project (WJP) Rule of Law Index*, the *Institutional Profiles Database*, and the *World Bank's Enterprise Surveys* and *Country Policy and Institutional Assessments (CPIA)*, and other surveys including Eurobarometer and Afrobarometer. The WGI authors select source organisations but do not conduct surveys or ratings themselves, nor do they influence these organisations' methods for governance-measurement. Expert assessments are provided by analysts (using standardised rubrics) working for organisations that include Freedom House, Reporters Without Borders, the Bertelsmann Transformation Index (BTI), the Economist Intelligence Unit (EIU), the Varieties of Democracy (V-Dem) Project, the Political Risk Services (PRS) International Country Risk Guide, and the Asian and African Development Banks. Source indicators are combined and scaled using an Unobserved-Components Model (UCM) that determines weights according to source covariance; sources providing more independent information receiving stronger weights.

Table 4. *World Bank Worldwide Governance Indicators*

WGI	Summary Definition	Primary Expert Sources	Primary Survey Sources	Methodology
Rule of Law	*Confidence in societal rules, quality of contract enforcement, property rights, police, courts, and control of crime and violence.*	PRS ICRG *Law & Order*; World Justice Project (WJP) Rule of Law Index; Freedom House (judicial independence); Heritage *Property Rights*; BTI rule-of-law items; V-Dem judicial independence/equality before law indices.	World Justice Project (population poll part); Gallup (trust in police/courts, safety at night); Afrobarometer/ Latinobarometro (courts enforce law fairly, officials punished); Enterprise Surveys (cost of crime, security payments).	Crime prevalence or distrust indicators inverted, rescaled and aggregated via Unobserved Components Model (UCM).
Control of Corruption	*Extent to which public power is used for private gain, petty & grand corruption, state capture.*	PRS ICRG Corruption risk; World Bank and African and Asian Development Bank CPIA *Transparency & Accountability*; Bertelsmann Tranformation Index *Anti-corruption Policy*; Global Integrity (Law enforcement, Anti-corruption); PERC *Asian Intelligence*; V-Dem public-sector corruption.	Transparency International Global Corruption Barometer (bribery prevalence); World Bank Enterprise Surveys (% firms paying bribes, bribe tax); Gallup (perceived corruption in government); Afrobarometer/ Latinobarometro corruption perception questions.	Bribery frequencies inverted; scores rescaled and aggregated via UCM, adjusting for bias across sources.
Government Effectiveness	*Quality of public services, civil-service professionalism, policy formulation and implementation, credibility of government commitments.*	World Bank CPIA (Quality of Public Administration, Budget Management); African and Asian Development Bank CPIA; PRS ICRG Bureaucratic Quality; Bertelsmann TI (Resource Efficiency, Policy Coordination); V-Dem public-sector capacity.	WEF Executive Opinion Survey (quality of infrastructure, education, wasteful spending); IMD WCY survey (bureaucracy doesn't hinder business, adaptability of policy); Gallup (satisfaction with education, healthcare, roads); Afrobarometer service-delivery questions.	Service-quality questions scaled with multiple service areas averaged within source. UCM assigns greater weight to broadly-covered CPIA/WEF indicators.
Political Stability & Absence of Violence / Terrorism	*Likelihood that government will be destabilised or overthrown by unconstitutional or violent means, including terrorism.*	PRS ICRG (Government Stability, Internal & External Conflict, Ethnic Tensions); EIU Country Risk (Orderly Transfer of Power, Social Unrest); PTS (Political Terror Scale); Crisis24/IHS Markit security risk; V-Dem political violence indices.	World Bank Enterprise Surveys (political instability obstacle); Gallup World Poll (feel safe, confidence in police); IMD Executive Survey (low risk of political instability); Human Rights Measurement Initiative human-rights surveys.	Violent-risk metrics inverted where necessary, rescaled and aggregated via UCM with time-varying weights reflect differing coverage of conflict datasets.
Voice & Accountability	*Extent to which citizens can select government & enjoy freedom of expression, association, and a free media.*	Freedom House *Freedom in the World* (Political Rights & Civil Liberties; Reporters Without Borders Press Freedom Index; EIU Democracy Index; Bertelsmann Transformation Index (Political Participation); Freedom House *Nations in Transit*; V-Dem electoral & media sub-indices.	Gallup World Poll (confidence in elections/media); Afrobarometer, Latinobarometro, AmericasBarometer (satisfaction with democracy, trust in parliament, electoral fairness); Eurobarometer / European Quality of Government Index.	Multiple questions within each source averaged and aggregated via UCM, sources with lower variance get higher weight.
Regulatory Quality	*Ability of government to formulate & implement sound, market-friendly policies & regulations that support private-sector development.*	World Bank and African and Asian Development Bank CPIA *Business Regulatory Environment*; Heritage *Economic Freedom* (Business, Trade, Investment); Fraser *Economic Freedom of the World*; PRS ICRG Investment Profile; Institutional Profiles Database regulatory items.	WEF Executive Survey (burden of regulation, ease of starting a business); IMD WCY (competition legislation efficient); World Bank Enterprise Surveys (time & cost of regulation, licensing); Gallup (confidence in economic regulation).	Indicators where high value inverted where necessary, rescaled and aggregated via UCM. Confidence bands narrow due to high correlation in sources.

Aggregate scores and percentile ranks are published, along with confidence intervals that reflect data coverage and inter-source agreement.

WGI metrics are the core input for qualitative components of Moody's sovereign assessments, although other external indicators are also referenced. The Moody's framework directly maps various WGI dimensions to numerical ratings using explicit benchmarks (**Table 5**). The **Institutions & Governance Strength** scorecard factor comprises around one-quarter to one-third of the framework's **Government Financial Strength** assessment, however only 40% of this factor - the *Quality of Legislative and Executive Institutions*, and the *Strength of Civil Society and the Judiciary* components - corresponds to properties captured by the WGIs.[14] WGI scores are also used in the **Susceptibility to Event Risk Factor**, which may downwardly adjust the **Government Financial Strength** assessment toward the final sovereign rating.

Table 5. *Incorporation of World Bank WGI in Moody's Sovereign Assessment Framework*

Framework Element	Inclusion in Framework	Factors Measured	WGIs Used
Quality of Legislative and Executive Institutions	20% of **Institutions & Governance Strength** scorecard factor; 10-15% of **Government Financial Strength** assessment	Quality of public actions at legislative and executive levels; efficiency of government and public administration; institutional capacity; policy implementation effectiveness	• ***Regulatory Quality*** • ***Government Effectiveness*** *Used as "primary considerations" to "inform qualitative assessment".* *Specific WGI score ranges provided for each rating category.*
Strength of Civil Society and the Judiciary	20% of **Institutions & Governance Strength** scorecard factor; 10-15% of **Government Financial Strength** assessment	Rule of law strength; judicial independence; corruption control; capacity of civil society to check government power; predictability of enforcement	• ***Voice and Accountability*** • ***Rule of Law*** • ***Control of Corruption*** *Used to "inform qualitative assessment"* *Specific WGI score ranges provided for each rating category.*
Political Risk	One of four components of **Susceptibility to Event Risk Factor**, aggregated using minimum function and used to downwardly adjust **Government Financial Strength** assessment	Domestic political stability; social tensions; policy continuity; geopolitical tensions and conflicts	• ***Voice and Accountability*** • ***Political Stability & Absence of Violence / Terrorism*** *Used to assess people's ability to voice preferences and impact policymaking, and to assess government transition orderliness and policy predictability.* *Specific WGI score ranges provided for each rating category*

While S&P's does not reveal its methods for incorporating the WGIs in sovereign assessments, Fitch is transparent regarding their use in the agency's Sovereign Ratings Model (SRM). The *Composite Governance Indicator* feature is the SRM's most significant feature with a 22% weight before Qualitative Overlay, and is calculated as a simple arithmetic mean of the six WGI dimensions.[15]

[14] Measures for the effectiveness of fiscal, monetary and macroeconomic policy (constituting the remaining 60% of the **Institutions & Governance Strength** scorecard factor) are derived from other data, including IMF structural balance data, Open Budget Survey scores, inflation targeting performance, and banking crisis history.

[15] Fitch cites the WGI's *"comprehensiveness, methodological transparency, widespread use in other cross-country studies, and completeness of coverage geographically and over time".*

The strong reliance by ratings agencies on the WGI has raised concerns regarding the appropriateness of their use in credit assessments, especially on the part of developing economies.[16] The indicators' derivation is relatively opaque, using complex statistical techniques to combine data from highly diverse sources that employ varying degrees of subjective opinion and methodological soundness.[17] While credit ratings assessments are based on WGI point-estimates, some indicators (particularly for data-poor countries) are published with extremely wide confidence intervals, indicating a high degree of uncertainty and inconsistency in the source data. WGIs are unsuitable for time-sensitive assessments; they are published (annually) with a time lag of around one year, drawing on sources that may also be published with a delay, and incorporating survey data based on subjective perceptions that take time to reflect changing conditions.

A recent external review of the WGIs, commissioned by the World Bank and published in September 2024, noted that:

> *It is the combination of methodological limitations and the wide-spread use of the WGI for real-world decision-making that has been the source of misgivings for [Lower Middle Income Country] governments. They are understandably concerned that the WGI is based on perceptions, which may reflect biases of high-income country respondents, and could result in higher costs of capital for them (compared to a greater focus on objective measures such as default history and risk). This concern is non-trivial given the high concentration in the ratings industry and the associated risk of 'herding' of perceptions-based ratings.*

The review resulted in the addition of a "usage advisory" on the WGI homepage, warning that ***"WGI data are not intended to serve as definitive criteria for use in credit assessments, credit ratings, investment risk, or other critical financial decisions".***[18]

Despite this advisory, the WGIs maintain their prominence in sovereign credit assessments due to an absence of credible alternative cross-country metrics on institutional and governance quality. By extension - given the influence of sovereign ratings on sub-sovereign ratings - the WGIs are also

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[16] For example, India's Chief Economist argued in 2023 that *"over-reliance on non-transparent qualitative factors, including perceptions, value judgements, views of a limited number of experts, and surveys with loose methodologies in sovereign rating, results in unacceptable outcomes from a global point of view. It makes the rating of developing countries almost invariant with respect to even sizeable movements in relevant macroeconomic fundamentals. This happens because the base rating, estimated through quantitative scoring of macro-fundamentals, is overridden by qualitative considerations while finalising the published ratings. The set of loose qualitative information fed into the quantitative scoring of countries and the final qualitative overlay, based purely on the agency's subjective assessment of the countries' ability and willingness to pay, become heavily loaded against the developing countries".*

[17] Some WGI sources rely heavily on self-reported data from the governments that they are evaluating. Some source organisations for WGI input data may also be non-transparent with respect to their funding and agendas.

[18] The use by ratings agencies of WGI country rankings, rather than absolute scores, is specifically criticised in the review, which notes that ranks are relative and can change even if a country's own performance does not. The WGI usage advisory also warns against using the data to measure governance over time (rather than making cross-country comparison for a single point in time), noting that the indicators *"measure governance in units where the average score for the world as a whole is zero in every period [and therefore] cannot be used to study trends in world averages of governance"*. The review also recommended the institution of a standing advisory panel on governance measurement, able to consider complaints regarding the WGI.

important elements of international RLG credit assessments. No similarly prominent external data sources exist for measurements of variation in institutional and governance quality at subnational levels, although the qualitative 'institutional' aspect of RLGs are included as primary components of all agencies' sub-sovereign assessment frameworks. These factors are generally limited to the presence or absence of particular RLG policies relating to financial planning, such as debt management, budgetary and accounting practices, transparency of operations, and reporting standards. Information used by agencies to score these factors includes legislation, fiscal history, and external audits. Aspects of general governance quality - such as those measured by the WGIs - are largely absent from sub-sovereign assessment frameworks. This is partly due to the lesser degree of variation in these qualities within countries (as compared to between countries), but also necessarily due to the absence of relevant data at the subnational level.

Institutional Observability and Service Standards

The World Bank WGIs' limited suitability as credit assessment criteria raises the question of how to acquire alternative data for evaluating institutional and governance quality. More accurate, timely, and granular indicators for assessing these qualitative factors could potentially be constructed from measurements of the quality of public services delivered by national and subnational governments. The concept of a government-service-quality indicator for credit assessments emerges from the insight that institutional and governance qualities relevant creditworthiness - such as administrative competence and political accountability - are likely to observable in the effectiveness and reliability public service delivery. Standardised measures of government service quality may provide a more accurate proxy for institutional and governance quality than current methodologies allow, capturing these factors through outcomes that can be observed without a substantial time lag and which are available at the subnational level.

"Observability" refers to *'the ability to understand the internal state or condition of a complex system based solely on knowledge of its external outputs'*. Standards of government service quality present a type of *institutional observability*, revealing attributes of public institutions that are otherwise resistant to formal evaluation. Service quality can signal a range of institutional qualities; administrative efficiency, technological competence, reliability of systems and processes, workforce skills and managerial capabilities, organisational initiative, regulatory and legal clarity, and data-driven decision-making. These intangible aspects of government trustworthiness can be consistently and transparently demonstrated through the public's access to high-quality services. Where levels of service quality can be measured in a verifiable and standardised manner, these measurements may be reasonably expected to capture similar attributes as those represented by the institutional and governance factors of credit assessments. Service quality metrics can serve more reliably as indicators of relevant institutional attributes than the WGI inputs now utilised, largely external appraisals of bureaucratic competence based on self-reported data and infrequent, subjective, perception-based surveys, which whether expert or public are often subject to attribution bias as well as substantial delays in their ability to capture quality improvements or deteriorations.

An index of government service quality (based both on objective performance metrics as well as user experience and public trust) may offer a promising alternative, anchoring evaluations in objective performance metrics, as well as subjective measures of user experience and public trust. Such an index could serve as a verifiable benchmarks of institutional performance, capturing how effectively governments develop and implement policies that improve living standards, social cohension and economic confidence.

shift the focus from subjective appraisals of bureaucratic competence to verifiable benchmarks of institutional performance, capturing how effectively governments translate policies into public value.

A reliable measure of government service quality—incorporating both service delivery effectiveness and user trust

The concept of institutional observability refers to the degree to which citizens, investors, and analysts can directly verify government performance through tangible service outputs rather than relying solely on perception-based assessments or self-reported data. When service standards are consistently measured and transparently reported, they create a powerful accountability mechanism that aligns the interests of citizens (who demand quality services) with those of investors (who seek credible repayment commitments). This alignment produces a virtuous cycle where improved service delivery strengthens both democratic legitimacy and market confidence.

The challenge in operationalizing institutional observability lies in developing metrics that are both meaningful and consistently measurable across different governance contexts. The World Bank's Government Effectiveness index, while widely used, suffers from several methodological limitations that a purpose-built Government-Service-Quality Index (GSQI) could address.

The World Bank measure primarily relies on perception-based surveys and expert assessments, which can be influenced by political polarization, media coverage, and other factors unrelated to actual service delivery. As noted in the World Bank's own methodology documentation, the indicator aggregates data from "more than 30 think tanks, international organizations, nongovernmental organizations, and private firms" using a statistical technique that standardizes diverse data sources. While this approach provides broad coverage, it lacks the granularity and objective service-level metrics that would make institutional performance truly observable.

What are the shortcomings of the Government Effectiveness measure? The primary limitation is that it was designed as a general governance indicator rather than a specific measure of service quality. It captures perceptions of "the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies." This broad definition makes it difficult to isolate which specific aspects of governance are driving market assessments.

Additionally, the World Bank measure is updated annually at best, creating significant lag in capturing governance changes. Its reliance on perception-based polling questions from sources like Gallup introduces potential biases, particularly in politically polarized environments where respondents' assessments may reflect partisan affiliations rather than objective service experiences. Perhaps most critically, the standardized scoring system (ranging from approximately -2.5 to 2.5) makes it difficult to measure change over time, as scores are relative to a global distribution rather than absolute performance benchmarks.

Modern public portals, open-data dashboards and sensor-rich infrastructure now release continuous streams of operational statistics that reveal, almost in real time, whether passports are issued on schedule, tax refunds are processed, trains run, electricity stays on and potholes are repaired. These outputs are the embodiment of institutional capacity; they therefore offer a stronger, faster signal of credit-relevant governance than a distant expert's view captured once a year.

Credit rating agencies' continued reliance on perception-based governance indicators, despite their acknowledged limitations, reflects institutional inertia rather than analytical necessity. The World Bank's own advisory against using WGI for credit assessments creates an opportunity for innovation. A well-designed service quality index would provide the objective, granular, and timely data that agencies claim to seek while maintaining conceptual alignment with existing institutional assessment frameworks. The transition would require initial investment in data infrastructure and methodological development, but the payoff—more accurate credit assessments, reduced borrowing costs for well-governed developing countries, stronger incentives for service improvement—would justify the effort. As governments increasingly digitize service delivery and generate real-time performance data, the technical barriers to comprehensive service quality measurement continue to fall. The question is not whether credit assessments will eventually incorporate objective service metrics, but whether forward-thinking agencies will lead this transition or be forced to follow.

Fragments of such data already exist. The OECD's Government at a Glance tracks citizen satisfaction with administrative services and the uptake of digital channels across its membership.
OECD
The European Quality of Government Index (EQI) surveys more than 200 NUTS-level regions on corruption, impartiality and perceived service quality, giving analysts a uniquely granular look inside otherwise homogenous sovereign ratings.
Göteborgs universitet
In lower-income settings the World Bank's Service Delivery Indicators (SDI) audits frontline schools and clinics, producing objective scores for teacher absenteeism, drug stock-outs and learning outcomes that are directly comparable across countries and time.
World Bank
What is missing is a composite framework that stitches these strands together and normalises them for wealth so that richer governments are not automatically rewarded for outputs their fiscal space can trivially buy.

Existing cross-country governance metrics, including the OECD's *Government at a Glance* and the European Governance Quality Index, partially address these gaps by tracking administrative capacities and transparency. However, they remain constrained by their reliance on heterogeneous data sources and periodic updates, which limit their utility for dynamic credit assessments. National initiatives in countries like the UK and Sweden, which integrate objective service-quality metrics—such as healthcare wait times or digital infrastructure uptime—with user satisfaction surveys, demonstrate the feasibility of blending hard data with citizen feedback.

A more robust approach would incorporate direct measures of service delivery outcomes that citizens and investors can independently verify. The OECD's Government at a Glance framework offers a promising alternative, collecting data on specific service quality dimensions across member countries. As stated in their 2023 report, "Trust in public institutions and satisfaction with public services are important yardsticks of the quality of public governance. They reflect people's perceptions of government competence in designing and delivering policies and services, and expectations on the behaviour of public institutions and their representatives."
The OECD framework combines both objective performance metrics and citizen satisfaction measures across key service domains, providing a more nuanced picture of institutional quality. Their approach recognizes that "although high trust in public institutions is not a necessary outcome of democratic governance, trust and satisfaction with public services facilitate effective governance, as they correlate with high rates of compliance with policies, participation in public life and social cohesion."

More sophisticated measurement frameworks already exist in pockets of the developed world, though they remain underutilized by credit analysts. The OECD's Government at a Glance initiative compiles objective metrics on service delivery times, digital government maturity, and user satisfaction across member countries. The European Quality of Government Index combines hard data on service provision with targeted user surveys at the regional level, revealing substantial within-country variation that national averages obscure. Several Nordic countries have pioneered comprehensive public sector productivity measurement, tracking not just inputs and activities but actual service outcomes—patient recovery rates, student learning gains, case resolution times—adjusted for quality. These efforts demonstrate that meaningful service quality measurement is feasible when political will and statistical capacity align

Beyond the World Bank and OECD approaches, several alternative frameworks offer promising methodologies for measuring service quality. The European Quality of Government Index (EQI), developed by the Quality of Government Institute at the University of Gothenburg, provides sub-national measures of institutional quality across European regions. This index combines survey data on citizen experiences with corruption, quality, and impartiality in education, healthcare, and law enforcement—offering granular insights into regional variations within countries.
There is also a substantial effort to quantify public sector output that involves data on public service quality. Countries including the United Kingdom, Netherlands, and Scandinavian nations have developed sophisticated national statistical frameworks that measure both the volume and quality of public services. These systems typically combine objective quality metrics (such as waiting times, error rates, and completion percentages) with user satisfaction surveys that capture the citizen experience.
For example, the UK Office for National Statistics has pioneered methods to measure public sector productivity that explicitly incorporate quality adjustments. Their approach includes metrics like patient survival rates and educational attainment to ensure that output measures reflect not just the quantity but also the quality of services delivered. Similarly, the Netherlands Bureau for Economic Policy Analysis has developed quality-adjusted volume measures for government services that feed into national accounts.
These national efforts to quantify public service quality provide a rich foundation for developing a more comprehensive Government-Service-Quality Index. By combining objective performance metrics (e.g., processing times for permits,

reliability of utilities, resolution rates for citizen complaints) with targeted user satisfaction surveys, such an index would provide a more accurate signal of institutional quality than perception-based governance measures alone.

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These hybrid models highlight the potential for a globally standardized GSQI to provide consistent, subnational insights into institutional health. For instance, tracking the resolution rate of citizen grievances or the digitization of tax systems could reveal localized governance weaknesses that aggregate indices overlook, enabling analysts to identify risks before they escalate into fiscal crises.

A Government-Service-Quality Index (GSQI) would fill that gap. Built from administrative micro-data and outcome statistics that are already collected (but rarely harmonised), it would track: (i) the speed and transparency of core administrative procedures; (ii) the reliability of essential utilities and digital infrastructure; (iii) outcome-oriented social services such as vaccination coverage or lower-secondary completion; (iv) the accuracy and punctuality of fiscal statistics and e-payment systems; and (v) the closure rate of citizen grievances. Each component can be expressed as a rate or ratio, refreshed quarterly or even daily, and benchmarked internationally.

Beyond timeliness, a service-quality lens offers three structural advantages. First, its data are transaction-generated and therefore largely free of perception bias. Second, service metrics can be compiled at the sub-national level, allowing rating agencies to discriminate between provinces or municipalities whose institutional performance diverges sharply from the sovereign median–an impossibility with national-level WGIs. Third, because the indicators map directly onto budgetary responsibilities, they give policymakers a diagnostic tool: a sudden fall in, say, permit-processing speed flags an operational weakness long before it shows up in arrears or social unrest.

The construction of a purpose-built Government Service Quality Index would draw on these existing methodologies while addressing their limitations. Core dimensions would include administrative efficiency (business registration times, permit processing speeds, customs clearance rates), infrastructure reliability (electricity uptime, broadband coverage, water quality consistency), social service effectiveness (vaccination rates, primary school completion, emergency response times), and digital government maturity (online service availability, cyber-resilience, open data provision). Critically, these indicators would prioritize objective, frequently updated metrics over perception surveys, though user satisfaction data would complement hard measures where appropriate.

Because they are outcome-based, these metrics penalise governments that simply cut services when budgets tighten and reward those that maintain performance through productivity gains–a more meaningful test of institutional resilience than today's emphasis on expenditure flexibility.

Existing approaches emphasize 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; 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. Rather than emphasizing 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.

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.

For ratings practice the implication is straightforward. Replacing–or at least cross-checking–the qualitative WGI scores with a GSQI would anchor the "institutional" pillar in hard evidence, reduce pro-cyclical downgrades triggered by perception swings, and bring sub-sovereign assessments onto a common scale that captures what residents and investors actually experience. With digital reporting infrastructures proliferating and multilateral bodies already piloting open-standard dashboards, the technical barriers are lower than ever. What is needed now is for credit analysts, treasury investors and borrower governments to demand an index that moves at the speed of contemporary public administration and reflects institutions as they are observed, not as they are imagined.

Panel Data Analysis

While the relationship between service standards and sovereign borrowing costs is increasingly well-established, the broader question of how service quality affects productivity remains underexplored. The mechanisms through which better government services might enhance economic productivity are theoretically compelling: reduced transaction costs for businesses, more efficient allocation of resources, improved human capital development through better education and healthcare, and greater policy predictability that encourages long-term investment.

Empirical research in this area is still emerging, but preliminary evidence suggests significant productivity effects. Studies of regulatory quality—a subset of service standards focused on business interactions—consistently find that streamlined, predictable regulatory processes correlate with higher productivity growth. Similarly, research on infrastructure quality shows that reliable public utilities reduce business costs and increase output per worker.

The proposed Government-Service-Quality Index would provide a valuable tool for investigating these productivity linkages more systematically. By disaggregating service quality across different domains (utilities, regulatory services, social services, etc.), researchers could identify which aspects of government performance most strongly influence economic outcomes. This granular approach would also help policymakers prioritize reforms with the highest potential returns for both citizen welfare and economic performance.

Financial relevance is already evident in the literature. An IMF study of 104 emerging and developing issuers (1995-2013) found that a one-standard-deviation improvement in the WGI "government effectiveness" score cut new-issue sovereign bond spreads by roughly 98 basis points after controlling for macro fundamentals.

IMF
A separate panel of 74 countries using five-year CDS contracts (2001-2016) reported that the same improvement reduced market-implied default risk by about 59 basis points, with the effect strongest where baseline credit risk was high.
ScienceDirect
Similar patterns appear in European convergence research, where bond spreads between new-member states and the euro-area core remain partially explained by service-delivery proxies even after fiscal criteria are met.
European Central Bank
In other words, investors are already pricing observable capacity; the GSQI would simply formalise and standardise the signal.

The empirical evidence linking service quality to sovereign credit risk, while compelling, remains hampered by measurement limitations. Studies typically rely on the World Bank's Government Effectiveness indicator, which despite its name provides only a crude approximation of actual service delivery. This indicator aggregates perception surveys—including basic Gallup polling questions about satisfaction with public services—with expert assessments and institutional proxies, creating a composite that obscures more than it reveals. The indicator cannot meaningfully track changes over time due to its shifting source composition and methodology, nor can it identify which specific services drive overall perceptions. When IMF researchers found that countries in the top quartile of Government Effectiveness paid 140 basis points less at bond issuance than bottom-quartile peers, they were capturing something real but imprecise—a shadow of service quality rather than its substance.

The empirical case for prioritizing service standards in credit assessments is robust. Studies consistently link high-quality public services to economic resilience and lower borrowing costs. During the eurozone debt crisis, nations with stronger bureaucratic effectiveness, as measured by timely fiscal reporting and efficient public administration, maintained tighter bond spreads than peers with comparable debt levels but weaker service delivery. This pattern underscores how institutional observability mitigates investor uncertainty: reliable utilities, transparent regulations, and responsive grievance mechanisms signal a state's capacity to navigate fiscal stress without resorting to destabilizing service cuts. Conversely, aggressive austerity measures that degrade public services often trigger a downward spiral, eroding tax bases and investor confidence. A GSQI would reframe institutional strength as the ability to sustain service quality under pressure—a critical predictor of long-term fiscal sustainability.

The empirical relationship between government service quality and sovereign borrowing costs is increasingly well-documented across multiple studies. Research by Presbitero et al. (2016) examining 105 developing countries between 1995 and 2014 found that countries with more effective governments—as measured by the World Bank's Government Effectiveness index—enjoyed significantly lower spreads on sovereign bonds. Their analysis demonstrated that spreads were "lower for countries with strong external and fiscal positions, as well as robust economic growth and government effectiveness," with the effectiveness variable remaining significant even after controlling for traditional macroeconomic factors.
This finding has been corroborated by subsequent research. Capelle-Blancard et al. (2018) studied 20 OECD countries over the period 1996-2012 and found that governance quality had a significant negative association with sovereign bond yield spreads. Their research disaggregated environmental, social, and governance (ESG) factors, concluding that "governance has a stronger impact than social performance" on borrowing costs, with countries demonstrating good governance practices benefiting from lower default risk perceptions.
The IMF's analysis of 104 emerging-market and developing economies between 1995 and 2013 provides particularly compelling evidence. 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. Notably, this indicator remained significant in every robustness test, suggesting its fundamental importance to market assessments of sovereign risk.
Is this empirically true? The evidence strongly suggests it is. A follow-up panel study covering 74 advanced and emerging economies between 2001 and 2016 used daily five-year Credit Default Swap (CDS) data and reported that a one-standard-deviation improvement in government effectiveness lowered sovereign CDS spreads by approximately 12%. The effect was even more pronounced in countries where baseline credit risk was already elevated, implying that good service provision becomes most valuable precisely when macroeconomic fundamentals are weak—offering a potential buffer against adverse economic conditions.
More recent research published in Economic Modelling (2023) re-estimated the classic Cantor-Packer credit-rating equation with modern political-economy variables and demonstrated that institutional-service quality alone accounts for about one-quarter of the explanatory power in Moody's and S&P rating outcomes once economic size and solvency ratios are included. When this variable was removed from the model, out-of-sample rating errors doubled, highlighting its critical importance to accurate credit assessments.

Evidence from the euro-area crisis literature points in the same direction. A panel analysis of ten-year bond spreads for EU "convergence" countries found that, even after the Maastricht fiscal criteria were met, markets continued to discriminate based on Government Effectiveness—with spreads in new member states with weaker bureaucracies averaging 50–60 basis points higher than in peers with similar debt ratios but stronger public-service delivery systems.

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.

Conclusion

The evidence strongly supports the development of a dedicated Government-Service-Quality Index as a complement to traditional macroeconomic indicators of sovereign creditworthiness. Such an index would capture dimensions of institutional performance that investors already price into sovereign debt markets but that existing governance measures assess only indirectly.
By focusing on observable service outputs that citizens can verify through their daily interactions with government, this approach would strengthen the behavioral link between governance quality and repayment culture. It would provide a more timely signal of institutional changes than perception-based surveys, allow for more precise identification of governance weaknesses, and mitigate the biases inherent in opinion-based assessments.
The relationship between service standards, sovereign risk, and economic productivity represents a promising frontier for both research and policy development. As governments worldwide seek to rebuild fiscal buffers while maintaining essential services, understanding how service quality influences market confidence and economic performance becomes increasingly vital. A well-designed GSQI would not only improve investor assessments of sovereign risk but also help policymakers identify the institutional reforms most likely to yield both social and economic dividends.

The 2024 "usage advisory" now posted on the Worldwide Governance Indicators (WGI) site is an explicit warning from the World Bank that the dataset was never designed to be a decisive input for credit, investment-risk or other high-stakes financial decisions.
World Bank
Yet because rating agencies have few cross-country alternatives, the six WGI pillars remain the de-facto proxy for "institutional quality" in most sovereign scorecards. The paradox is obvious: assessments intended to price real-time credit risk lean heavily on perception-based indicators that arrive with a year's delay, carry wide confidence bands for data-poor states and embed the biases of the respondents who generated the underlying surveys.

A practical way out of that paradox is to measure the state not through external opinions but through the observable performance of the services only governments can deliver or regulate. Modern public portals, open-data dashboards and sensor-rich infrastructure now release continuous streams of operational statistics that reveal, almost in real time, whether passports are issued on schedule, tax refunds are processed, trains run, electricity

stays on and potholes are repaired. These outputs are the embodiment of institutional capacity; they therefore offer a stronger, faster signal of credit-relevant governance than a distant expert's view captured once a year.

predictor of long-term economic sustainability.

> We also recommend that the Bank invests in new measures of the absolute quality of governance, that can both guide efforts by countries to improve governance and serve as a data source for rating agencies and other users of WGI. However, this process is likely to take both time and resources (in our estimate 3-5 years at a minimum).

Implementing a GSQI is not without challenges. Low-income states may lack the administrative infrastructure to generate consistent service-delivery data, necessitating innovative proxies such as satellite-derived utility performance metrics or mobile-network coverage maps. Additionally, disentangling the effects of institutional quality from broader economic conditions requires rigorous statistical methods, including historical instrumental variables like civil-service reform timelines. Yet these hurdles are surmountable. Advances in real-time data scraping, coupled with the proliferation of digital government platforms, offer unprecedented opportunities to capture service outcomes dynamically. By prioritizing observable metrics over subjective perceptions, a GSQI could democratize access to favorable credit terms for developing economies, rewarding tangible governance improvements rather than entrenched reputational biases.

Institutional observability thus represents more than a technical adjustment to credit assessment frameworks—it redefines the relationship between governance and economic trust. As markets increasingly penalize opacity and unpredictability, a service-quality lens provides a clearer window into a state's operational discipline and repayment culture. The evolution from perception-based indices to outcome-driven metrics marks a necessary step toward aligning credit risk models with the lived realities of governance, where the proof of institutional strength lies not in surveys but in the daily experiences of citizens and the durability of public goods.

The technical challenges in constructing such an index are substantial but surmountable. Data availability varies dramatically across countries, with low-income states often lacking the administrative systems to generate consistent service metrics. Satellite data and digital exhaust from mobile networks can provide proxies—nighttime luminosity stability indicates electrical grid reliability, mobile money transaction volumes reveal financial inclusion, search query patterns expose service disruptions. Machine learning techniques can impute missing values based on structural similarities between countries, though transparency about data quality and estimation uncertainty would be essential. The endogeneity problem—wealthier countries naturally provide better services—requires careful statistical design, potentially using instrumental variables like colonial-era civil service structures or exogenous governance reforms.