

METHODOLOGY FOR SOVEREIGN RATINGS



الوكالة الإسلامية الدولية للتصنيف
Islamic International Rating Agency
Serving the Islamic Ummah

PREAMBLE

IIRA's sovereign rating methodology has been outlined to provide clarity on the economic and social dimensions typically involved to assess sovereign level creditworthiness. In addition to being an opinion on the sovereign's long-term debt paying capacity, sovereign ratings also provide a benchmark to institution level assessments. With IIRA's ratings outstanding in 12 of the Organization of Islamic Cooperation (OIC) member countries, sovereign assessments by IIRA have gained traction over recent years.

IIRA's sovereign issuer ratings provide an indication of the creditworthiness defined in terms of the likelihood of full and timely payment of specific obligations based on both the analysis of current economic performance and a forward-looking assessment. Foreign-currency convertibility and transfer risk considerations are also embodied in the issuer and issue ratings assigned to foreign governments.

As such, IIRA's approach in rating sovereigns on the international scale is consistent with best practices globally. At the same time the methodology's emphasis on long-term wealth and value creation and principles of human uplift, as being central to the core philosophies of Islamic jurisprudence, lends it a decided distinctiveness. It is therefore the investment made into society, the quality of infrastructure the effectiveness of political, economic and social institutions, and a disciplined approach to fiscal and debt management that sustains countries through economic cycles.

The broader purpose of IIRA's sovereign ratings is to more effectively map the countries in the OIC on the scale of creditworthiness, allowing improved access to international capital, through transparency. A number of countries in the OIC are as yet unrated and comprehensive regional comparisons are not readily available. By extending the methodology of IIRA's ratings on one rating scale, we aim towards, enhanced cross border flows, greater funding access where it is required and deepening of the regional capital markets.

THE RATING APPROACH

The rating approach towards sovereigns is multi-tiered, taking into account, macroeconomic analysis, fiscal sustainability and debt management, external position, financial sector stability and the country's social and institutional framework. Our macroeconomic analysis, centers on the country's economic strength and prospects, with due consideration for the structure of the economy in terms of its key vulnerabilities and drivers. This gives way to an assessment of external drivers vis-à-vis the balance of payments, and foreign investment flows. Tied in with a sovereign's fiscal sustainability, the impact of trends and developments on these fronts is ultimately translated onto the sovereign's debt burden and its repayment capacity. Also given significant importance are areas that can precipitate or avert macroeconomic crisis like the conduct of monetary policy, corporate indebtedness and the state of key sectors' health, most notably the financial sector.

IIRA's evaluation of social and institutional effectiveness translates into long-term wealth creation in terms of investment in human and institutional development through education, healthcare, financial inclusiveness, and an independent judiciary, among others, leading up to internal social stability. It also includes an evaluation of the long-term prospects of a country's creditworthiness through a reflection on demographics, physical infrastructure and potential for long-term, political instability. Diplomatic relations with neighbors and with major sovereign powers can have significant implications. Countries that form part of regional blocks like the Eurozone, the Gulf or the CIS, often offer opportunities and connectivity that allows each sovereign to derive cooperation from others, which is evaluated on a case - by - case basis.

Quantifiable data is often readily available from the relevant central bank and / or government entities such as the Ministry of Finance or the entity responsible for collating and disseminating official statistics. For further research requiring data not available from national data bases, IIRA may also cite and utilize data and information from credible international entities such as the International Monetary Fund (IMF), or the World Bank.

The eventual rating is a result of an interaction of multiple factors, which, depending on the unique circumstances surrounding each sovereign, can gain prominence over other factors. Core areas covered under our analysis are as follow:

- Economic Structure and Trends in Growth
- External Position vis-à-vis Balance of Payments
- Fiscal Sustainability
- Debt and Contingent Liability Management
- Monetary and Exchange Rate Management
- Strength and Stability of the Financial Sector
- Social and Institutional Infrastructure

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In assigning its sovereign credit ratings, IIRA's main focus is on the structural issues impacting the credit fundamentals of a sovereign government rather than on transitory changes in creditworthiness brought about as a result of economic cycles. This focus on structural issues is consistent with IIRA's approach of assigning credit ratings 'through the economic cycle' rather than 'at a point in time'. At the same time, the sovereign rating attempts to measure key vulnerabilities and stress tests for external shocks that may affect the external or fiscal sustainability of the country.

ECONOMIC STRENGTH

The evaluation of economic strength of a country forms the foundation of the overall assessment, by delineating the strength or vulnerability of respective drivers, their prospects and their translation into overall

Key indicators & ratios as stated (but not limited to) for the period T-2 to T+2F; T being the latest last year / period

Real GDP growth (%)
Volatility in GDP growth (%)
GDP per capita (US\$)
Factors contributing > 10% of economic output

economic strength. It determines the level of affluence and well being of the general populace and in turn affects the social structure of a nation. IIRA's analysis would, among others, focus on the main drivers of economic activity, and their prospects, economic integration at the regional and global levels as well as the economic policy planning and implementation framework in the country and its effectiveness.

➤ Drivers of Economic Activity and Growth

....Economic Structure

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 through utilization of internal resources, it creates capacity to service debt. As such, the main drivers of economic activity and their general resilience to changes in local and global developments are a key determinant of economic growth. An open economy engenders high dependence on global and regional markets. IIRA analyzes the contribution of each type of economic activity towards national gross domestic product (GDP), their historical trends and future prospects. Historical considerations aside, the future prospects of an economy are more crucial as they are strongly correlated with the future debt servicing ability of the sovereign. In addition to the contribution to output, IIRA also examines the pattern of sectoral growth to determine if these patterns are steady or volatile. In general, a diverse economy with a variety of economic activities is likely to be more resilient across economic cycles than an economy that is dependent on a few key sectors. This is especially true for countries that exhibit a high level of dependence on specific sectors such as commodity exports, which can be impacted by a price decline in global markets, or tourism, which can be impacted by regional security related concerns. At the same time, a sustainable competitive advantage in a particular sector can also be an important driver of economic activity for a country. A strong national competence, say in the manufacturing of high-technology products are generally credit positives, especially when such competence is supplemented by fairly robust activities in other sectors that can mitigate any demand downswings in key sectors.

....Competitiveness and Economic Management

IIRA examines the country's external competitiveness where it is believed to have meaningful long-term implications for its GDP growth. This could be an important consideration for open economies and / or economies which possess a large export sector. External competitiveness is usually influenced by the

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quality of human capital, tax and the regulatory environment, infrastructure and the supportiveness of the financial sector. Structural reforms to boost productivity, increase flexibility in product and labour markets and promote competition would be an important rating consideration, where a loss of external competitiveness is judged to be an underlying reason for declining GDP growth.

A country's competence in creating wealth and managing the resources efficiently becomes key determinant, given that debt repayments must draw from a nation's accumulated wealth—past, present and future. Without wealth-generating policies, deficit financing can become structural, which does not support a high rating. It is, therefore, critical to understand if the concerned authorities could implement effective structural adjustment measures, and also if there is sufficient receptivity in the political environment to sustain difficult reforms. Furthermore, IIRA assesses a country's innate resources (human and natural) to determine their potential and check to see if there are constraints to their utilization, such as rigid labor markets, high taxation, and efficiency-stifling bureaucracy. In addition, IIRA 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.

At the same time, IIRA also evaluates the level of intervention by the government, the adequacy of the infrastructure, and the efficiency of the public sector, since market-oriented economies produce more growth than planned economies and are generally more respectful of investor and creditor rights.

IIRA is alert to factors which may limit growth such as anaemic job creation, high inflation expectations, falling foreign investment and eroding consumer and business confidence. Domestic savings and their investments (both private and public) are also a key determinant of the future growth, for which it is essential to also consider the size, direction and regularity of such investments. IIRA would focus on economic growth measured in nominal terms as well as in real terms. The measurement in real terms is essential in certain high-inflation countries, where the actual magnitude of underlying growth can be overstated if growth is measured only in nominal terms. Apart from absolute GDP numbers, IIRA would also look at per capita GDP numbers as an indicator of the country's economic development, living standards and productivity levels. In general, although not always, a high level of per capita income would indicate a focus on high value-added services and manufacturing. A growing economy with a more equitable distribution of income is likely to be able to better withstand shocks than a country with a weak or stagnant economy. This is to imply that 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. The unemployment rate also provides an indication of economic strength.

...Economic Policy Formulation and Consistency

IIRA will also attempt to ascertain the coherence and consistency with which the authorities attempt to set economic policies and priorities. Greater coherence and policy consistency, along with proper implementation, are generally associated with brighter economic prospects. Economic policy

formulation that is transparent and open to public debate, at the very least to legislative deliberation is also viewed positively. IIRA also looks at the authorities' ability to anticipate and flexibly respond to external shocks and emerging domestic macroeconomic imbalances.

BALANCE OF PAYMENTS AND EXTERNAL RESERVES

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.

Key indicators & ratios as stated (but not limited to) for the period T-2 to T+2F; T being the latest last year / period

Exports (US\$'b) – major components thereof
Imports (US\$'b) – major components thereof
Current Account Balance
Current Account Balance / (Deficit - CAD) as % of GDP
Major Trading Partners – composition and trend
Vulnerability To Any Commodity
Investment Flows – composition and trend
FDI as % of GDP
Gross International Reserves (US\$'b)

....Balance of Payments (BOP)

IIRA analyzes both the overall BOP balance and its key structural components within the context of the impact of economic policies. A country's merchandise trade account determines its external earning capacity as it indicates the flow of funds as a result of a country's core trade and private transactions. 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 low value commodities, such as cotton, or on certain imports, such as hydrocarbons, the trade balance shows less elasticity, and there is consequently less capacity to compete in world markets and earn foreign exchange. As such, IIRA assesses the BOP 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).

Moreover, it is worthwhile to study trade partner composition, free trade agreements in effect and the basket of exports and imports. An imbalance in the degree of sophistication of exports vis-à-vis imports or concentrated trade partnerships or trade components, may spell high external economic dependence and will be viewed unfavorably. Diversification in the current account whereby income from foreign businesses or workers' remittances is a significant part of net inflows is also credit positive.

While a current account surplus is viewed as a credit strength, a current account deficit need not necessarily be a credit weakness if a country can offer evidence of its ability to sustain such deficits without any significant adverse economic effects. 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 mismanagement, which could lead to a foreign exchange crisis. However, a persistently widening current account deficit may indicate severe domestic imbalances, susceptibility to a drop in export revenues or rise in import costs, or other factors that can raise credit concerns.

Furthermore, on the capital account side, the ability to attract foreign direct investment (FDI) as well as portfolio investments influences the overall BOP balance. 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. Both FDI and portfolio investments do not generally exhibit the same degree of predictability as current account transactions. Therefore, the trend in such transactions and the underlying causes need to be ascertained, even if the overall BOP balance is on a positive trajectory. For instance, in an open capital account regime, FDI or capital investments, although may generate BOP surpluses over the short term, could eventually result in current account deficits when there is repatriation of profits and dividends.

....External Reserves

The availability of sufficient liquidity to cover external debt is an important consideration with the focus remaining on external reserves, export receipts, and access to external financing, including possible contingent claims from external sources. The external reserve position of a country would indicate its ability to repay future foreign currency - denominated commitments as well as its ability to intervene in the foreign exchange market to ensure the relative stability of the domestic currency. In this context, it is important to note the reliability of access to foreign exchange. Further, it is also noteworthy to understand the cyclicity of 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. Generally, a country with an adequate level of external reserves is viewed more favorably from a credit standpoint than a country that has a low level of external reserves. In this context, the adequacy of a country's reserves is judged in relation to its gross external financing needs. Although not a credit strength on its own, access to international sources of financing on a bilateral or multilateral basis (e.g. the IMF) can alleviate downward pressure that may otherwise be exerted on a sovereign's credit rating.

FISCAL SUSTAINABILITY

The trends in a country's 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.

Key indicators & ratios as stated (but not limited to) for the period T-2 to T+2F; T being the latest last year / period

Central Government Revenues (US\$'b) – composition and trend
Central Government Expenditures (US\$'b) – composition and trend
Interest Payments as % of Total Central Government Revenues
Budget Balance as % of GDP
Primary Balance as % of GDP
(T+1) Year Budget Major Allocations
Total Government Debt (US\$'b)
Central Government Nominal Debt Stock as % of GDP

....Fiscal Management Policy Priorities

IIRA's analysis of a sovereign's public finances addresses fiscal sustainability rather than the sovereign's 'point in time' fiscal position which is heavily influenced by cyclical factors. Fiscal policy can play a countercyclical role in some economies. During the 2008-2009 global economic recession, governments across the globe have been observed to use a combination of fiscal and monetary policies to lessen the severity of the global economic downturn.

IIRA's focus on fiscal sustainability derives from our observations that the improvement in public finances which takes place against benign economic conditions often has the effect of reducing the urgency to address longer-term fiscal challenges and diluting the sovereign's commitment to financial discipline. Rising revenues from commodity exports, especially for oil-rich sovereigns, can fuel inflationary pro-cyclical fiscal spending in response to surging oil prices. Therefore, sound fiscal management is required to ensure significant surpluses generated under a positive economic climate are used to build a strong fiscal buffer to defend the sovereign against price volatility. Further, it is important to also understand the degree of fiscal flexibility. A government is said to have fiscal flexibility (and ceteris paribus a higher rating) if it has options for raising revenue and cutting expenditure should a crisis occur. If emergency funds are required, a government with fiscal flexibility can 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. The degree of documentation in the economy, also serves to provide flexibility to the government by effecting smaller changes on a wider section of the economy, reaping benefits equivalent to major fiscal restructuring in the face of a budgetary crisis. Part of IIRA's analysis is to gain an understanding of the constraints on fiscal policy and how they affect the sovereign's fiscal policy stance going forward.

Increased competition for human and financial capital is likely to have an effect on a sovereign's ability to sustain or raise tax revenues while ongoing and projected shifts in demographics and growing income disparities may contribute to expenditure pressures. IIRA looks at the sovereign's medium-term fiscal targets in addition to its current targets. This provides the rating agency an indication of the sovereign's commitment to fiscal sustainability, its flexibility as well as the likely direction of debt levels going forward.

....Budgetary Analysis

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 inter-governmental transfers.

A strong and resilient revenue base is viewed as a credit positive. For most sovereigns, taxation is the key revenue source. Other typical sources of sovereign revenue would include custom duties and levies, royalties and income generated by public enterprises. In this regard, a country with a broader tax and revenue base is likely to be better positioned than a country that is dependent on a narrower tax and revenue base. IIRA tries to assess if the tax structure maximizes revenue receipts in both the open and hidden economies and thereby the efficiency of the government in raising its revenue base. Some countries exhibit higher proportion of indirect tax incomes in their taxation structure, the future growth prospects in such sources of income is dependent on economic growth, rendering the government's budget cycle pro-cyclical. In addition, in a growing economy it is also noteworthy to understand if the existing tax rates in the system encourage savings and / or act as a hindrance to creativity and entrepreneurship.

Government expenditure can take the form of current operating expenses, capital expenses and debt-servicing commitments. Likewise, IIRA also determines if the size of the civil services places an undue burden on the national budget.

IIRA analyses the composition of government expenditure, paying close attention to its discretionary and non-discretionary components. Over the short term, governments typically have limited flexibility to control operating expenses such as public-sector salaries, healthcare and age-related spending. Such spending cuts are viewed unfavorably from the social as well as political perspectives. At the same time, IIRA takes into cognizance any policy implementations which are warranted to align the practices in a country with the international industry standards. For instance, wage increases imposed through the system would be considered counter-productive for the economy unless these measures are necessitated to uplift the sub-par wages, mostly for the informal sectors and such that these measures are not on account of labor market rigidities.

On the other hand, development expenditure may be used to lay foundations for future growth and to strengthen long-term competitiveness. The diminished investments in economic or social infrastructure may impact future economic output.

From an analytical standpoint, a key focus area would be the primary balance, which is computed by subtracting non-debt expenditure from revenue. The primary balance is a key indicator of fiscal flexibility as it is viewed as something which the government can control, if it has the political resolve to do so. The overall fiscal balance (budget surplus or deficit), which includes interest charges, better reflects the potential financing requirements for the year. While a surplus budget is desirable from a creditor's standpoint, it is seldom achieved in practice, especially in emerging markets with high levels of developmental expenditure. IIRA, therefore, assesses if a country faces chronic deficits that require internal or external financing, or whether there are regular surpluses that help to minimize borrowing

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and provide investment resources. As such, a well-controlled and manageable budget deficit is still viewed favorably, especially when coupled with solid economic prospects that can ensure successful debt servicing.

Sovereigns that meet current expenses through borrowings or non-recurrent revenue sources such as asset disposals (typically done via privatization exercises) are often viewed more negatively than those sovereigns that are able to cover their current expenses with current revenue. However, in case asset sale / privatization is undertaken as part of driving up the operational efficiencies, then such measures would be subjectively construed as favorable notwithstanding the one-off nature of such earnings. IIRA sees the likelihood of a future major fiscal correction as significantly higher for sovereigns that continue to incur large fiscal deficits and exhibit growing debt ratios over an extended period. Delaying fiscal adjustment for too long can be harmful and may predispose the sovereign to a fiscal crisis. Debt-laden sovereigns facing a deteriorating fiscal position and are eager to avert a fiscal crisis have been observed to announce deficit-reduction plans. IIRA believes that the success of a long-term deficit-reduction plan depends in large part on:

- A combination of 'defensive' and 'offensive' elements in the plan (spending cuts may have to be combined with raising private sector investment in infrastructure to strengthen future economic development);
- The conservativeness of the economic forecasts on which the plan is based;
- The sovereign's fiscal discipline and transparency;
- Current deficit, debt levels and related debt servicing requirements relative to total expenditures and to GDP; and
- The extent to which the plan signals a decisive commitment to fiscal sustainability.

IIRA will assess the sustainability of fiscal consolidation efforts by monitoring the level of political and social tensions within the sovereign.

DEBT BURDEN AND REPAYMENT OUTLOOK

In reviewing the debt burden on economies, IIRA deploys a comprehensive approach, keeping its eye on total external debt on the economy and total debt burden on the government (national and external). In open economies, and in addition to general government debt, this entails an analysis of banking sector debt and particularly non-financial corporate debt, which can under extreme situations become a crisis precipitating factor, for reasons that it cannot be as closely regulated or managed as can banking sector or government debt. The Asian Financial crisis, preceded by an increase in corporate sector debt and exacerbated by a currency crisis, resulting in a systemic meltdown, is a clear reminder of the vulnerability embedded in rising debt levels.

In IIRA's view, the long-term debt raised by the private sector constitute an important dimension in a country's overall debt profile as:

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

It is essential that the level of debt is studied both in terms of its trends as well as in relation to size of the economy (both on a gross and net basis) and thereby in terms of sustainability of the debt burden. While debt burdens of certain advanced economies surpass 100% of GDP, these remain sustainable given economic resilience and the structure of debt. Moreover, lower levels of debt in relation to GDP can still pose concerns, if the economy does not have sufficient wherewithal and fiscal flexibility to sustain it. A broad based economy and diverse revenue streams render similar levels of debt burden on GDP, easier to manage.

The sovereign debt profile assessment also entails careful evaluation of the debt distribution in terms of general government debt, vis-à-vis non-government debt. Also significant in terms of debt structure are maturity profile of total debt with longer term debt preferable to shorter term debt and the direction of average cost of debt. If debt repayment is skewed towards the shorter end of the curve (both short-term debt and amortized pay downs of longer term debt), the risk of non-repayment is exacerbated. A clear debt management policy, highlighting the government's intent on lengthening the duration of its debt and specific targets thereof, can provide useful insights into the expected evolution of debt structure over time.

<i>Key indicators & ratios as stated (but not limited to)</i>
Gross External Debt (US\$'b)
External Debt as % of GDP
Public Sector External Debt (US\$'b)
Private Sector External Debt (US\$'b)
Banking Sector External Debt (US\$'b)
Net External Debt (US\$'b)
Short-term External Debt (US\$'b)
External Debt Service (US\$'b)
Gross International Reserves (US\$'b)
(CAD + Short-term External Debt) / Gross International Reserves (%)
Contingent Liabilities (US\$'b)

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With regards to general government debt, fixed versus floating rate commitments and local versus foreign currency denominated debt, determine the vulnerability of the overall debt profile to volatility in currency values and changes to monetary policy. A sovereign is generally expected to display greater ability to raise domestic-currency financing compared with external financing. A sovereign that does not benefit from deep domestic capital markets would usually be more dependent on confidence-sensitive external financing. This would increase the sovereign's vulnerability to global financial market volatility which could exacerbate in case of unfavorable currency movements that could also impair the sovereign's debt servicing and repayment abilities.

An important point to consider is the access to international markets for further funding as reflected in a developing cost profile and sentiment towards new debt take up. Moreover, access to concessional funding from international institutional creditors also features as an important variable. Prospective debt issuances feature prominently in IIRA's sovereign debt profile. Again, clarity and reliability of debt raising plans helps alleviate investor concerns regarding the evolving sovereign risk profile.

Debt affordability is also linked with budget balances and foreign exchange generation. In instances where interest payments exceed a sizable portion of a sovereign's revenues, the debt is likely to be unsustainable and a default of interest commitments likely in the event of a revenue shock. High indebtedness would restrict fiscal flexibility as the related high debt servicing commitments would tie up funds that might be utilized more productively. Likewise, chronic budget deficits require financing which makes current account receipts more critical.

Debt that is deployed for augmenting productive capacity in the economy is viewed more favorably than debt that is geared to meet operating deficits or towards projects with negligible economic benefits; the latter is often raised to meet political priorities rather than economic priorities. IIRA looks at a sovereign's track record of meeting debt obligations over the last 20 years or less if meaningful shifts in the economic or debt structures have occurred, meanwhile, to assess the country's willingness to pay debt in challenging times that may recur in future.

....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 to support the banking sector in time of need. Contingent liabilities can be committed contingent liabilities (such as explicit guarantees) or implied contingent liabilities that are not committed but are generally expected by stakeholders to materialize in the event of need. Of particular focus are a sovereign's contingent liabilities on account of government-related enterprises, especially when these relate to the provision of essential utility services such as power distribution, transportation and telecommunication. Given the importance of these entities to the national economy, it is essential for the government to ensure their continued healthy operations, even times of distress. Similarly, in certain countries (like Turkey), the government provides guarantees on major infrastructure projects, which are being handled under PPP (public-private partnerships) that could further weigh on their debt

burden in the event of default on part of the PPP. As such where possible, IIRA will factor into its analysis the contingent quantum of financial support that needs to be extended for these public-sector enterprises by the sovereign. IIRA does this by examining 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.

MONETARY AND EXCHANGE RATE MANAGEMENT

Monetary and exchange rate management is a key policy area that could influence the prospects of an economy through the determination of interest rates and exchange rates. Given the nature of the monetary and exchange rate function, it is reasonably expected that such functions are independent from mainstream political decisions and typically conducted by an independent monetary authority or a central bank. The absence of an independent authority is generally viewed as a credit negative.

Key indicators & ratios as stated (but not limited to) for the period T-2 to T+2F; T being the latest last year / period

Inflation (CPI Year End, %) – Major Components and Trend
Foreign Exchange Volatilities - Trend
Policy Rate(s) (%) – Trend

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 takes into account the options available to the central bank 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.

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.

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. IIRA also assesses 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. IIRA recognizes that monetary and exchange rate management capability may also be limited, where the sovereign is a member of a monetary union. Further, IIRA acknowledges the fact that the economic and fiscal policies also have a bearing on the monetary policy decisions and therefore, views a well coordinated monetary policy more favorably.

....Interest Rate Management and Inflation

IIRA looks at the trend in the sovereign's long-term interest rates and interest rate policy and the demonstrated commitment of its authorities to maintain financial equilibrium. As witnessed in certain sovereigns, excess domestic liquidity raises the risk of destabilizing asset price appreciation, making it necessary for authorities to drain liquidity from the system and to raise key policy rates over time. At

times, monetary support may be required from the authorities in the form of open-market operations and the lowering of reserve requirements to prevent a contraction of the domestic credit market, as was the case during the global financial crisis. High real interest rates could, under such circumstances, increase banking system asset quality pressures and dampen economic activity. A high and uncontrolled rate of inflation has implications for savings and investments, currency value, in addition to investor confidence, affecting a country's long-term prospects. IIRA looks at the effectiveness of the authorities' use of key interest rates to combat rising inflation expectations.

....Exchange Rate Stability

The ability of a sovereign government to intervene to stabilize its domestic currency is influenced by the availability of foreign currency reserves as well as the government's philosophy towards formulating and managing an exchange rate regime. A government with a well articulated policy is likely to be viewed more favorably than a government without one. A country with a free-floating and volatile exchange rate regime runs the risk of being the target of profit-oriented speculative attacks on the currency, as was witnessed with the Indonesian Rupiah and Thailand Baht in the 1997 Asian crisis. Furthermore, a volatile exchange rate regime is also likely to negatively impact business decision-making by introducing uncertainty and increasing the cost of doing business. On the other extreme, a pegged exchange rate regime is likely to limit the monetary policy options for the local central bank through the importation of the monetary policy of the country to which the former's currency is pegged.

FINANCIAL SYSTEM RESILIENCE

IIRA's analysis of a sovereign would also include an analysis of the resilience of the country's financial system, taking into account the size of the financial sector relative to the sovereign government's balance sheet as well as the effectiveness of banking supervision and regulation. A weak financial

<i>Key indicators & ratios as stated (but not limited to)</i>
Financial System - Breakdown
Banking Sector – Key Trends
Total Banking Sector Assets (US\$'b) – Breakdown into Retail, Wholesale, Islamic
Total Banking Sector Financings & Type (US\$'b) – Breakdown into Retail, Wholesale, Islamic
Total Banking Sector Deposits (US\$'b) – Breakdown into Retail, Wholesale, Islamic
Foreign Currency Deposits as % of Total Banking Sector Deposits
Asset Quality Indicators – Trend of NPLs and Provisioning Coverage (%)
Size of Insurance Sector,
Size of Fund Industry (Mutual Funds)
Size of Pension Funds
Capital Markets Depth: Volume, Market Capitalization, etc.
Degree of Financial Inclusion

system will not only increase the cost of financial intermediation and thereby hamper economic activity, but it will also create a contingent liability on the sovereign's financial resources, as evident during the global financial crisis. In fact, the recent crisis has clearly highlighted the importance of financial sector stability for economic stability. At the same time, several sovereigns have provided financial support for financial institutions, often even in the absence of any firm commitments to do so. These actions have, of course, had an impact on the financial position of the sovereigns. Therefore the stability of the financial sector is important not only for the country's economic prospects, but also to avoid any potential pressure on the sovereign's own creditworthiness.

IIRA will typically assess the stability of a country's financial system through the analysis of key financial sector ratios and trends, as well as through the analysis of financial stability indicators compiled by credible international institutions such as the International Monetary Fund.

Further given the focus on niche markets, IIRA also examines the state of Islamic Finance in a country in conjunction with the level of government support and development along with the future growth prospects of such institutions.

INSTITUTIONAL AND SOCIAL STABILITY

The analysis of institutional and social stability entails an evaluation of the overall strength of the political and economic institutions, the social system, its inequalities and the room available to people to grow and succeed. The process of policy formulation, involvement of stakeholders, the effectiveness of policy implementation and the general socio-economic stability of a country, become the key areas of our evaluation.

Key indicators (but not limited to)

Population Growth rate
Unemployment Rate (%)
Human Development Index
Investment in education as % of budget/GDP
Global Competitiveness Index
Financial inclusion indicators
Mobile and internet penetration

Most of the economies covered by IIRA depict characteristics peculiar to emerging markets like:

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

Under this framework, IIRA primarily assesses if certain conditions exist in a country, some or all of which could constrain a country's credit rating, such as:

- 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
- 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 give rise to capital flight

....Political Scenario and Policy Environment

IIRA views political risk, not as much in itself, as in the context of long-term impact of social inequalities and political strife on economic reform and thereby a sovereign's creditworthiness. It is the consequences of political instability in terms of the direction of economic policies and their continuity, that we consider political risk as an important element in our overall assessment.

A democratic form of government is socially desirable and if well entrenched, may also prevent major political disruptions; however it need not always be the most efficient form of government from a credit standpoint. History shapes the larger human experience and what works in one jurisdiction may be

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vastly different from another, at any given point in time. Having stated this, the system of checks and balances and incentives to progress, offered by society as a whole, in addition to a strong judicial system lay the foundation of a stable, and progressive society. A democratic form of government and a multiparty political system has higher likelihood of greater checks and balances. Participation of elected representatives (based on a popular mandate) in the political processes and transparency in economic policy decisions are credit strengths as it would institutionalize good governance. Also of concern is the smoothness with which leadership transitions can take place. This is especially a concern for monarchies, centrally planned or tightly controlled governments as well as countries run by coalition governments.

Further, the reform-minded nature of a government and the efficacy of its policies coupled with 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.

IIRA has mainly observed that the current government policies are the best indicator of future credit problems, and policy intentions and implementation may be leading causes of economic confidence and security for foreign investors. 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. IIRA evaluates whether government policies are designed to facilitate economic growth and the payment of debt service. For this, IIRA also studies a government's past behavior under stress to understand its tendency to borrow and to repay debt.

....Rule of Law

The operation of an effective and just legal system is important to instill and protect business confidence. The ability to attract foreign portfolio and direct investments is especially contingent on a sound legal system where the rule of law is upheld and justice dispensed without fear or favor.

....International Relations and Geo-political Stability

The state of international relations and geo-political stability is crucial for any country, in terms of both trade and economic growth and regional threats of war. Peaceful relations with neighboring countries and strong relations with major global powers are likely to result in support for a country at times of geo-political tensions as well as during times of economic need.

The spread of embassies, the degree of economic influence in diverse countries and trade agreements that a country may be part of, are analyzed in detail to determine the regional advantage that a country may have, or will develop over the years. Being part of international groups of countries provides a member country the ability to become involved in global affairs, which in turn translates into a competitive edge, in terms of being able to protect its long-term interests and deepen international ties that lead to increasing prosperity.

A sovereign which is a member of a powerful economic union and where the members have demonstrated the willingness and the resources to extend economic or even military assistance in times of need, requires careful evaluation. While commitment for such assistance may not be binding, a set of political, economic or ideological incentives, such as fear of possible contagion effects, may make it plausible. In such cases, assistance so offered, may have far reaching consequences. This was indeed manifested during the European sovereign debt crisis and may also play a role in the evaluation of Gulf countries' creditworthiness. While the concept does not readily lend itself for measurement and incorporation into a rating assigned by IIRA, it warrants an evaluation in historical and present day context, and its potential role in future national security and creditworthiness is delineated. In such instances, IIRA would clearly spell out its opinion as to the likely nature of support, including any limitations to such support.

....Institutional Stability

The stability and predictability of a country's political and economic institutions along with transparency in political and economic decision making are important considerations. The existence of civil institutions for independent policy advocacy and media freedom supports intellectual thinking, which in turn can support the creation of a knowledge-driven economy. Another crucial factor in IIRA's analysis is the ease of doing business in a jurisdiction. IIRA monitors on a regular basis, a range of indices, the ease of doing business index compiled by the World Bank and the global competitiveness index compiled by the World Economic Forum. Typically, a highly competitive and business-friendly economy is likely to foster entrepreneurship and attract foreign direct investments, which in turn can be a credit positive.

....Population and Social Stability

Human power is the most persistent long-term indicator of a country's economic growth and its sustainability. A young population, perpetuated by a healthy, but controlled growth rate, access of the population to factor inputs that ensure productivity of the population are key ingredients to a rating evaluation. The existence of a growth-conducive socio-economic environment and infrastructure is generally supportive of a productive workforce that can generate a high level of economic activity. A high level of investment in social infrastructure such as education or key economic infrastructure would be viewed positively as a long term credit driver. The analysis of employment trends is important from not only an economic point of view, as it would influence the general resilience of an economy, but also from a social point of view. Countries with persistently high levels of unemployment are characterized by social ills such as crime and civil disturbances, which can, in turn, impact economic activity and general business confidence.

A steady rate of population growth is also essential for an economy to ensure adequate supply of labor to meet expanding economic activity. A low population growth rate can hamper a country's economic prospects as ageing adults with low productivity would tend to dominate the workforce. Furthermore, an ageing population will result in higher pension and healthcare costs in the future. On the other hand, an extremely high population growth rate would create pressure on socio-economic infrastructure such as healthcare and education as well as economic infrastructure such as roads, thereby lowering the

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population's standard of living. For its analysis, IIRA would also focus on human development indicators such as rates of literacy, infant mortality and life expectancy to gauge the quality of life in a country. The Human Development Index developed by the United Nations Development Program offers comparability in this dimension. A low level of infant mortality and high level of life expectancy would generally indicate a more resilient population. Similarly, a high literacy level would indicate a population that is more laterally and upwardly mobile and in general, more productive.

The approach to evaluating social stability brings to the fore the need to understand social inequalities, as measured by income inequalities, financial inclusion and the penetration of modern day technology into the general population. High mobile and internet penetration will also contribute to ease of doing business and are factored in the overall analysis. IIRA's focus remains on the drivers of long-term economic reform and social prosperity, and the policy infrastructure needed to support this.

....IIRA's Sovereign Rating Scale & Definitions

Medium to Long Term

IIRA uses a scale of AAA to C to rate credit worthiness of the issuer and long term issues with AAA being the highest possible rating and C being the lowest possible rating.

AAA: Highest credit quality. Represent the least credit risk.

AA+, AA, AA-: High credit quality. Protection factors are strong. Risk is modest but may vary slightly from time to time.

A+, A, A-: Good credit quality. Protection factors are adequate. Risk levels may vary or on time to time.

BBB+, BBB, BBB- : Adequate credit quality. Protection factors are reasonable and sufficient. Risk factors are considered relatively less stable.

BB+, BB, BB- : Obligations deemed likely to be met. Protection factors are capable of weakening if changes occur in the economy. Overall quality may move up or down frequently within this category.

B+, B, B- : Obligations deemed less likely to be met. Protection factors are capable of fluctuating widely if changes occur in the economy. Overall quality may move up or down frequently within this category or into higher or lower rating grade.

CCC: Considerable uncertainty exists towards meeting the obligations. Protection factors are scarce and risk may be substantial.

CC: A high default risk.

C: A very high default risk.

D: Defaulted obligations.

Short Term

The obligations having an original maturity not exceeding one year are considered short term. IIRA uses a scale of A1+ to C to rate credit worthiness of short term obligations, with A1+ being the highest possible rating and C being the lowest possible rating.

A1+: Superior ability for repayment of obligations, evidenced by extremely strong liquidity conditions.

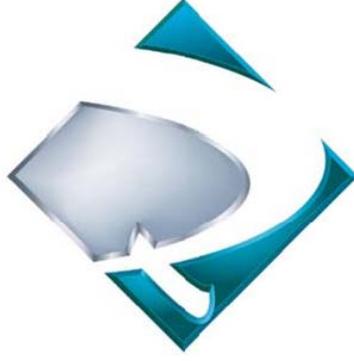
A1: Strong ability for repayment and reflecting very good liquidity conditions.

A2: Sound capacity of repayment but could be affected by external market conditions. Risk levels may vary from time to time.

A3: Adequate ability to repay the obligations. However, risk factors are more susceptible to adverse market conditions.

B: The obligations rated B have weak capacity for repayment and economic changes can harm liquidity conditions.

C: Obligations rated C shows considerable uncertainty towards timely payments of obligations. The liquidity conditions appear very weak.



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Islamic International Rating Agency

This document has been drafted in coordination with IIRA's technical partners and shareholders.

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