

IBRD CREDITWORTHINESS FRAMEWORK A METHODOLOGICAL OVERVIEW

Countries wishing to access IBRD on standard terms for the first time, or after a period of lack of creditworthiness, are assessed for creditworthiness by the IBRD Credit Risk Department (within the Corporate Finance and Risk Management Vice-Presidency (CFRCR). This note provides an overview of the methodology used to determine creditworthiness.

1. INTRODUCTION

What is Creditworthiness for IBRD? IBRD creditworthiness is an assessment that is made that a borrower is likely to be both willing and able to repay the IBRD on time and in full over the length of an IBRD lending program. Given the typically long maturity of IBRD loans, the creditworthiness analysis considers the country's growth prospects and risks over a medium- to long-term horizon. Since the IBRD only lends to sovereign governments or with a sovereign guarantee, the assessment only covers sovereigns' creditworthiness. The main focus is on structural factors that would play a role in shaping longer-term prospects, while taking into account recent economic developments. It is supplemented by short-term factors that may heighten immediate risks of lending that could point, inter alia, to the need to delay a positive decision.

Why do IBRD's creditworthiness decisions differ from private rating agencies? The creditworthiness assessment pertains to creditworthiness for IBRD borrowing and may differ from decisions by private rating agencies that focus on payment risks on bank and bond debt, and would have a shorter-term focus. Unlike private bank lending where higher default risk premiums are charged in higher risk countries, the IBRD as a cooperative development institution does not price for risk to IBRD members but extends the same terms to all members regardless of their risk.

Who initiates a creditworthiness review? Requests for assessment of creditworthiness come from the Country Department, on instructions from the government of the country in question, and after discussions take place on the pros and cons of IBRD borrowing. Usually requests are made after the country's GNI per capita surpasses IDA's operational cutoff point as a proxy for poverty and ability of the economy to absorb economic shocks; or when the country has demonstrated sustained ability to access the international financial markets, with low levels of debt distress and solid development prospects.

Why a rigorous creditworthiness assessment? IBRD finances lending to member countries by borrowing from the market, and hence relies on its high credit standing and AAA rating to ensure competitive borrowing costs for its members. Since IBRD does not price for risk, it is important that IBRD's lending practices be prudent and minimize risk factors to maintain IBRD's historically low incidence of defaults on IBRD loans. The importance of maintaining IBRD's high credit standing is also behind IBRD's policy not to write-off loans.

> A decision on creditworthiness can have an impact on the Bank's financial strength long after a creditworthiness decision is made. A number of previous IBRD borrowers assessed at one point as creditworthy had

difficulty maintaining creditworthiness for IBRD and returned to blend or IDA-only status. Of the 40 countries to be declared eligible for significant debt relief from bilateral and multilateral creditors under the HIPC and MDRI initiatives, 23 of them had, at one point in time, access to IBRD borrowing, with debt relief provided by IDA. A number of other countries that were IBRD members and started to face difficulties in maintaining their payments were assisted through a Fifth Dimension Trust Fund that helped offset IBRD debt service. This shows the difficulties many countries can experience in remaining creditworthy for IBRD, and the need for rigor in the creditworthiness decision.

IBRD incurred its first default since its foundation in 1984. Since then, twenty borrowers have been in default – some more than once. Among the nearly 100 current or former IBRD borrowing countries, the most that have ever been in default to IBRD in a single fiscal year is nine. Currently, only one borrowing country is in default.¹ All borrowers' contractual obligations that have been defaulted on have eventually been paid in full, and this superior payments record reflects IBRD's preferred creditor status.²

2. CREDITWORTHINESS ASSESSMENTS

Main components

Assessments of creditworthiness, similar to determinations of individual country risk ratings, are derived on the basis of both quantitative and qualitative analysis. The components considered in the analysis can be grouped broadly into eight categories.

- political risk
- political accountability and governance
- sustainability of external debt and liquidity
- fiscal policy and public debt burden
- balance-of-payments risks
- economic structure and growth prospects
- monetary and foreign exchange policy
- financial sector risks and corporate sector debt and vulnerabilities

Weights not fixed Each of these categories is considered in turn, and they jointly determine a country's overall creditworthiness. However, no fixed weights are assigned to any one category and qualitative judgment is needed to come to a coherent decision on creditworthiness. This largely reflects the fact that no weighting formula can cover all country situations at all points in time. One single category, depending on the circumstances, can dominate otherwise satisfactory performance in all others, such as extreme political risk, an unsustainable debt burden, a track record of stalled reforms, or in a positive direction, a resource endowment that provides a significant source of sustainable foreign exchange with very little downside risk.

The evaluation of the creditworthiness of a given country occurs against the background of a particular global outlook. Factors such as commodity price

Global outlook can affect creditworthiness

ZIMUADWE IS IN NON-ACCRUAL STATUS AT the time of writing.

 $^{^{2}}$ The IBRD does not charge interest on interest, with resulting losses affecting net income.

trends, projections of international trade and G7 output growth, and prospects for international capital flows can have a strong influence on the growth outlook for individual countries, and can affect the timing of a positive creditworthiness decision. CFRCR is briefed on a monthly basis by the World Bank's Development Prospects Group on global prospects, international finance and commodity trends. Feedback from these meetings into individual country outlooks plays an important role in the creditworthiness decision.

Macroeconomic
projectionsUnderpinning individual country assessments is a set of macroeconomic
projections covering a two-year period. These provide one analytical tool—
but not the only one—to bring together the influences of the main
creditworthiness criteria into a consistent framework.

Since particular focus is given to economic structure and growth prospects, for many variables such as longer-term growth prospects, public debt sustainability, and external debt sustainability, longer term projections are also used. Here it is important to make a determination whether growth rates will likely exceed the increase in financing costs for the country should it move away from concessional financing. It is also important to look at the totality of preferred creditor exposure.

In addition to solvency considerations, liquidity considerations are taken into account. External financing needs, available financing sources and implications for the external debt service burden are of key importance as most countries for which creditworthiness analysis are being undertaken are prospective IDA graduates, and many of them would have lower GNI per capita levels than the average IBRD borrower. Flexibility factors such as wealth endowments and international reserves cushions can help moderate the higher vulnerability to shocks of these poorer countries.

The paragraphs below, albeit not exhaustive, provide a brief overview of key issues that are analyzed in each of the eight risk categories. In some categories qualitative analysis dominates, while others build on quantitative economic indicators and standard economic analytical tools.

Political Risk Political factors have historically been a very important determinant of payments behavior in those countries that have defaulted to IBRD, but also more broadly in generic payment difficulties. At the same time, political risk factors are the least quantifiable of all determinants of creditworthiness, resulting in heavy reliance on qualitative analysis.

Factors that would detract from creditworthiness include the presence or imminence of domestic or external armed conflict; significant unresolved political, social, ethnic or religious tensions; location in a politically volatile region; or an isolationist political and/or economic stance that makes for a very risky investment climate and hampers growth prospects. Positive factors would be a high degree of stability of a country's political system and its institutions, predictability of the future direction of economic policy, a track record of appropriate policy adjustments in crises, and broad consensus on the direction of economic policies.

Political Accountability and governance

Liquidity

Political Accountability and governance is a separate category from Political Risk in the creditworthiness assessments. This examines factors such as the strength of a country's policies and institutions, levels of corruption, how well the government delivers services, the "doing business" climate in the country and how government rules and regulations enhance or hamper the business climate. This section also looks at social indicators as a measure of development of a country. Many of these factors are qualitative, but some are quantified – for example, Country Policy and Institutional Assessment (CPIA) measures, or indexes of governance and human development.

A key factor in the assessment is the level and sustainability of a borrowing Sustainability of country's external debt. Debt levels and future service payments are External Debt and evaluated relative to GDP, exports and access to financing. The analysis focuses on the external debt of the public sector, but since external obligations of the financial and the non-financial private sectors can turn into public liabilities in a crisis, these are also examined. A country's debt servicing history and its reliance on preferred creditors, indicating a country's room for maneuver in a crisis, are also very important. Exposure and debt servicing history to IDA and IBRD are scrutinized in detail, as is debt servicing history to official bilateral creditors. Previous access to HIPC/MDRI debt relief could have a positive or negative influence on the creditworthiness decision depending upon how post-HIPC debt has been managed. A renewed pattern of debt accumulation post HIPC could signal a high risk of renewed debt problems, particularly if linked to unsustainable recurrent expenditures.

> International reserves can act as a financial liquidity cushion during crises. Their adequacy and quality are assessed relative to a country's import needs, to broad money that could be a source of capital flight, and to liquidity needs, debt service and short-term debt exposure. In addition, different currency regimes may imply the need for different levels of reserve holdings. Commodity exporters which are particularly vulnerable to price shocks may also need higher levels of reserve holdings than more diversified countries.

Another key component is fiscal and public debt sustainability. For countries Fiscal Policy and vulnerable in these areas, detailed quantitative analyses are conducted that **Public Debt Burden** consider, inter alia, vulnerabilities to changes in interest rates, poor growth prospects, foreign exchange depreciation and roll-over risks. For all countries, fiscal accounts and public debt levels are assessed on a comprehensive basis, using broad definitions of the public sector and including contingent liabilities wherever possible. The quality of the underlying expenditures, revenue-raising capacity and sustainability are assessed when looking at fiscal deficits. For countries that rely substantially on external grants, their medium and longer-term sustainability is also taken into account. It is important to also consider the structure of the country's administration, i.e. is it a federal versus a unitary state, as a federal system can complicate fiscal management. The strength of fiscal responsibility legislation can be an important element to consider in the strength of fiscal policy, as is the country's debt management ability.

Current and capital account vulnerabilities can be instrumental in triggering **Balance of Payment** crises and can undermine creditworthiness. While large current account Risks deficits often are a warning signal of potential instability in the external accounts, they do not have to be detrimental to creditworthiness, depending

on their origin and non-debt creating financing possibilities. Structural factors, such as diversification and competitiveness, as well as trade policies, reliance on workers' remittances and global prospects are important in assessing current account vulnerabilities.

Capital account vulnerabilities that could undermine creditworthiness are often linked to large debt roll-over requirements or large short-term debt exposures that can be affected by investor sentiment. Capital flight is a related risk. Access to non-debt-creating FDI or portfolio flows can mitigate these risks to some extent. Quantitative modeling of individual countries' current and capital account vulnerabilities underpins the analysis of this component of the creditworthiness assessment.

Economic Structure and Growth Prospects A country's ability to sustain IBRD borrowing depends to an important extent on its economic structure and its prospects for growth. Economic structure encompasses a broad range of factors, which can partly be assessed through quantitative indicators but which also require qualitative analysis and judgment. Included are, for example, a country's resource endowments, its institutional capacity broadly defined, and progress on structural reforms, all of which affect its ability to withstand shocks and consequently matter to its rating. Given these structural endowments, the creditworthiness assessment also looks into the country's planned capital spending, its potential efficiency and the likelihood it will unlock growth bottlenecks. Private sector investments in the pipeline, and public-private partnerships may also improve growth prospects, as can domestic savings rates.

> Growth prospects are one key determinant of the sustainability of public debt and thus of payment ability. Growing economies with positive structural characteristics also tend to have more room for maneuver in the event of a shock than stagnant economies with structural deficiencies, and thus contribute to a greater likelihood of creditworthiness.

Monetary and Exchange Rate Policy Monetary policy that is supportive of macroeconomic stability would be a positive factor in a country's creditworthiness. This would include a history of price stability, controlled money and credit growth, and a significant degree of central bank autonomy. Structural factors such as monetary depth, availability of monetary instruments and the exchange rate regime may limit the scope for effective monetary policy management.

> Different exchange rate regimes imply different degrees of flexibility to accommodate shocks, although limitations may be given by country size or degree of dollarization. Under any regime, signs of overvaluation often provide an indication of looming foreign currency crises and figure negatively in the creditworthiness decision.

Financial and Corporate Sector Risks and vulnerabilities Financial sector difficulties with a potential for reaching systemic proportions can be a negative factor in assessing a country's creditworthiness. Financial sector crises tend to carry significant fiscal costs, depress economic activity for extended periods, and have also often been associated with broader exchange rate crises. As a result, a country's payments ability deteriorates.

> Assessments of financial sector risks build on a combination of quantitative indicators (such as asset quality, foreign exchange exposure, and capital adequacy), structural characteristics (such as financial depth, extent of

dollarization, degree of controls, public/foreign ownership and the quality of financial supervision), and results from Financial Sector Assessment Programs (FSAPs) or similar studies that stress test the resilience of the financial system to withstand shocks. In many IDA-only countries, financial sectors may be very small or nascent, and may not make a significant contribution, or pose significant risks to creditworthiness.

Corporate sector external payment difficulties can affect the public sector and its payment ability in crises. Data are often more difficult to come by, particularly in lower income countries, but attempts are made to track the sector's gross and net foreign exchange exposure, leverage, export capacity, competitiveness, and stock market valuations along with other more qualitative indicators of the sector's health.

3. METHODS TO ENSURE CONSISTENCY IN ASSESSMENTS

Proposed creditworthiness decisions for individual countries pass a thorough vetting process to ensure consistency across countries and over time before assessments are finalized. This section gives an overview of the process followed and some of the main tools used.

Creditworthiness Assessment Process Creditworthiness assessments are carried out by CFRCR analysts with a broad range of relevant experience under the direction of the Chief Credit Officer.³

A creditworthiness assessment is prepared by the CFRCR team that typically travels to the country and consults with: the authorities (including the Central Bank, Finance Ministry, and other government bodies), the Bank country team, other multilaterals, credit agencies, academics, think tanks and the private sector.

Comparative tables on a number of key areas that have been demonstrated as important predictors of successful graduation are included. The tables typically compare the borrowing country being considered with other appropriate groups of IBRD borrowing countries, as well as with the group of high-risk IBRD borrowing countries. In most cases, it would be expected that on the whole, the country should perform at least as well as the group of high-risk IBRD borrowing countries (excluding marginally creditworthy countries) to be assessed creditworthy.

The initial assessment for a country is prepared by the responsible country analyst in CFRCR, based on the eight categories described above, and drawing on information gleaned during the creditworthiness mission, as well as other sources. The proposed decision is presented in the form of a note, typically 15-30 pages, accompanied by a data page with key economic indicators covering recent history and projections for the next 2-3 years.

³ Analysts typically have a strong background in macroeconomic analysis and many have previous work experience related to country risk evaluation and debt analysis, e.g., current analysts have worked at the Belgian Export Credit Agency (ONDD) and the broader association of OECD export credit agencies, Bank of England, Economic Intelligence Unit (EIU), French Center for Prospective Studies and International Information (CEPII), Institute of International Finance (IIF), IMF, numerous operational departments of the World Bank, and represented the World Bank in Paris Club and Berne Union meetings.

The assessment, along with the positive or negative proposed decision is then distributed to the creditworthiness committee, consisting of all country analysts in CFRCR and chaired by the Chief Credit Officer. At the committee meeting, the analyst presents his or her assessment of the country's creditworthiness and justification for the proposed decision. The committee then debates the proposal, compares country performance against other country experiences and different benchmarks discussed below, and the chair concludes with due regard to the consensus view of the group. The creditworthiness report itself is an internal document in the credit risk department, and is not shared with the country authorities or the Board. However, the report along with the final creditworthiness assessment is conveyed to the Country Director. Should there be a positive assessment, the Board in informed, usually at the time of a new Country Partnership Strategy (CPS) or CPS Progress Report. At this point the new status (typically blend) is updated in the Bank's operational policy manual (OP3.10, Annex D). Several technical tools have been developed to facilitate consistency in Quantitative risk comparing countries. Once such tool is the quantitative risk model (Quant rating model model), but given data weaknesses in many IDA-only countries for which creditworthiness assessments are undertaken, there may not be sufficient information to effectively employ the Quant model. The model uses 17 key quantitative annual indicators of creditworthiness aggregated into four subaggregates: macroeconomic situation, debt and balance of payments, political risk and policy framework, and direct risk of protracted arrears. The subaggregates are then aggregated into an overall score. The scores provide a systematic ranking of countries. For creditworthiness, it would be expected that the results of the model would place the country at least above the highest risk IBRD borrowers-higher risk would imply only marginal creditworthiness. Also available to analysts is a set of creditworthiness charts indicating a **Risk indicator charts** particular country's performance on 22, mostly annual indicators against the average of all high risk countries. The indicators are broadly grouped into four categories, the external debt position, external economy, domestic economy and the political situation, with additional information on payments experience to IDA and/or IBRD, and IDA/IBRD exposure. The charts serve as a useful quick visual reference on a country's relative performance. Another tool used during the creditworthiness assessment review meeting is **Benchmark** tables a set of benchmarking tables that show IBRD, preferred creditor and overall debt ratios, rating agency ratings, bond spreads and, where applicable, IBRD exposure across countries. This tool allows analysts to compare at a glance a country's debt ratios relative to the average of all IBRD countries and high risk IBRD countries. Given that a potential IDA-only graduate is likely to have primarily concessional preferred creditor debt and would rarely have a broad set of rating agency ratings, the benchmark tables are primarily useful for looking comparing debt levels. CFRCR has also experimented with econometric estimates of the Logit-models for probability of default based on a set of independent variables, so-called logitestimating default probabilities

models.⁴ One of the inherent problems with these models when applied to IBRD or other IFIs is the limited number of instances of default. The difficulty of quantifying some factors that play an important role in a creditworthiness decision is another broader issue. As a consequence, the results of these models have so far not been very promising, and they have not been used systematically in IBRD creditworthiness decisions.

Exposure projections To track a country's IDA and IBRD exposure, projections are made covering IDA and IBRD lending and repayment projections for the next three years, based on current country lending programs.

Documentation and records are kept by CFRCR, documenting each creditworthiness assessment, including the creditworthiness assessment report, accompanying country projections, and comparator charts and tables.

4. COMPARISON WITH OTHER MULTILATERAL DEVELOPMENT BANKS (MDBS)

Other MDB processes and outcomes Creditworthiness assessments by other MDBs may differ from that of IBRD for a number of reasons. MDBs often follow IBRD's lead in whether to declare a country creditworthy for non-concessional borrowing. But in some cases such an assessment may be influenced by other factors, such as the limited availability of concessional financing. In such instances, the institution may have other mechanisms to cushion it from credit risk, including with regard to reserve and provisioning, such that the decision is consistent with the MDB's financial policies.

5. CONCLUSIONS

IBRD's creditworthiness assessments aim to determine a potential borrowing country's ability and willingness to repay the IBRD on time and in full. The assessments build on a careful quantitative and qualitative analysis of eight broad components of creditworthiness. In the process, analysts draw on country visits with discussions with authorities, private-sector participants, academics, think tanks, credit rating agencies and other donors and partners. Analysts also draw on discussions with colleagues in the regional and central economic departments, the IMF, and reviews of country information from official and private sources. The creditworthiness assessment is informed by the use a number of tools developed by CFRCR to ensure consistency among countries and over time. While the focus of IBRD's creditworthiness decision is on medium-term payments ability, short-term risks are systematically considered, and where high, these could delay a positive creditworthiness decision.

CFRCR, June 2012

⁴ "An Econometric Analysis of the Creditworthiness of IBRD Borrowers," David McKenzie, World Bank Working Paper 2822, April 11, 2002