POLICY & METHODOLOGY SOVEREIGN RATINGS



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The Islamic International Rating Agency (IIRA) offers ratings of all types for sovereign borrowers and related institutions. Moreover before assigning a credit rating to an issue or issuer in a country, IIRA must first assign a sovereign rating to the country to establish a credit benchmark and sovereign ceiling for foreign currency transactions. IIRA evaluates the creditworthiness of the government of that country, determining its ability and willingness to fully service its financial obligations on time.

A government is almost always the most creditworthy entity in a country because of its powers to tax, print money, and control the allocation of foreign exchange. No financial institution or company in a country can match these powers; therefore, they are by definition less able to meet their financial obligations than the central government. Hence, the ratings of non-governmental institutions will have a rating below that of the sovereign or at best equal to it in some cases.

Different types of obligations and rating scales

The obligations that IIRA rates can be denominated in either foreign currency or the country's local currency. They can be of a short-term nature (issues due within one year) or of a long-term nature (issues due more than one year into the future). They can be cross-border debt or domestic debt. Local currency obligations are usually rated higher than foreign currency obligations since there is no currency conversion risk involved in repayment. Depending on the needs of investors and issuers in IIRA's markets, the ratings can be based on an international scale or on a national scale, without reference to ratings of other governments as issuers.

IIRA's international scale methodology for rating sovereigns is consistent with best practice globally in terms of information content, statistical under-pinnings and its comprehensive analytical approach. That analytical process has been tested over time and is widely accepted by the debt markets as credible and useful. There is no need for IIRA to "re-invent the wheel." At the same time, IIRA adds its unique stamp to the process by including the individuality and distinctiveness associated with the Islamic market. IIRA's analysts are experts in understanding the political and social characteristics of the market and adjust their analyses to take into consideration those sovereigns with special economic dependencies (e.g., petroleum) or special financial systems (e.g., Islamic).

In these cases, analytical emphases may shift and certain economic factors may assume greater weight in the overall picture compared to the standard methodology. These special emphases, shifts and weights endow IIRA with a unique approach that can be more appreciated in the regions served. These regions stretch from northern Africa to Asia.

The methodology presented here will briefly explain the various factors, both qualitative and quantitative, that IIRA considers when assessing a sovereign.



Six analytical categories

There are six basic categories used by IIRA in analyzing sovereigns and their likelihood of default on debt obligations. There are no set weightings associated with these categories; nor does IIRA use mathematical formulas or econometric models in its sovereign evaluations. Indeed, judging a government's policy intentions, evaluating the quality of economic management, and assessing the sufficiency of their data are subject to qualitative consideration.

A default is defined as an issuer missing a scheduled payment of a debt or a contractual obligation. The payment may be either late or insufficient according to the obligor's contract. If the rating is not already adjusted to reflect imminent default, the event always results in a downgrade in the entity's rating. In the case of sovereigns, the decision to meet the obligation or not is more often a result of unwillingness to pay rather than inability to pay. This is clearly a political consideration.

I. Politics and Policy Continuity

The reform-minded nature of a government and the efficacy of its policies plus the level of public support behind the policies together determine whether a government will succeed in creating the incentives and appropriate legal environment that facilitates economic growth and political stability.

With regard to policy, experience has taught IIRA two realities:

- 1. Current government policies are the best indicator of future credit problems, and
- 2. Policy intentions and implementation are the primary cause of rating changes, up or down, in a country.

In the light of these two premises, IIRA examines the policy-making and decision-making capacity of the executive, legislative and judicial branches of government to determine if there is sufficient capacity and determination to meet the country's goals and respond to fiscal and political problems. We evaluate whether government policies are designed to facilitate economic growth and the payment of debt service. IIRA studies a government's past behavior under stress to understand its tendency to borrow and to repay debt.

Assessing emerging markets

Many of the countries that IIRA focuses on can be termed "emerging markets," which are characterized by these common features:

- 1. Economic and political structures in transition from one form to another
- 2. Dependence on external trends, such as a high sensitivity to changes in commodity prices and capital markets
- 3. Less than the desired level of transparency and timeliness in government operations and documentation.

Given this framework, IIRA assesses whether the following conditions exist in a country, some or all of which can constrain a country's credit rating:

- Frequent changes in government, which undercuts policy continuity and could even bring to power proponents of debt repudiation
- Lack of a systematic process for political succession, which raises uncertainty for investors and demands a risk premium
- Non-credible or nonexistent electoral processes, which weaken the social consensus
- Ineffective judicial and law enforcement agencies, which dissuades investment



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- Official corruption or favoritism, which undermines the efficient use of capital
- Internal security threats, which can deter investment or sap scarce resources
- Sluggish or non-existent economic growth, which can trigger high unemployment, fuel domestic unrest, delay reforms, and complicate access to funding
- External threats, which can strain fiscal policy and produce capital flight

In sum, the political environment is a critical factor in IIRA's evaluation; it affects all the other factorsbelow.

II. The Economy—Structure and Growth Prospects

The structure of the national economy and its prospects for steady economic expansion are important in a rating determination, because a growing economy supplies operating revenues to the government through taxes and exploitation of natural resources it creates a greater capacity to service debt. Without wealth-generating policies, deficit financing can become structural, countries tend to stagnate, and governments lose their popular backing. Such developments do not support a high rating. Hence, a key issue IIRA examines is: Can the authorities implement effective structural adjustment measures, and is there sufficient receptivity in the political environment to sustain difficult reforms?

Market orientation

Since market-oriented economies produce more growth than planned economies and are generally more respectful of investor and creditor rights, IIRA examines the extent to which an economy is market-oriented, the adequacy of the infrastructure, and the efficiency of the public sector. With regard to this latter point, IIRA determines if the size of the civil service places an undue burden on the national budget.

IIRA also checks the effectiveness of the financial sector in intermediating funds, the diversity of economic production, the country's natural and human resource endowment, and the benefits (if any) of membership in regional trading or economic or currency co-operation zones. A sovereign's credit quality depends on wealth generation and thereby its ability to reduce debt. The competence of economic management is the key variable here.

To determine the growth prospects for an economy, IIRA examines each sector and its contribution to output as well as the pattern of sectoral growth. Are the patterns steady or volatile? Since future growth is generated by investment of the country's savings (both private and public), the amount and the nature of such investment plays a key role in the analysis. IIRA focuses on the size, direction and regularity of investments. A rising standard of living has many benefits from a credit standpoint: it produces public support for wealth-generating policies, it permits higher public sector debt levels, and it cushions the economy from unexpected political, economic or financial shocks.

In the final analysis, debt repayments must draw from a nation's accumulated wealth—past, present and future. IIRA assesses a country's innate resources (human and natural) to determine their potential and checks to see if there are constraints to their utilization, such as rigid labor markets, high taxation, and efficiency-stifling bureaucracy.

III. Budgetary and Fiscal Policy

The trends in a country's internal fiscal balances are a good determinant of future debt burdens. In fact, fiscal policy is the leading indicator of creditworthiness. There is a clear and direct link between public finances and a country's internal and external debt.



General government finances

IIRA assesses the trends in the consolidated general government budget, which is the sum of the national, regional and local government sectors with adjustments for intergovernmental transfers. Here is a sample of questions requiring answers:

- 1. Are there chronic deficits that require internal or external financing, or are there regular surpluses that help to minimize borrowing and provide investment resources?
- 2. Do the tax rates encourage saving and spending or do they penalize creativity and entrepreneurship?
- 3. How efficient is the government in raising revenue; that is, does the tax structure maximize revenue receipts in both the open and hidden economies?
- 4. How burdensome is debt servicing relative to total expenditures and to GDP?

A key concept in IIRA's sovereign credit analysis is "fiscal flexibility." A government has fiscal flexibility (and ceteris paribus a higher rating) if it has options for raising revenue and cutting expenditure should a crisis occur, such as a run on bank deposits or capital flight. If emergency funds are required and borrowing is not an option, a government with fiscal flexibility can quickly raise tax rates or cut discretionary spending in public services. Conversely, governments that face tax collection problems or constitutional rigidities in attempting fiscal adjustments are more likely to incur higher debt and other liabilities. In such a situation, it is also more difficult to sustain reform policies and economic growth.

Contingent liabilities

Most governments maintain off budget commitments and contingent liabilities, such as pension obligations to former public employees, guarantees of the debt of state-owned enterprises (SOEs), or promises (implicit or explicit) to support the banking sector in time of need. IIRA examines banking sector health (e.g., profitability, real economic capital, the significance of non-performing loans), the size of the public sector in the overall economy, and the indebtedness of SOEs to determine if contingent liabilities are likely to become an actual burden in a stress scenario. If so, the debt profile of the government is marked up and the rating constrained.

IV. Monetary Policy and Flexibility

A government's monetary policy is a leading indicator of its credit status. Let's take two extremes as examples:

- (1) If the central bank is independent from the executive branch of government of political influence or control, then it can more easily pursue tighter or looser monetary policies when the times demand it. Moreover, the more developed and transparent a country's financial sector, the more effective its policy tools will be as the monetary signals will be transmitted throughout the economy more clearly and efficiently. IIRA considers, what are the central bank's options for damping inflation and controlling the money supply? The more options and policy flexibility available to monetary authorities, the more likely is a benign outcome when inflationary or deflationary pressures arise.
- (2) On the other hand, if a central bank monetizes budget deficits due to pressure from various ministries, political factions or pressure groups, then there is a greater likelihood of price inflation and economic damage, such as the erosion in value of savings and less financial intermediation due to high interest rates. High interest rates squeeze out borrowing, investment and spending, which constrains economic expansion. A high inflation rate and its collateral damage tend to correlate with lower credit ratings. Similarly, if a country's capital markets are shallow and do not effectively intermediate funds, changes in monetary policy will not have as rapid or as thorough an impact.



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Thus, IIRA examines a country's record of success against inflationary pressures over recent economic cycles and how budget deficits are financed in order to determine how professional and independent the central bankers are. We check to see if monetary goals are compatible with the exchange rate regime. If a country's currency is pegged tightly or loosely to the world's reserve currency or to a basket of currencies, then the central bank's flexibility in monetary management is constrained.

V. The External Accounts

In the external sector, the economy must be able, through the sale of goods and services on the world markets, to earn enough foreign exchange to buy necessary imports and have enough remaining to repay outstanding debt and maintain an adequate level of reserves.

To determine a country's external earning capacity, IIRA looks first at the merchandise trade account. If the components of trade (both imports and exports) have a pattern of flexibility and diversity, then the country is less vulnerable to price swings or disruptions in markets. On the other hand, if a country has a structural dependence on certain export products, such as hydrocarbons, or on certain imports, again such as hydrocarbons, the trade balance shows less elasticity, and there is consequently less capacity to compete in world markets and earn foreign exchange.

IIRA then assesses the balance of payments flexibility, including the compressibility of imports and the prospects for growth in exports (which may depend on the product and market mix of exports as well as on wage and price competitiveness), and the ability of the authorities to attract foreign direct investment as well as portfolio investments.

A country that runs a current account deficit is building obligations to the outside world, but this may not be a critical rating consideration by itself, since that deficit may be the result of inward investment in future income-generating goods and services. Hence, IIRA seeks to determine if the external deficit is relatively benign or the result of internal fiscal mismanagement on the part of authorities, which could lead to a foreign exchange crisis and capital flight, as in Thailand in 1997.

Capital flows into and out of a country need to be analyzed to understand the nature of a country's accumulation of obligations, in debt or equity terms, to the outside world. The key question then is reliability of access to foreign exchange. How cyclical and reliable are the sources of a country's reserves, including foreign exchange earnings, returns and principal recapture on offshore investments, and gold? While available data can give guidance on this question, the answer is a matter of professional judgment.

VI. Internal and External Debt

IIRA analysts are concerned with several aspects of a sovereign's debt profile: the amount of debt outstanding, its relative burden on society, the past record of repayment, repayment scheduling into the future, the capacity to repay, access to concessional funding, and prospective additional borrowing.

We ask such questions as:

- For what purpose was the debt raised—investment versus consumption?
- How large a burden on the country's wealth is gross and net debt?
- What share of general government revenue (or current account receipts) is devoted to debt repayments?
- What is the maturity profile of external debt? If debt repayments are bunched in the short term, then the risk of delay in payment, or even nonpayment, is heightened.



In evaluating internal and external debt generated by the public sector, we are cognizant of the linkages among the other five factors listed above, primarily budget balances and foreign exchange generation.

For example,

- high indebtedness restricts fiscal flexibility since servicing the debt ties up funds that might be utilized more productively;
- chronic budget deficits require financing, sometimes from overseas, which makes growing current account receipts more critical.

Private Sector External Debt

The long-term debt raised by the private sector constitutes an important dimension in a country's overall debt picture. We include private sector external debt in our sovereign ratings for three reasons:

- 1. The ability of the private sector to repay its overseas debt is dependent on the economic and fiscal policies of the central government,
- 2. The foreign obligations of domestic companies and banks can become a liability of the central government in a crisis, and
- 3. Debt raised by private borrowers still needs to be serviced with foreign exchange, over which the government has ultimate control.

Debt generated by the private sector comprises

- 1. Financial sector borrowings from non-residents, including deposits and structured debt, i.e., bank obligations in foreign currency
- 2. Non-financial private sector external debt, including structured debt, denominated in foreign currency

IIRA evaluates whether the government provides an investor friendly environment, permitting private companies and banks to pursue wealth-generating returns, or is the operating environment full of regulatory burdens and high taxes that constrain the private sector from creating wealth and the ability to service obligations.

Key Ratios

IIRA's analysts collect economic and financial data, using public sources, private sources, international sources, and statistics provided by national official statistical authorities, the central bank and ministry of finance. From these data, IIRA generates key ratios that best indicate the country's credit posture from several perspectives: economic, financial, external and debt. Below are examples of data and relationships IIRA considers significant. Each ratio is calculated over the past five years to determine trends and uncover vulnerabilities. IIRA then extrapolates those trends to estimate where credit risks may arise in the future.



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Data Tables (Illustrative Exhibits)

2002 2003 2004 2005 2006 2007f 2008f

Economy

Nominal GDP

Real GDP

Oil

Non Oil

Nominal GDP (Million BD)

Population (,000)

GDP per capita (US\$)

GDP per capita (BD)

Inflation rate

Public sector employment (,000)

Total Employment (,000)

Gross investment

Estimated unemployment rate

Annual Oil production (mil of barrels)

Government Finances

Oil Contribution

Non Oil Contribution

Central gov't revenues

Current (Excluding debt) Exp.

Interest Payments

Capital Expenditure

Strategic Capital Expenditure

Central gov't expenditures

Gov't primary balance

Gov't financial balance

Gov't interest payments

Total gov't debt

Local currency short term debt

Local currency med- & Long-term debt

Government external debt

Local currency debt service

External Accounts

Exports of Goods

Exports of Services

Income Receipts

Current Transfer Receipts

Total Receipts

Imports of Goods

Imports of Services

Income Payments

Current Payments

Total Payments

Current account balance

Merchandise trade balance

Data Tables (Illustrative Exhibits)

2002 2003 2004 2005 2006 2007f 2008f

External Debt

External debt

Public Sector External Debt

Private Sector External Debt

Short-term external debt

Med & long term external debt

External debt service

Monetary, External Vulnerability & Liquidity Indicators

M1

M2

M2XR (M2 + Time deposit + FX deposits)

Consumer price Index

Total foreign currency deposits

Total local currency deposits

Total Deposits

Total advances of commercial banks

Foreign Assets of Domesti Banks

FX Reserves

Maturity Profile Up to 6 m 6m -1 yr 1-2 yrs 2-3 yrs 3-5 yrs >5 yrs Total

Government Domestic Debt Government External Debt

Source: e=IIRA's Estimates f=IIRA's Forecast



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Ratio Analysis (Illustrative Exhibits)

Country Name

2002 2003 2004 2005 2006e 2007f 2008f

Economy

Per capita GDP in US\$

Real GDP growth

Inflation rate

Gross investment/GDP

Estimated unemployment rate

Government Finance

Oil revenues/Total revenues

Non oil revenues/Total revenues

Gov't primary balance/GDP

Gov't financial balance/GDP

Gov't debt/GDP

Gov't debt/Gov't Revenue

Gov't Interest Payment/Gov't Revenue

Local currency med- & long-term debt/GDP

Local currency debt service/Gov't Revenues

External Accounts

Exports of G&S (% change y-o-y)

Imports of G&S (% change y-o-y)

Merchandise trade balance/GDP

Current account balance/GDP

Import coverage (X in months)

Monetary, External Vulnerability & Liquidity Indicators

M2-Growth

Short-Term Nominal Interest Rate

Domestic Credit (% change)

Domestic Credit/GDP (%)

M2/Official Foreign Exchange Reserves (X)

External Vulnerability Indicator

Dollarization Ratio

Dollarization Vulnerability Indicator

Debt

External debt/GDP

Short-term external debt/External debt

Med & long term ext. debt/External debt

Public sector/Total external debt

Private sector/Total external debt

External debt/Current account receipts

External debt service/Current account receipts

e=IIRA's Estimates

f=IIRA's Forecasts



Peer Comparisons (Illustrative Exhibits)

Peer Comparison								
	Country 1		Country 2		Country 3		Country 4	
	2004	2005	2004	2005	2004	2005	2004	2005

Economy

Nominal GDP

Oil

Non Oil

Real GDP

Oil

Non Oi

Population in ,000

Real GDP per capita

Nominal GDP per capita

Estimated unemployment rate

Government Finances

Oil

Non Oil

Gov't Revenues

Current Expenditure

Interest Payments

Capital Expenditure

Strategic Expenditure

Gov't Expenditure

Gov't Primary Balance

Gov't Financial Balance

Gov't Debt

Local currency short term

Local currency med-long term

Gov't external debt

External Accounts

Exports of Goods

Exports of Services

Income Receipts

Current Transfers

Total Receipts

Imports of Goods

Imports of Services

Income Payments

Current Payments

Total Payments

Current Account balance

merchandise trade balance

Monetary, External Vulnerability & Liquidity Indicators

M2

M2XR ($M2 + Time\ deposit + FX\ deposits$)

Consumer price Index

Total foreign currency deposits

Total local currency deposits

Total Deposits

Total advances of commercial banks

Foreign Assets of Domesti Banks

FX Reserves

External Debt

Public sector

Private sector

Short-term

Med. & long-term

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