

Sovereign Rating Methodology

Master Criteria

This report replaces the previous report of the same title dated 13 August 2010

Scope

This report describes Fitch Ratings' criteria for the rating of sovereign issuers, and is an update of the Sovereign Rating Methodology published in August 2010.

Issuer Default Ratings: Sovereign Issuer Default Ratings (IDRs) are a forward-looking assessment of a sovereign's capacity and willingness to honour its existing and future obligations in full and on time. Sovereigns are assigned two IDRs: the Local-Currency IDR reflects the likelihood of default on debt issued (and payable) in the currency of the sovereign, while the Foreign-Currency IDR is an assessment of the credit risk associated with debt issued in foreign currencies.

Debt Issue Ratings: Fitch also assigns specific ratings to the debt issued by rated sovereigns, which in most instances represents a senior and unsecured claim on the government and hence the ratings are typically the same as the relevant sovereign IDR.

Key Highlights

Willingness and Capacity to Pay: Fitch's approach to sovereign risk analysis is a synthesis of quantitative and qualitative judgements that capture the willingness as well as the capacity to meet its debt obligations. Moreover, given the significance of the government and public sector as a whole to the national economy, the activities and policy actions of the sovereign have a profound impact on and are influenced by the performance of the economy as a whole.

Key Factors: As such, Fitch's sovereign rating analysis incorporates a wider range of factors than only the financial strength of the sovereign and includes an assessment of the following:

- macroeconomic performance and prospects;
- structural features of the economy that render it more or less vulnerable to "shocks", including the risks to macroeconomic stability and public finances posed by the financial sector, as well as "political risk" and governance factors;
- public finances, including the structure and sustainability of public debt as well as fiscal financing; and
- external finances, with a particular focus on the sustainability of international trade balances, current account funding and capital flows, as well as the level and structure of external debt (public and private).

Cyclical Versus Structural Trends: Fitch seeks to ensure that its sovereign ratings are consistent through time as well as across countries. In terms of the former, Fitch attempts to distinguish in its analysis of public and external finances between "cyclical" (temporary) and "structural" (permanent) developments and trends, for example by taking account of estimates (if available) of cyclically adjusted budget balances.

Related Criteria

[Country Ceilings - August 2011](#)

[Distressed Debt Exchange Criteria \(August 2011\)](#)

[Rating Corporates Above the Country Ceiling \(January 2011\)](#)

Related Research

[Guide to Sovereign Credit Report \(October 2008\)](#)

[Macro Prudential Risk Monitor \(June 2010\)](#)

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Country Risk vs. Sovereign Risk

“Country risk” and sovereign credit risk are related but distinct concepts. The former refers to the risks associated with doing business in a particular country, while sovereign credit ratings are more narrowly focused on the risk of a sovereign government defaulting on its debt obligations. Risks to doing business can include weak property rights, unpredictable tax and legal regimes, and a volatile operating environment.

A specific “country risk” that is especially pertinent for cross-border investment and lending is the risk of controls being imposed by the sovereign authorities on the conversion of local into foreign currency and on its transfer abroad in order to meet external debt service obligations. Transfer and convertibility (T&C) risk is explicitly addressed by the Country Ceiling that is assigned to all countries with Fitch-rated sovereign issuers.

Though there is a positive association between sovereign and broader country risk, the sovereign credit profile can improve without necessarily an improvement in the “business environment”. Similarly, deterioration in country risk conditions does not necessarily imply a worsening in sovereign creditworthiness, though often that will be the case.

What is a Sovereign?

From a rating perspective, a sovereign issuer is the government (usually national or federal) that de facto exercises primary authority over a recognised jurisdiction. Central banks, like other public policy institutions, are agents of the sovereign, though their debt could be assigned ratings that differ from those of the sovereign.

Because the sovereign is the highest authority and has the power to enforce its will in the jurisdiction it governs, creditors have very limited legal or other recourse in the event that the sovereign is unable or unwilling to service its debt. This is also the case at the international level, given the limitations of international law and its enforceability with respect to sovereign nations. Consequently, whether in terms of local- or foreign-currency debt, the analysis of sovereign credit risk must take into account the willingness to pay, as well as financial capacity.

Sovereign Debt and Default

Sovereigns have a wide range of financial relationships with resident and non-resident entities, whether it is foreign suppliers of goods (such as defence equipment) or local suppliers of services (such as teachers). The sovereign IDR, however, only relates to the probability of default on debt owed to private creditors and, in particular, debt securities issued in public markets and rated by Fitch.

Arrears on payments to suppliers or reported failure to pay out under a government “guaranteed” contract would not constitute a default event in terms of the sovereign rating. Delays on payments to suppliers often reflect contractual disputes between the supplier or beneficiary of the guarantee and the government rather than sovereign financial distress or unwillingness to meet financial obligations. Nonetheless, failure to honour a debt obligation that benefits from an unequivocal guarantee (and is rated as such by Fitch) would be considered a rating event and if the affected debt is material relative to the total stock of sovereign debt, the sovereign's IDR could be lowered to Restricted Default ('RD').

Default by a wholly state-owned and/or -controlled issuer would generally not be considered to be a sovereign default event, even if the default is a direct result of actions by the sovereign. The sovereign's liability, like that of any other shareholder, is limited and does not extend to ensuring that all creditors are made good.

Given the opacity of financial relations between governments and the influence of political and "non-financial" factors, reported failure to repay debt owed to other governments and official creditors, including multilateral institutions such as the International Monetary Fund (IMF) and the World Bank, would also not result in the sovereign IDR being lowered to 'D' (Default) or 'RD' (Restricted Default). However, if "arrears" to official creditors indicate growing financial distress and/or lack of willingness to pay, it will adversely affect the sovereign rating.

Moreover, official creditors may seek "comparable treatment" for private-creditor claims as part of any restructuring of their own claims, notably by the Paris Club of Official Creditors. Payment defaults on unrated debt obligations owed to private creditors (eg:- commercial bank loans) will result in the IDR being placed into 'RD' if material and inasmuch as Fitch has been able to ascertain to its satisfaction that a default event has occurred.

Similarly, if a rated sovereign's debt is subject to a "distressed debt exchange" (DDE), an 'RD' rating will be assigned. If, in Fitch's opinion, an announced exchange offer constitutes a DDE, the sovereign's IDR will be lowered to 'C', indicating that default is highly likely in the near term. The ratings of the securities subject to the exchange will also be lowered to 'C'.

On closing of the exchange offer and following confirmation that the exchange will be completed (for example because the minimum threshold for participation has been met), Fitch will place the IDR of the sovereign into default, specifically 'RD'. The ratings of the tendered securities will be lowered to 'D' and will remain at that level for as long as the sovereign is rated 'RD'. The ratings of eligible securities that are not tendered and continue to be serviced will remain at 'C' until the exchange is completed and then rated according to their priority in the new, post-exchange capital structure.

Following completion of DDE, the sovereign IDR will likely be lifted out of 'RD' to a rating appropriate for its prospects on a forward-looking basis shortly after the effective date of the exchange, although the IDR will likely be constrained to the low speculative grade range. However, if the share of eligible securities not tendered in the exchange is large and the securities are non-performing, the 'RD' rating will likely be maintained until the default is cured, such as through a further exchange, or until the sovereign is judged by Fitch to have normalised relations with the international financial community despite outstanding non-performing securities.¹

In contrast, agreed debt relief from international financial institutions (IFIs) under multilateral initiatives to eliminate the "debt overhang" are generally viewed as a positive development for sovereign creditworthiness and hence ratings.

Sovereign Credit Ratings

Fitch assigns Long-Term Foreign- and Local-Currency IDRs to sovereigns and ratings to specific debt instruments issued by sovereigns according to its published rating definitions. A Short-Term IDR is also assigned and is relevant for foreign-currency-denominated debt with a contractual maturity of 13 months or less. Reflecting market convention, short-term local-currency-denominated debts, such as Treasury bills, are assigned the Long-Term Local-Currency IDR. Fitch maintains its public ratings on an on-going basis to ensure that they are appropriate and rating actions are timely. However, if a rating has been actively reviewed by

¹ For more details, see Fitch's *Distressed Debt Exchange Criteria* dated August 2011.

the sovereign rating committee, the rating will be publicly “affirmed” even though a change in the rating has not been judged to be necessary.

Typically the Local-Currency Rating lies above the Foreign-Currency Rating, reflecting the sovereign's greater access to local currency.

Local vs. Foreign-Currency IDRs

Compared with non-sovereign entities that are subject to the bankruptcy and legal regimes in the jurisdiction(s) in which they operate, the sovereign has much greater scope to default selectively. The most relevant distinction from a sovereign credit perspective is between foreign and local obligations in terms of currency denomination of debt, though the market in which it is issued and the predominance of holder (ie resident versus non-resident) are also factors that can result in differences in the ratings assigned to debt instruments in the same currency. Consequently, though the same obligor, there is often a rating distinction between debt denominated and payable in foreign and local currency.

The latter is critical since the currency of payment can differ from the currency in which the bond is denominated. If, for example, the bond is denominated in local currency but repayment is specified as being in foreign currency, a Foreign-Currency Rating will be assigned to the bond. This is because even if the bond is denominated in local currency, the sovereign's capacity (and will) to make payments in foreign currency is the same as if the debt were also denominated in foreign currency, even though the market exchange rate risk is borne by the bondholder. Similarly, debt issued in local capital markets but denominated and payable in foreign currency is assigned a Foreign-Currency Rating.

Sovereign creditworthiness in terms of both foreign- and local-currency debt is a function of all the various factors that influence the “stand alone” credit quality of the government (primarily but not exclusively related to public finances, potential to “monetise” local-currency-denominated obligations and political stability), and the robustness of the economy's capacity to generate tax receipts and foreign exchange (primarily driven by an assessment of the risks to macroeconomic stability and the strength of external finances). The relationships between the various factors that influence the intrinsic credit quality of the sovereign and the ability to access foreign exchange are complex, change over time and cannot be clearly delineated. Moreover, given that irrespective of the currency denomination, the obligor is the same, ie the sovereign, the Foreign- and Local-Currency Ratings are determined simultaneously and directly linked to each other.

Nonetheless, most sovereigns typically receive nearly all of their income (taxes, charges etc) in local currency; the exceptions are commodity producers and “dollarised” economies. Consequently, they must purchase foreign currency in the foreign-exchange market (or from the central bank) or borrow it. The government's access to foreign currency therefore depends on the economy's (rather than the sovereign's) capacity to generate foreign currency and the willingness of market participants to exchange it for local currency — and, if unwilling, the government's capacity to expropriate it.

In contrast, not only are tax and other receipts in local currency, but most sovereign governments through the central bank have ultimate control over the domestic money supply and in theory could print currency to fund themselves, albeit not indefinitely. Moreover, many sovereigns have preferential access to domestic capital markets, which can be a more reliable source of funding than international capital markets, especially during periods of distress. Consequently, the Local-Currency Rating is typically one or two “notches” on the rating scale above the Foreign-Currency Rating. Rarely, the Local-Currency Rating may lie below the Foreign-Currency Rating due to its payment record on domestic debt or if the sovereign's domestic debt burden dwarfs its foreign-currency obligations and it is judged that in a distress scenario, the authorities may choose not to default on limited foreign debt even as the sovereign restructures its local-currency debt.

The factors that influence the level of notching, if any, of the Local-Currency Rating relative to the Foreign-Currency Rating, fall in the following broad categories.

- Strong public finance fundamentals support a Local-Currency Rating above the Foreign-Currency Rating, especially in those situations where the primary constraint on the sovereign ratings stems from vulnerabilities in the balance of payments and external finances.
- An established domestic capital market that is an ample and reliable source of fiscal funding in local currency at relatively low cost and medium to long maturities supports a Local-Currency Rating above the Foreign-Currency Rating.
- A short or fragile track record of low and stable inflation, reflected in the prevalence of inflation indexation and low levels of monetisation, limits monetary flexibility and hence the extent to which local-currency obligations will be rated above foreign-currency debt.
- Other factors include payment record and whether the sovereign has effectively treated local-currency debt more or less favourably than foreign-currency obligations; exchange rate regime; participation of non-resident investors in the local market; and strength of the domestic banking and financial sector.

For sovereigns that do not have their “own” local currency, such as members of currency unions (notably the euro area) and fully dollarised economies, the Foreign- and Local-Currency Ratings are the same.

Country Ceilings

The economic and financial spill-over from a sovereign debt crisis may spread far beyond the sovereign and materially affect the private sector's ability to service its foreign-currency-denominated and/or external debt. The Country Ceiling captures the risk that the sovereign may impose restrictions that prevent the convertibility of local into foreign currency and transfer abroad to meet external debt obligations — T&C risk. Fitch maintains Country Ceilings on all countries which have a rated sovereign.²

Country Ceilings are “notched” from the sovereign Foreign-Currency IDR (to a maximum of three notches) unless assigned on the basis of currency unions or supranational monetary arrangements. Country Ceilings are not assigned to any specific debt instrument or class or any particular issuer. As such they are not ratings, but rather act as the effective “cap” on the Foreign-Currency Rating that can be assigned to any issuer or transaction originating in the country; hence Country Ceilings do not have rating Outlooks. Nonetheless, the Country Ceiling invariably moves in tandem with the sovereign Foreign-Currency IDR and thus the Outlook on the Foreign-Currency IDR is a good guide on the likely future direction of any change in the Country Ceiling (and hence those ratings capped by the ceiling). Transactions and entities can only achieve Foreign-Currency Ratings above the Country Ceiling if there are specific features that materially reduce the credit vulnerability to T&C risk.³

Peer Analysis

Indicators of sovereign creditworthiness are compared across countries and over time. Summary measures for several quantitative indicators of sovereign creditworthiness by rating category (eg the 'BBB' category would consist of 'BBB-', 'BBB', and 'BBB+') currently and over time are regularly updated. Moreover, the Credit Analysis report states for each of the four broad categories of factors identified above (macroeconomic, public finances, external finances and structural issues) whether it is considered a strength, weakness or neutral factor for the

The Country Ceiling is Fitch's assessment of transfer and convertibility risk, which is related but distinct from sovereign creditworthiness and broader country risk.

Fundamental to Fitch's sovereign rating methodology is rigorous peer analysis.

² See also “Country Ceilings” under *Related Research* on the front page

³ See “Rating Corporates Above the Country Ceiling”, under *Related Research*

sovereign relative to its rating peer category and whether trends in each are positive, stable or negative.⁴

It is evident, however, that there is not a simple linear relationship between sovereign ratings and every metric that Fitch considers in its rating analysis. In part this merely reflects the multivariate nature of the analysis such that the relationship between, for example, the government debt burden and the sovereign rating is conditioned on a range of other variables, such as income per head. But it also in part reflects qualitative factors that influence the ability and willingness of a sovereign to honour its financial obligations. These “intangible” influences on sovereign creditworthiness in part explain why so-called advanced economies are able to sustain much higher debt burden, even after taking into account per capita income. These factors include high levels of human capital; strong institutions; respect for the rule of law and property rights; stable and flexible political systems responsive to economic and social pressures; very wealthy (including in the quality and stock of capital) and diversified economies; and very strong external and fiscal financing flexibility, reflecting “benchmark borrower” and, for some, “reserve currency” status. Consequently, advanced economies are typically less prone (though certainly not immune) to severe shocks — political or economic — and well placed to absorb and adjust to any shocks that do occur. These strengths greatly enhance the capacity of the sovereign to tolerate a much greater debt burden and hence tend to be associated with higher sovereign credit ratings even though public and external debt indicators may be less favourable than for more lowly rated sovereigns.

Sovereign Rating Model

While recognising that qualitative factors have an important bearing on the rating assessment, Fitch has developed a new proprietary Sovereign Rating Model (SRM) that generates a score calibrated to the Long-Term Foreign-Currency IDR. The SRM is a rating rather than a sovereign default model, which generates a predicted Long-Term IDR rather than a probability of default.

Model Design and Derivation

The SRM has been estimated from the application of Ordinary Least Squares (OLS) to the set of economic and financial variables referenced in the '*Sovereign Rating Methodology*' for all Fitch rated sovereigns over the period 2000 to 2009 inclusive. Only those factors that were found to be statistically significant (at 95% confidence) and those with the appropriate sign (+/-) are employed in the SRM. The model uses empirical data, does not allow for 'judgemental' analyst input and aims to provide a transparent, coherent framework for comparing sovereigns across regions and through time. The OLS model will be re-estimated on an annual basis to incorporate outturns of data once available for all indicators used in the model.

Model Variables

The SRM is a multiple regression model that employs 18 economic/financial variables, referenced in Appendix 1 of this '*Sovereign Rating Methodology*'. Three-year averages, centred on the current year, are used for the more dynamic variables, such as for the current account and fiscal balances.

The 18 variables employed in the SRM are derived from a range of sources, including the sovereign issuer itself, BIS, the IMF and the World Bank. This data will be updated at least on a quarterly basis, although Fitch notes that the timeliness of availability of certain data points can vary across regions and individual sovereigns. The ability to update the model on a timely basis will therefore be dependent on the availability of the relevant input data. Fitch nonetheless expects to be able to update the SRM on at least an annual basis for each rated sovereign issuer.

⁴ The Special Report "*Guide to Sovereign Credit Report*" (see *Related Research*) details the median by rating category for most of the quantitative indicators that are part of Fitch's sovereign credit and rating analysis

Model Output and Application

The output of the SRM is a score that is calibrated to Fitch's long-term rating scale and which derives a predicted long-term foreign currency rating for the sovereign issuer.

In terms of application, Fitch's sovereign analysts will utilise the SRM as an important analytical tool and as one of a range of qualitative and quantitative inputs into the rating process. However, Fitch recognises that no model can fully capture all the relevant influences on sovereign creditworthiness, meaning the actual rating determined by the sovereign rating committee can and does differ from that implied by the rating model.

Further details of the SRM will be available in a report titled '*Guide to Fitch's Sovereign Rating Model*'.

Surveillance

All rated sovereigns are subject to surveillance by the primary and back-up analysts, supported in many instances by on-going dialogue with the sovereign authorities. Such surveillance supports a forward-looking credit assessment and ensures that the rating remains appropriate and that rating actions are timely. For every sovereign rated by Fitch, a database of key economic and financial data is maintained, which is used to generate economic forecasts and conduct peer comparisons on several sovereign credit metrics across the rating scale.

Data Sources and Limitations

Fitch's analysis and rating decisions are based on relevant information available to its analysts. The sources of this information are the issuer and the public domain. This includes relevant publicly available information on the issuer, such as financial and economic data published by national authorities and international agencies, as well as regulatory filings. The rating process can also incorporate information provided by third-party sources. If this information is material to the rating or a specific rating action, Fitch will disclose the relevant source.

While key data and information are subject to critical review by Fitch, such as cross-checking with third-party sources where available, the agency relies on the accuracy and reliability of information published by national authorities and international agencies, as well as the veracity of the information provided directly by representatives of the sovereign. Moreover, for some countries, broad economic and financial data that is typically incorporated in Fitch's sovereign credit and rating analysis has material shortcomings in terms of reliability and coverage. Such data limitations, where judged to be material, are noted in Fitch's sovereign Full Rating Reports and taken into account by the rating committee when assigning sovereign ratings. However, Fitch does not assign sovereign ratings if it judges that the data limitations are so great as to render any analysis insufficiently robust to support a rating opinion.

Reasonable Investigation

When assigning and maintaining sovereign ratings, Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its rating methodology and obtains reasonable verification of that information from independent sources, to the extent that such sources are available for a given sovereign issuer. Issuers may choose not to share certain information with external parties, including rating agencies, at any time. While Fitch expects that each sovereign issuer that has agreed to participate in the rating process, or its agents, will supply promptly all information relevant for evaluating both the ratings of the issuer and all relevant securities, Fitch neither has, nor would it seek, the right to compel the disclosure of information by any issuer or any agents of the issuer.

Macroeconomic Policies and Performance

Because the public sector is invariably a major economic agent, it exerts a powerful influence over macroeconomic performance and stability, which, in turn, affect its own creditworthiness. While past performance is not always a good guide to the future, countries' track records of

Track record of macroeconomic stability, underpinned by a credible policy framework, has a material positive influence on sovereign creditworthiness and ratings.

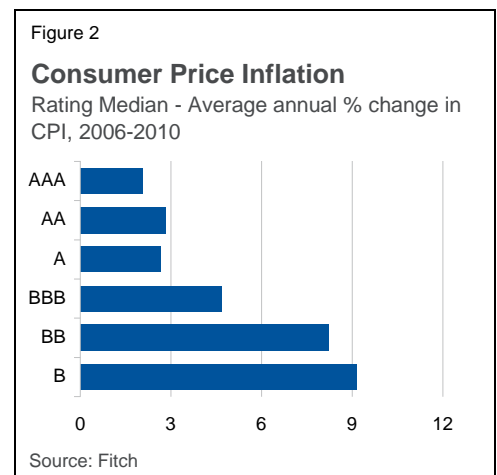
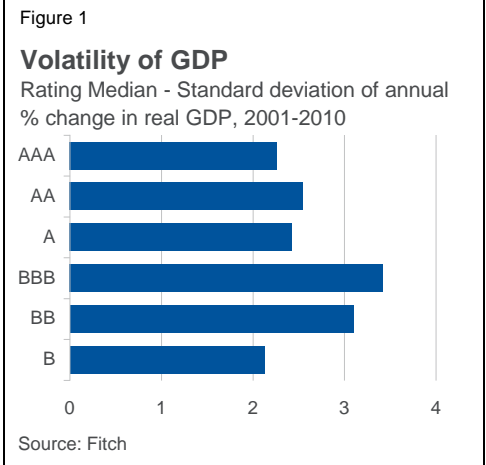
economic performance nonetheless reflect the cohesiveness and robustness of their macroeconomic policy frameworks and the structural strengths and weaknesses of the economy. Fitch considers a credible policy framework to be one in which responsible monetary and fiscal policies work in tandem towards a sustainable long-term growth path while minimising the impact on output and inflation of adverse economic shocks.

Macroeconomic volatility constrains savings and investment, distorts the development of the financial sector, and hinders long-term business decision-making. It also adversely affects the capacity of the sovereign (as well as the broader public and private sectors) to tolerate a given level of indebtedness. Protracted periods of economic instability and fragile macroeconomic policy frameworks render the economy and public finances much more vulnerable to shocks and hence prone to interruptions in sovereign debt service. The 10-year rolling standard deviation of annual percent changes in real gross domestic product (GDP), the consumer price index (CPI) and the real effective exchange rate (REER) are measures used by Fitch to assess macroeconomic volatility.

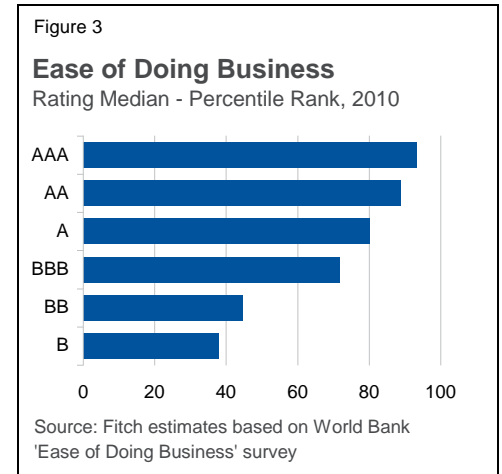
Inflation matters for sovereign creditworthiness.

Countries that have benefited from a long period of sound macroeconomic policies are likely, other things being equal, to enjoy stable and higher non-inflationary growth, leading to higher income levels and greater resilience to shocks. Sovereigns underpinned by economies that have benefited from a track record of low inflation and stable economic growth will tend to be rated more highly than those that have (or have experienced in the recent past) chronic inflation and severe economic cycles. The legacy of previous episodes of high and volatile inflation can persist for several years. The longer the period that low and moderate inflation (less than 10%) is sustained, the greater the confidence that it will remain so.

Economies with a long history of inflation often exhibit high degrees of indexation and dollarisation, as foreign currency becomes the chief store of value and the exchange rate the key reference price for the economy. A large stock of foreign-currency deposits in a banking system can quickly become a drain on the system's foreign assets (including central bank international reserves) and a source of capital flight. The ratio of foreign currency to total deposits — the dollarisation ratio — is one of the quantitative factors incorporated into the sovereign rating analysis. Moreover, dollarisation and indexation of contracts (debt as well as wages) limit the capacity of monetary and exchange rate policies to contain and manage shocks, while also reducing the scope to monetise local-currency sovereign debt obligations while containing inflationary pressures.



Sovereign debt crises have often been preceded by a currency collapse and financial crisis due to inappropriate exchange rate policies that have failed to adjust to shocks and/or are inconsistent with other economic policies, and in particular fiscal policy. The experience of economic and sovereign debt crises since the mid-1990s suggest that fixed and in particular pegged exchange rate regimes can be especially damaging to the economy and sovereign creditworthiness if they fail. Consequently, in the rating analysis of sovereigns that operate fixed or managed exchange rate regimes, particular attention is given to the consistency and sustainability of the macroeconomic policy framework, as well as on the robustness of the financial sector, balance-of-payments trends and the level of international reserves and other foreign assets relative to “quick” foreign-currency and external liabilities.



The greater the depth of demand for sovereign and local-currency assets, the greater the flexibility of monetary and fiscal policies in responding to adverse shocks. Shallow demand for local-currency assets is typically reflected by a high degree of dollarisation, low level of financial intermediation (measured by the ratio of private credit to GDP) and under-developed domestic capital markets. The less price-elastic the demand for local-currency assets, the weaker the capacity of the central bank to act as a credible lender of last resort to the financial sector, while the government has less scope to incur and fund large budget deficits. Countries with currencies with reserve currency characteristics enjoy exceptionally strong financial and policy flexibility.⁵

Monetary and exchange rate policies figure less prominently in sovereign assessments of countries allied to a currency union such as the euro area or that are fully dollarised (in contrast to economies that are partially dollarised and still have a local currency). In these instances where monetary and exchange rate policies are not under the direct control of the sovereign authorities, greater emphasis is placed on appropriate fiscal and structural adjustment policies and the competitiveness and flexibility of the economy.

Structural Features

Macroeconomic stability is not the sole criterion for strong sovereign creditworthiness and rating: structural characteristics of the economy and what is broadly described as political risk are also important factors that are taken into account.

Economies that are more flexible in responding to shocks are generally those with relatively high domestic — and to a lesser extent national — savings relative to GDP; openness to international investment flows and trade (a factor that also influences the number of notches, if any, that the Country Ceiling lies above the sovereign Foreign-Currency Long-Term IDR); and effective mechanisms (legal and institutional) for shifting and allocating resources among competing uses (what is usually described as a positive business environment). These economies will suffer smaller output losses and less variability in tax receipts and government expenditure demands. Consequently, economies exhibiting such structural characteristics will

High-income and savings economies, open to international trade and finance with positive business environment tend to have highly rated sovereigns.

⁵ There is no accepted definition of reserve currency status, but the US dollar, euro, Japanese yen and pound sterling are the four currencies that make up the IMF Special Drawing Right (SDR) and currently account for more than three-quarters of global foreign-exchange turnover. Other currencies with reserve currency characteristics include the Swiss franc, the Australian dollar and, to a lesser extent, New Zealand and Canadian dollars as well as the Swedish krona and Danish krone

tend to have sovereigns that are more highly rated than if the economy is deemed to be more rigid and less well placed to absorb adverse shocks.

Fitch uses the country's percentile rank on the United Nations Human Development Index and the World Bank's Ease of Doing Business survey and Governance Indicators to determine the relative strength and weaknesses of the business environment, human capital and overall level of governance.

Gross national income per capita (using the purchasing power parity) and GDP per capita (at market exchange rates) materially influence Fitch's sovereign ratings. High income per head implies that labour is engaged in high-value-added activities (though this is not necessarily the case for commodity producers) and hence that the economy is less vulnerable and better able to absorb adverse shocks. Moreover, income (measured in terms of GDP) is also positively correlated with economic wealth (stock of human and physical capital) and financial wealth (stock of financial assets) that render the economy better able to absorb adverse shocks and reflected in greater "debt tolerance".

The political will and ability to mobilise resources necessary to honour their financial obligations is a key element of sovereign creditworthiness.

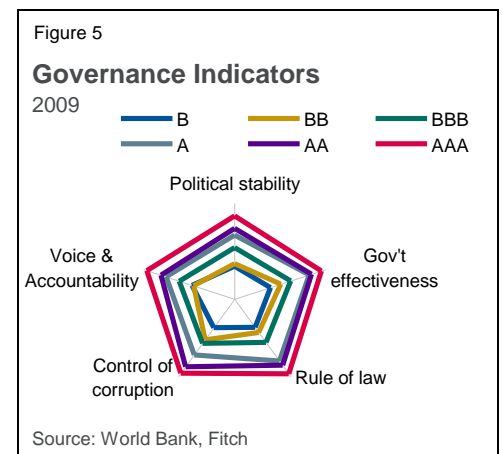
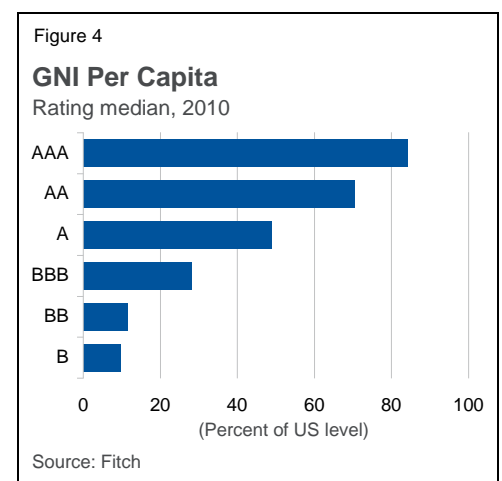
Political Risk

In the context of sovereign credit analysis, political risk refers to the risk that the sovereign authorities will lack the political capacity and will to mobilise resources necessary to honour their financial (and in particular rated) obligations. Rule of law and respect for property rights provide confidence that political (and civil) institutions have a strong commitment to honouring financial obligations.

Political risk factors relevant to sovereign creditworthiness include the legitimacy of the political regime; the effectiveness of government (in terms of the formulation, implementation and credibility of policy); control of corruption; and an assessment of the likelihood of severe civil conflict and "war risk". The World Bank Governance Indicators, along with other measures and sources, are often used to inform Fitch's judgement regarding political risk.

Political and social tensions can have an important bearing on sovereign creditworthiness. A high degree of consensus on major social and economic issues is associated with stable and predictable economic policies. Conversely, in a country that is riven by divisions along the lines of income distribution, race, religion or regional differences, the government of the day may encounter numerous challenges to its authority and undermine its ability to conduct effective economic and financial policies. Account is also taken of powerful vested interests that may block essential structural reforms. In a worst-case scenario — civil war, revolution, cross-border conflicts — the risk of a government declaring force majeure and suspending public debt service cannot be excluded.

Payment record is the most visible, albeit backward-looking, indicator of willingness to pay. The absence of any modern (ie from



1980) incidence of debt default and rescheduling can influence the rating positively if it is judged that this reflects a long-established and proven commitment to honouring financial commitments. Moreover, the influence on the rating of even recent episodes of default will be greatly moderated if it is judged that the default is not symptomatic of a continuing weakness in the political capacity and will of the sovereign authorities to mobilise resources to honour debt obligations. In this regard, the conduct of any sovereign debt rescheduling may influence the assessment of the post-default commitment to resuming and maintaining timely servicing of debt.⁶

Relations with the international community, including with IFIs (ie the IMF and development banks) and major global or regional powers, may also influence the sovereign risk assessment. Unwillingness for political or other reasons to secure policy-conditional financing from the IMF and other IFIs reduces the sovereign's financing options in a distress scenario and therefore negatively influences the sovereign credit and rating assessment. Conversely, a well-designed and internationally funded economic programme can stabilise local financial markets, normalise the flow of private capital, and lay the basis for sustained recovery. Nonetheless, emergency financial support from the IFIs is a sign of distress and it is likely that the sovereign credit profile and rating have deteriorated over the months preceding receipt of external assistance.

Banking Sector

A sound, well-supervised and regulated banking and financial system is a positive sovereign rating factor. Not only are the direct financial risks to the sovereign's creditworthiness limited, but economic performance is also enhanced by an efficient and effective financial system that encourages domestic savings and investment and offers an inexpensive alternative to international capital markets as a source of funding.

There are two principal risks posed to sovereign creditworthiness by the (domestic) banking sector: macroeconomic instability and contingent liability. The recapitalisation of banking systems has historically resulted in significant increases in the government's debt burden. The risks to macroeconomic stability arise from a weak banking system that amplifies rather than absorbs shocks to the economy, for example by exacerbating exchange rate over-shooting in response to an external shock due to (explicit or implicit) currency mismatches on its balance sheet. The failure of a single large bank can also result in a collapse in confidence in the system as a whole, prompting deposit and capital flight and disrupting the ability of the sovereign to finance itself in domestic and international financial markets.

The critical role played by the banking system in the economy — the depository of savings and source of investment and credit as well as providing the infrastructure for payment in the economy — means that governments and central banks invariably intervene to prevent a systemic banking failure. This intervention is through supervision and regulation, but can also take the form of financial support, including the “socialisation” of bank liabilities so as to ensure the solvency of the system. The capacity of the sovereign to intervene in support of the banking sector without materially impairing its own creditworthiness is a function of the credibility of the central bank as a lender of last resort and the capacity of the government to absorb domestic banking and financial-sector liabilities without threatening its own solvency and financing capacity.

An important starting point for the analysis of bank system risk from a sovereign ratings perspective is Fitch's Bank Systemic Risk (BSR) indicators, which are reported semi-annually in the “*Macro-Prudential Risk Monitor*” for most countries with Fitch-rated sovereigns.⁷ The

⁶ Along with other factors, consideration will be given to the “Principles for Stable Capital Flows and Fair Debt Restructuring in Emerging Markets” articulated by the Institute for International Finance in judging the nature of any sovereign debt restructuring

⁷ Formerly the “*Bank Systemic Risk Report*”. See “*Assessing Bank Systemic Risk: A New Product*” under *Related Research*

A weak financial sector can undermine economic performance, macroeconomic stability and impose large fiscal costs on the sovereign.

Banking System Indicator (BSI) is based on the average (weighted by assets) Individual Rating of banks in a system and ranges from 'A' — financially very strong system — to 'E' — very weak system. Financially weak systems with substantial liabilities (eg indicated by a high ratio of private credit to GDP) imply large contingent liabilities for the sovereign and hence will be a negative rating factor. Conversely, financially strong bank systems that do not represent a material contingent liability and are efficient in attracting and allocating savings to investment projects represent a positive rating factor.

The other BSR measure is the Macro-Prudential Indicator (MPI), which ranges from '3' — high potential vulnerability to financial stress over the medium term based on trends in credit expansion and asset prices — to '1' — low likelihood. This indicator can provide an early-warning signal of potential financial distress that, in the most adverse circumstances, could result in macroeconomic instability and/or large contingent liabilities being realised by the sovereign.

Other indicators of banking system soundness reviewed in the sovereign rating analysis include the ratio of non-performing to total loans, capital adequacy ratio (based on Basel definition where available) and relative shares of public and foreign ownership. Qualitative judgements are also made in conjunction with Fitch's Financial Institutions Group on the effectiveness of bank supervision and regulation. Fitch takes some comfort from high levels of foreign ownership, which is often associated with the transfer of more sophisticated financial management and technology that reduces the risk of bank failure; also, the foreign parent rather than the sovereign is the principal source of finance in the event of distress. In contrast, publicly owned banks have historically been subject to political interference and engaged in quasi-fiscal operations that have undermined financial soundness and often required substantial fiscal resources to resolve.

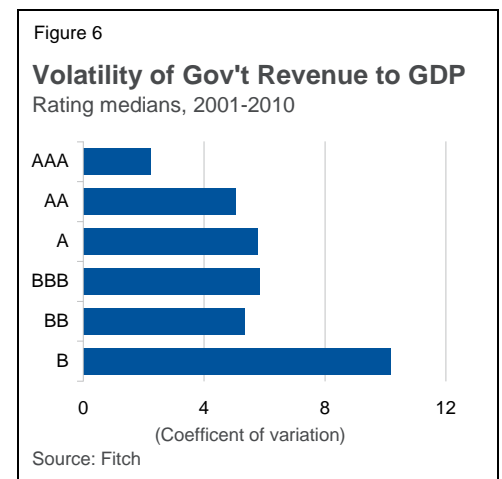
Public Finance

Public finance is a critical element of Fitch's sovereign risk analysis.

Management of public finances affects sovereign creditworthiness directly and indirectly through its influence on the economy through the channels of taxation, spending and borrowing, including the impact of the latter on the cost and availability of credit. Inappropriate fiscal policies can result in macroeconomic instability and even crisis, undermining sovereign creditworthiness. High and rising public debt burden erodes the solvency of the sovereign, while a weak debt structure can render public finances vulnerable to duration, currency and refinancing risks. Moreover, the more vulnerable public finances to adverse shocks, the less capacity to sustain a given level of debt. The more volatile revenue, perhaps because of a narrow tax base, the lower the level of debt that can be sustained for a given rating level.

A “sustainable” public debt burden varies across countries and over time, and hence there is no simple linear relationship between the stock of government debt (whether relative to GDP or government revenue) or debt service (maturing debt as a percentage of GDP and interest payments as a percentage of revenue and/or expenditure) on one side and sovereign creditworthiness and ratings on the other. Nonetheless, a heavy government debt burden (stock and debt service) will, other things being equal, be associated with lower sovereign ratings.

The principal measures of sovereign indebtedness adopted by Fitch are gross and net general government debt. In Fitch's opinion, gross government debt is the most relevant



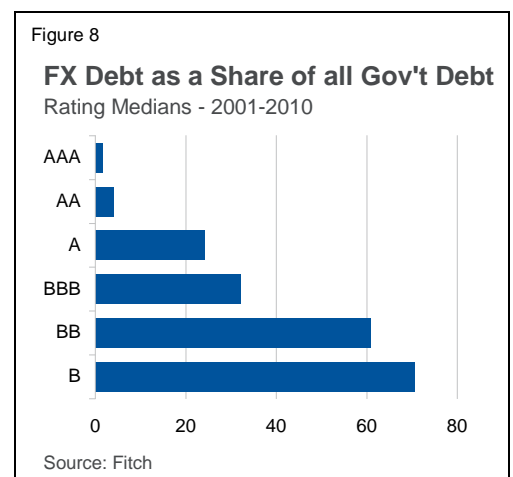
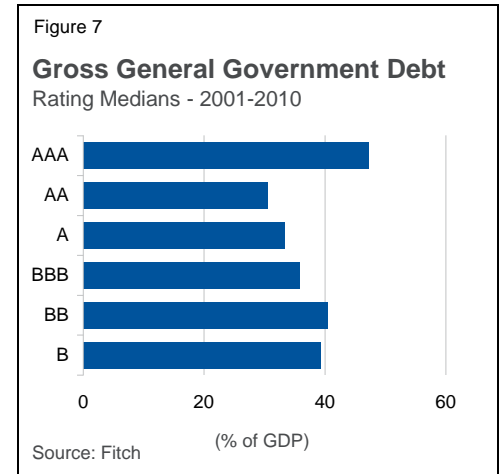
and comprehensive measure of sovereign indebtedness and the one that best lends itself to cross-sovereign comparative analysis. The general government's net debt position (general government gross debt less its deposits with financial institutions) is also an important indicator of indebtedness and is more closely aligned with the government's on-going budgetary financing need and underlying fiscal trends.

Fitch will also take into account in its assessment of government solvency the overall stock of financial assets, including equity and illiquid financial instruments that are not included in its measure of net debt, if such assets are judged to be unencumbered (for example committed to fund future pension payments) and ultimately marketable (for example, the long-term investment portfolios of sovereign wealth funds).

In Fitch's opinion, net public debt measures that include the liabilities and assets of the broader public sector, such as state-owned or -controlled financial institutions, can obscure the underlying state of government finances and the analysis of the fiscal adjustment that may be required to underpin confidence in the long-run solvency of the government. Consequently, the debt and assets of state-owned enterprises (including financial institutions) are generally not assessed by Fitch as sovereign liabilities and assets for the purposes of its sovereign rating analysis, even though their credit profile maybe closely linked to that of the sovereign. Nonetheless, Fitch may incorporate the financial liabilities of the rest of the public sector (central bank and state-owned enterprises and financial institutions) if it judges these liabilities to be very likely to become a financial liability for the government — if there is an explicit and full guarantee from the government likely to be realised, such liabilities should be already incorporated into general government debt — or to have been incurred, explicitly or implicitly, on behalf of the government.

Contingent liabilities for the government are myriad, ranging from future liabilities arising from expectations or commitments regarding pensions and healthcare provision to required investment in infrastructure after several years of public under-investment, for example. However, only where there is a material contingent liability (material in size relative to existing liabilities and in terms of time) recognised by the government — such as the closure of a nuclear power plant or the expected recapitalisation of a state-owned bank — will it be incorporated into the analysis of public finances and sovereign creditworthiness. Unfunded pension liabilities will be considered in periodic reviews of medium- and long-term sustainability of public finances if official projections (either by the government or an internationally recognised institution such as the OECD) imply that such liabilities are material.

A measure of the government's financial position with respect to the rest of the world is the net foreign debt/asset position of the sovereign. The sovereign net foreign asset position is defined as general government and central bank gross external debt (on a residency basis) less the international



The structure as well as the overall level of public debt has a material bearing on sovereign creditworthiness.

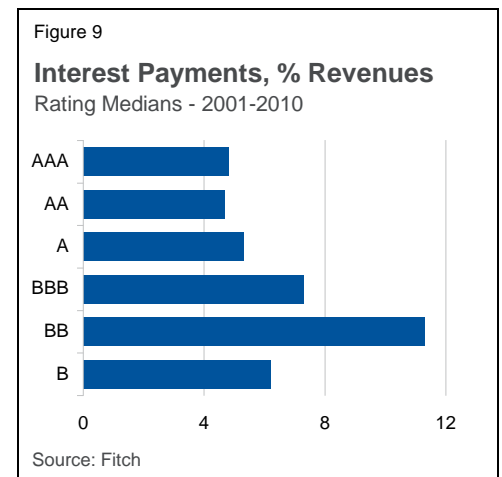
reserves of the central bank and foreign assets (debt and equity) of the government (eg in sovereign wealth and stabilisation funds), expressed as a percentage of GDP and current account (of the balance of payments) receipts (CXR).

Fitch examines the maturity, interest rate and currency composition of government debt, which informs its judgement on the extent of “market risk” faced by the government. A sovereign can gain additional financial flexibility and an ability to sustain relatively high levels of debt if it has a well-regulated, liquid domestic government debt market that is underpinned by a broad range of investors (local institutional investors such as pension and other savings funds), willing and able to provide a range of financing alternatives (including long-maturity and fixed-rate funding), and is resilient to all but extreme economic and political shocks. A government debt stock that is characterised by long maturity and duration materially reduces refinancing and interest rate risks. Conversely, a prevalence of short-term debt and foreign-currency-denominated and payable debt renders the government balance sheet much more vulnerable to market risk.

High levels of financial intermediation (proxied by measures such as domestic credit and broad money to GDP) are often associated with a greater capacity to sustain and fund a given domestic debt burden. Similarly, countries with high rates of domestic savings are, other things being equal, able to sustain larger fiscal imbalances and debt load than low-savings economies, where government borrowing can quickly absorb domestic savings, forcing the sovereign and the private sector to borrow externally. Finally, a proven track record of access to funding from international capital markets is also a positive rating factor.

The sustainability of a given level of government debt is also a function of its path over time. If there is weak credibility that fiscal policies will be sufficient to adjust the primary budget balance (ie the budget balance excluding net interest payments) to establish and sustain the debt ratio on a downward path over the medium to long term, the long-run solvency of the government will also be under pressure. The historical profile of the government debt burden and its track record regarding fiscal policy influence the assessment of sustainability. Stylised projections for the government debt burden based on various assumptions regarding economic growth, the cost of borrowing and the primary balance (ie simple debt dynamics analysis) are also sometimes employed to assist the rating committee in judging the sustainability of a given debt level and current fiscal policy settings.

The degree of budgetary flexibility is also a factor that influences Fitch's analysis of the vulnerability of public finances to adverse shocks, as well as the sustainability of a given debt burden. In particular, Fitch gives weight to the share of interest payments in expenditure and relative to revenue.



External Finances

The stock of assets and liabilities along with trade and financial flows between residents and non-residents is an important influence on the sovereign rating assessment. For the country as a whole, it must obtain foreign exchange — whether it is from the accumulation of liabilities, export of goods and services or from the sale of assets to foreigners — in order to service foreign-currency obligations.

The composition and stock of foreign assets and liabilities, as well as the capacity of the economy to generate foreign exchange, are taken into account in assessing sovereign creditworthiness

Balance of Payments

The starting point for this analysis is the trade and current accounts of the balance of payments, which is a record of a country's current transactions with non-residents. Fitch examines the main components of the current account to identify strengths and weaknesses. While receipts from non-factor income and transfers are determined to a significant degree by events outside of the country and influence of local policymakers, such receipts contribute to the country's overall access to foreign currency. Fitch will nonetheless take account of the volatility and potential vulnerability of such receipts — such as remittances — to domestic and external shocks.

Moreover, analysis of the vulnerability of all CXR is taken into account in the sovereign rating assessment. The greater the reliance on a single commodity or service (such as oil or tourism) for export receipts, the greater the vulnerability to terms-of-trade or other shocks and, other things being equal, the weaker is sovereign creditworthiness. Fitch will also take account in its analysis of the underlying drivers of trends in the current account balance, in particular how it reflects shifts in savings and investment balances and the influence of fiscal policy.

Severe external imbalances render economies much more vulnerable to shocks.

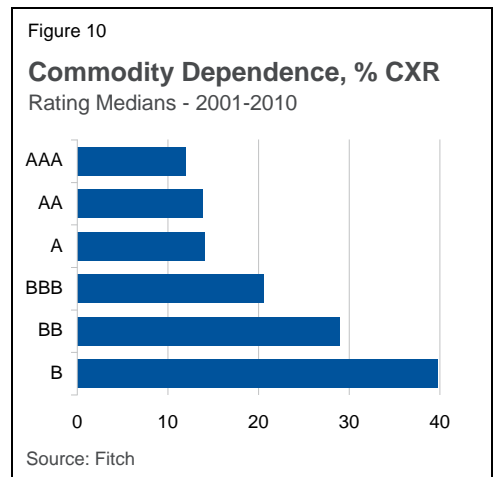
Large current account deficits (both in absolute terms and relative to the size of the economy and CXR) can be a source of risk to macroeconomic stability if financed by potentially volatile capital flows, such as portfolio capital and short-term debt. This can be the case especially if official international reserves are modest in comparison with potentially quick foreign capital and the exchange rate is actively managed.

For those countries with managed exchange rate regimes and which are already heavily indebted (and hence likely to be “credit constrained”), Fitch will put additional onus in its rating analysis on the resilience of external financing flows (eg the likelihood of policy-conditional funding from the IFIs) and whether ex ante external financing needs are likely to be met. Moreover, previous episodes of private “capital flight” will also weigh negatively on the rating analysis if macroeconomic stability and policy credibility is judged to be fragile.

Substantial external debt refinancing needs and outflows of interest payments increase the vulnerability of the balance of payments and economy to external shocks — the former with respect to episodes of volatility in international capital markets, while the latter requires that the goods and (non-factor) services balance must be in surplus (or smaller deficit) than would otherwise be the case. Fitch also assesses the sustainability of the external debt burden through the debt service ratio (repayments of principal on medium- and long-term external debt plus gross interest payments on all external debt relative to CXR) and the interest service ratio.

External Balance Sheet and Debt

Fitch recognises that an economy's and hence the sovereign's ability to withstand adverse balance-of-payments shocks is in part a function of the existing stock of external assets and liabilities. Current account deficits must be matched by the accumulation of external liabilities and/or the rundown of external assets, ie will negatively affect the net international investment position and net external debt. However, as is the case with public debt, there is no given level of external indebtedness that becomes “unsustainable” and results in debt default.



In Fitch's opinion — in addition to expectations for the future path and volatility of output (both GDP and CXR), which is part of its analysis of macroeconomic performance and policies described earlier — the other factors that determine whether a given and projected level of external indebtedness is “sustainable” can be summarised as follows:

- willingness of non-residents to extend credit and purchase domestic assets;
- share of current output and CXR devoted to servicing external debt;
- maturity and currency structure of foreign liabilities and assets; and
- distribution of foreign liabilities and assets by sector.

The willingness of foreigners to extend credit and acquire claims on the residents of a given country is a function of the size of the outstanding stock of foreign liabilities relative to current and future income streams and the stock of foreign assets held by residents. Exogenous influences on the willingness of foreigners to supply capital (such as shifts in investor risk appetite and liberalisation of capital flows by capital-exporting economies) can also directly affect the cost and availability of international capital and potentially sovereign creditworthiness. Fitch's sovereign credit analysis and ratings seek to capture the vulnerability of economies and sovereign creditworthiness to adverse external shocks, including capital market shocks.

The net foreign asset position relative to GDP and CXR for the economy as a whole as well as the sovereign (measured by sovereign net foreign assets described in the *Public Finance* section above) will be estimated and used as an input for the sovereign rating analysis, inasmuch as reliable and timely data on external assets and liabilities is available.

Particular focus is placed on international liquidity where governments rely heavily on borrowing from international capital markets.

The vulnerability of the economy's external balance sheet to a liquidity shock arising from severe maturity mismatches is provided by Fitch's International Liquidity Ratio (ILR). The ILR expresses the stock of the banking system's liquid foreign assets (including the central bank international reserves) relative to quick foreign liabilities, including non-resident holdings of local-currency debt irrespective of maturity, as well as external debt with a residual maturity of less than one year. An ILR of greater than 1 (expressed in Fitch sovereign credit research as 100%) implies that the stock of short-term and liquid external liabilities is exceeded by the stock of short-term and liquid foreign assets, providing a cushion against temporary closure of international capital markets. This is often judged to be an important positive rating factor for those sovereigns that have traditionally relied on international capital markets for fiscal funding as well those with actively managed exchange rate regimes and partially dollarised economies.

The focus on debt, both on the asset and liability side, is because the income and servicing burden respectively are materially less sensitive to the performance of the underlying asset and in particular that of the debtor economy. The value of equity, as well as dividend income, is procyclical, while debt payments are largely fixed according to a predetermined schedule and not conditioned on economic performance. Thus the value and burden of foreign equity liabilities will decline if there is an adverse shift in expectations of future economic growth and/or the domestic economy contracts. Similarly, the income stream and value of foreign equity investments will be a function of the economies invested in and may or may not provide a cushion of assets and income if the domestic economy becomes distressed.

The principal measure of external solvency is based on the concept of net external debt (ie the difference between gross external debt and residents debt claims on non-residents) relative to GDP and CXR. The net external debt ratios for the sovereign are also estimated — the sovereign net external debt differs from the sovereign net foreign asset measure by excluding the sovereign's holdings of non-debt foreign assets. The emphasis on net rather than gross measures of external debt is because as economies become more internationalised, the stock of foreign assets and liabilities, including debt, increases. As such, high and rising gross external debt does not necessarily imply an overall increase in the country's overall foreign indebtedness if matched by a corresponding increase in foreign assets, especially debt claims on non-residents.

The net external debt of the non-sovereign sector of the economy is one of the factors that influences the number of notches, if any, that the Country Ceiling is set above the sovereign Foreign-Currency IDR. If the non-sovereign sector has a materially stronger net external debt position (or even a positive foreign asset position), the Country Ceiling is more likely to lie above the Foreign-Currency IDR of the sovereign.

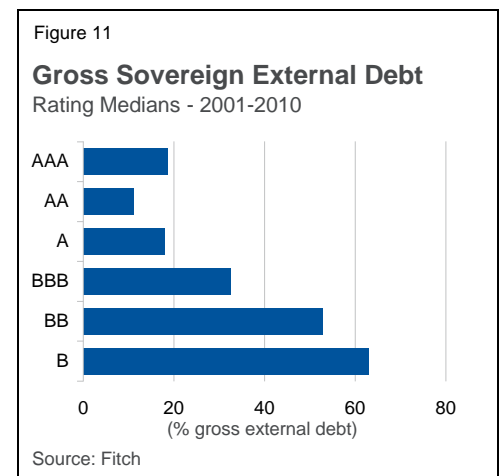
Fitch also includes gross measures of external debt, especially with respect to the sovereign. Moreover, the greater the sovereign share of gross external debt, the greater the government's reliance on external funding and the more vulnerable its credit profile to external shocks. It is also likely that sovereign borrowing is "crowding out" non-sovereign borrowers from international capital markets to the detriment of private investment.

The ability to borrow abroad in local currency materially reduces the vulnerability of the economy and sovereign creditworthiness to external shocks.

Countries whose residents, including the sovereign, can and do borrow at low cost and long maturity in their own currency (in international as well as domestic capital markets) and more generally have local-currency-denominated assets that are attractive to international investors will, other things being equal, be less vulnerable to exchange rate shocks, with positive implications for sovereign creditworthiness. Currency mismatch is approximated by the sovereign net FX indicator: sovereign foreign-currency-denominated debt (irrespective of residence of holder or marketplace) less central bank gross foreign-exchange reserves, expressed as a percentage of GDP. A negative figure indicates that the sovereign's foreign-currency assets are greater than its foreign-currency debt (ie is "long" foreign currency) and is rating positive.

When analysing external public debt, Fitch also draws a distinction between market (ie rated securities issued in public markets) and non-market debt. High concentrations of official debt, extended by multilateral and bilateral creditors, are often on terms more favourable than those offered by the market, and Fitch will use estimates of the net present value of external debt if available. Favourable external debt structure and financing are also reflected in low debt and interest service ratios. Less favourably from a rating perspective, however, if IFIs and official creditors are the primary sources of external

finance and dominant creditors, the private creditor claims may be de facto subordinate in the event of sovereign distress, increasing the risk of selective default and lowering recovery prospects in the event of default.



Appendix 1: Sovereign Rating Model – Key Variables

Sovereign Rating Model – Independent Variables

Variable	Derivation and description
Macroeconomic	
Consumer Price Inflation	3 year average (centred on current year) of annual change in consumer price index (CPI). The forecast at time t rather than the actual outturn is used, signified by 'HF'.
Real GDP Growth	3 year average (centred on current year) of annual change in real GDP. The forecast at time t rather than the actual outturn is used, signified by 'HF'.
Real GDP Growth Volatility	Natural log of the trailing 10 year standard deviation of average annual change in real GDP.
Public Finances (General Government)	
Budget Balance	3 year average (centred on current year) of general government (budget) balance (GGB) as a percent of GDP. The forecast at time t rather than the actual outturn is used, signified by 'HF'.
Gross Debt	3 year average (centred on current year) of gross (general) government debt (GGD) as a percent of GDP. The forecast at time t rather than the actual outturn is used, signified by 'HF'.
Interest Payments	3 year average (centred on current year) of gross government interest payments (GGI) as a share of general government revenues (REV).
Public Foreign Currency Debt	3 year average (centred on current year) of public foreign currency denominated (and indexed) debt (PFCD) as a share of gross (general) government debt (GGD).
External Finances	
Commodity Dependence	Non-manufactured merchandise exports as a share of current account receipts (CXR).
Current Account Balance plus net Foreign Direct Investment	3 year average (centred on current year) of current account balance (CAB) plus net foreign direct investment (FDI) as a percent of GDP.
Gross Sovereign External Debt	3 year average (centred on current year) of gross sovereign external debt (GPXD) as a share of gross external debt (GXD).
External Interest Service	3 year average (centred on current year) of external interest service expressed as a share of current external receipts (CXR).
Official International Reserves	Year-end stock of international reserves (including gold) expressed as months' cover of import payments (CXP).
Structural	
Financial Market Depth	Natural log of financial assets (sum of the outstanding stock of public and private sector debt securities, market capitalisation of the domestic stock market, private sector credit and official international reserves) relative to GDP.
GDP per Capita	Percentile rank of GDP per capita in US dollars at market exchange rates.
Composite Governance Indicator	Average percentile rank of World Bank governance indicators: 'Rule of Law'; 'Government Effectiveness'; 'Control of Corruption'; 'Voice & Accountability' and 'Political Stability'.
Reserve Currency Status	Reserve currency status: 3 = 'strong'; 2 = 'medium'; 1 = 'low'; 0 = none.
Years since default	Non-linear function of the time since the last default (since 1980); the indicator is zero if there has been no default. For each year that elapses, the impact on the model output declines.

Note: For expanded definitions of Sovereign indicators, please refer to the "Definitions and Sources" section of Fitch's Sovereign Data Comparator.
Source: Fitch

Appendix 2: Embedded Market Risk

Some sovereigns are regular issuers of debt securities that return amounts referenced to an external market risk — a risk essentially independent of the issuing sovereign's own creditworthiness. Fitch refers to these notes collectively as structured notes. In some cases only the coupon stream references the market risk (principal protected notes), and in others both coupon stream and principal repayment are driven by the reference market risk (non-principal protected notes). Structured notes reference a very broad array of risks, most commonly equities, currencies, and commodities. Each of these can be referenced on a single-name basis or on a basket or index basis. In some cases the structured note may also contain other structural features that determine the return to the investor such as caps, collars, call or put options, and embedded leverage.

Fitch does not believe it is possible to factor these highly varied embedded market risks into a conventional credit rating. Indeed, Fitch takes the view that in a non-principal protected note, the additional risk (ie beyond the counterparty risk) is potentially so great that Fitch will not rate instruments that do not have 100% principal protection. (In an extreme case, where the embedded market risk has moved materially in an adverse manner, the total return to the investor may be very low or even zero). Fitch defines 100% principal protection as the return to the investor of the full nominal amount of the investment in the same currency that it was originally invested. Typically, this means that Fitch does not rate dual-currency notes where the principal is repaid in a different currency to that of the original investment.

However, certain sovereigns issue structured notes with this type of dual-currency structure in order to provide international investors with access to local currency assets through a secure clearing platform with repayment in a benchmark currency (such as US dollars), thereby protecting the investor against the imposition of exchange controls by the sovereign. As the primary intent of this structure is not to create synthetic currency risk, Fitch is able to assign ratings to sovereign issues of this type.

In the case of structured notes that have 100% principal protection but a coupon subject to embedded market risk, Fitch assigns ratings that solely address the counterparty risk of the issuer. The variability of return to the coupon created by the embedded market risk and any other embedded structural features is fully excluded from the rating assigned to the note. Almost all such notes are issued as senior obligations and will therefore carry a rating identical to that of the issuer's other senior obligations.

To reinforce the limitation in scope to the counterparty risk created by the exposure of the coupon to embedded market risk, Fitch appends a subscript ('emr') to its sovereign structured note ratings, although this subscript is not used for the dual-currency structures outlined above. The 'emr' subscript addresses solely the exclusion of the embedded market risk from the rating. It does not indicate any limitation in the analysis of the counterparty risk, which in all other respects follows this criteria report.

For the purposes of these criteria, inflation is not regarded as a market risk, and inflation-linked notes in the absence of additional embedded market risk are rated without the addition of the 'emr' subscript. They are not subject to the principal protection rule.

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