

COUNTRY RISK ANALYSIS
Republic of Solvencia and
the International Capital Markets

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Annex

Background Information for Solvencia's Eurobond Request to
CASINO BANK



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Background Information for Solvencia's Eurobond Request to CASINO BANK

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1. What is country risk all about? (Source: **Country risk in an age of Globalization**, Palgrave-MacMillan, 2018: Bouchet, Fishkin, Goguel)

Risk is a multi-faceted issue. It has to do with uncertainty, i.e., a deficit of information. Risk stems from a situation of uncertainty regarding the near or long term, where information about the situation's outcome is insufficient, lacking or simply wrong

Country risk analysis involves the assessment of a private or public foreign entity's ability and willingness to service its external obligations in full and in time (contractual, debt servicing, import payments, legal commitment...). It incorporates a forward-looking estimate of default probability.

Country risk includes several parameters:

- Economic risk
- Financial risk
- Foreign exchange risk
- Political risk
- Cultural environment risk
- Legal and contractual risk (repudiation, confiscation, bribes...)
- Regional contamination risk (spill-over effect/contagion), and
- Systemic risk (global crisis)

2. What is a Eurobond?

First of all, the prefix "Euro" has **nothing to do with the €** currency in the European economic community. A Eurobond is a bond issued and traded outside the country whose currency it is denominated in, and outside a single country's banking regulations. For instance, a Dollar-denominated bond issued on the London market is a Euro-dollar bond. This type of bonds is usually underwritten by a multinational syndicate of investment banks, therefore it can simultaneously be floated in various capital markets.

Eurobonds have a number of salient features.

- They are usually issued in bearer form, with yearly coupon payment.
- This type of bond also doesn't follow country issued domestic bond regulation (NY, London legislations).
- Another feature of Eurobonds, which give advantage to borrower, are less restrictive covenants and call provision features, even for short term bonds.

There are several types of Eurobond instruments. Most commonly issued bonds are in the form of long-term bonds as well as medium term notes, commercial papers and floating rate notes (FRN). As a result of this variety type of instruments, the term of Eurobond itself has got a new label, which is "International Securities". The most commonly currency used in Eurobond issuance is US\$, accounted approximately 50% of total current outstanding Eurobonds.

Eurobonds also have secondary market trading, hence market liquidity. Usually, the market makers in Eurobond secondary market are the underwriters who sell the Eurobond in primary market. Since 1969, International Securities Market Association (ISMA) has performed a central role by providing global framework of industry-driven rules and recommendations which regulate and guide trading and settlement in this market.

3. What are the main underlying risks of a Eurobond issue:

Interest rate risk: The major risk faced by investor in bond market is interest rate risk. The change in current interest rate will affect the bond price, hence it will affect value of the investment. The sensitivity of the change in bond prices due to change in interest rate depend on various characteristics of issuance, such as coupon rate and the maturity period. The higher the coupon rate and the shorter maturities of the bond, the less sensitive price change due to change on the interest rate. But, this type of risk is not faced by held to maturity-investor, i.e., an investor who buys the bond and holds it until the last day. The issuer of the bond, especially floating-bonds issuer, also faces significant interest rate risk. Since the change of current interest rate will affect the benchmark rate, and finally will change the coupon rate that the issuer has to pay.

Exchange Rate Risk: currency mismatch: This type of risk is also a major risk faced by issuer and investor of Eurobond. Exchange rate risk refer to change in the exchange rate of issuer's and investor's currency to Eurobond denominated currency, that will affect return of the investor or the issuer's cost of borrowing. For example, imagine that a company in Japan which the revenue mainly generated in Yen, issued a Eurobond denominated in US\$, and one of the investor of the Eurobond is a European investor. Therefore a change in exchange rate between US\$/Yen and €/US\$ will affect the cost of borrowing of the issuer and the rate of return for the investors.

Country Risk: This type of risk is also involved in Eurobond issuance. Country risk refers to any risk that exists with regard to transnational business. Sources of country risk could be varying. But basically, any volatility in economic, financial, and socio-political situation in a cross-border transaction can be a source of country risk. Related with Eurobond issuance, the risk is that the bond issuer is unable or unwilling to pay the principal or interest from the Eurobond due to specific and unexpected problems. Therefore, country risk analysis is an important pre-cautionary action before investing in Eurobond.

Default Risk: or often called credit risk is the risk that the issuer of Eurobonds be unable to pay timely coupon and principal payment, in full and on time! The rating agencies such as Moody's, Fitch and Standard and Poor are the major agencies that measure the default risk of issuer.

Liquidity Risk: The risk stemming from the lack of marketability of the Eurobond that cannot be bought or sold quickly enough to prevent or minimize a loss. The primary measure of this type of risk is the bid-ask spread quoted by the market. The wider the spread, the higher the liquidity risk faced by the investors.

"Risk of Risk": The risk faced by investors given the misunderstanding of the risk of the securities that they have invested. The main source of this risk is low understanding of the investors related with the risk-return characteristic of the issued securities, this could happen if the features of Eurobonds becoming more innovative and complex. In addition, unrealistic hypotheses (bell-shaped curve, thin tails, and Gaussian probability distribution) might add a model risk to a market risk! See Mandelbrot for further analysis of that biased assessment of market finance risk.

4. What are the key conditions investment banks will/should consider before exploring the launching of a bond issue:

Basically, the investment banks should carefully consider the risks described above before deciding to underwrite a Eurobond issuance. Country risk analysis should be the first priority to evaluate the underlying risk of Eurobond issuance. The country risk analysis involves qualitative as well as quantitative analysis of political, economy and other aspects of the country's issuer's creditworthiness. Qualitative analysis can be applied for political and governance issues of the country's issuer that will impact its ability to fulfill the commitment to pay coupon and principal of the Eurobonds. On the other hand, Quantitative analysis can be applied to macroeconomic, balance of payment and other economic features of the country's issuer. In the case that the Eurobond issuer is a private entity, microeconomic, sectoral as well as industry specific characteristics are also important factors in the Eurobond issuance. Finally, combination of all above-mentioned analysis will give the investment banks a framework and guidance to assess the short and long-term riskiness of Eurobond issuance.

5. How can a bond issue be syndicated:

Syndication refers to number of banks grouping together to make a loan to one borrower. There are 2 syndication's processes, the traditional one called "*European issue procedure*" which can be described in seven stages:

1. Preliminary negotiations and preparation
2. Legal clauses (pro rata, negative pledge...)
3. Preplacement
4. Fixing the final terms of the issue (pricing day)
5. Apportioning securities (offering day)
6. Placing the issue
7. Closing the issue (closing day)

The second syndication way is called "*Bought deal*": conditions are fixed by the lead manager and proposed to the issuer. This procedure is more rapid than the European procedure and the syndicates much smaller.

6. What are the underlying elements of a spread:

In the bond market, the spread reflects the additional required rate of return from the investors when shifting their investment from a risk-free or less risky instrument to more risky assets. Therefore, the term of spread reflects the risk premium of the investors. There are several types of spread definition that investors must know in bond market:

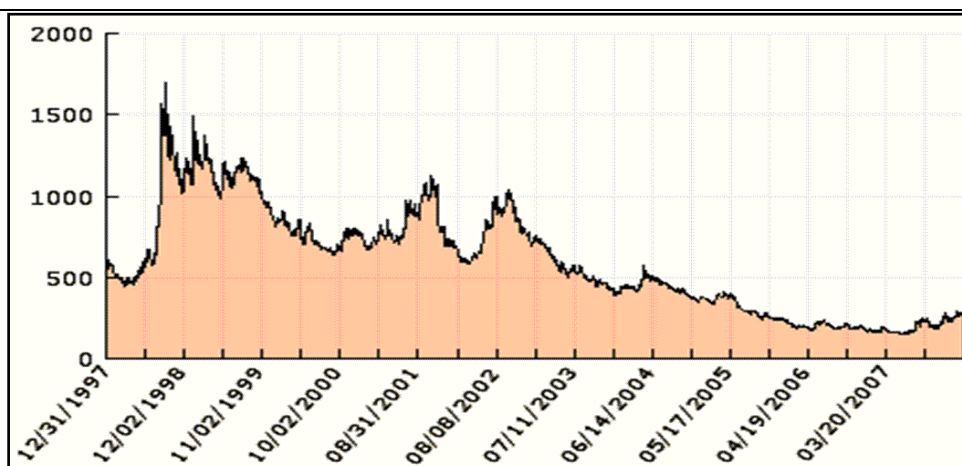
- Quality Spread: spread between different qualities of the credit ratings of the borrower. One can mention the difference between yield on a AAA credit rating company with the A credit rating company in a similar industry with same maturities.
- Maturity Spread: difference between yield of a similar credit rating borrower but with different maturities.
- Intra-market Spread: difference between yield of the bonds from different industries but with similar maturities and credit ratings and trading in same sector of bond market. One example is comparing yield between AAA ratings of a company in manufacturing industries with the company, which has same credit rating and maturities but operates in banking industry. Both bonds are traded in same bond market sector, i.e., corporate bond market

- Inter-market Spread: difference between yield on two sectors of bond market, that is, comparing a bond issued by the government's treasury which is being traded in treasury market securities with the bond issued by the corporate with similar maturities.
- Yield Spread: spread within a specific bond market that is attributable to differences between credit ratings (quality spread), maturities (maturity spread), and sectors within markets (intra-market spread).

The definition of Eurobond spread which reflects the risk premium can be driven by two factors. First, if the Eurobond issuer is a government, the country risk analysis of the country's issuer is an important factor that determines the risk premium, and therefore the yield of the Eurobond. The yield of a Eurobond issued of a government, will be determined by the benchmark rate and risk premium. The benchmark rate is yield from the bond issued by a super-safe government or a country which holds a AAA credit rating (typically, an OECD country). Regarding current practices, many Eurobonds issued by a government use yield from the US treasuries which have same maturities as benchmark rate, because US treasury securities are still considered risk-free instruments.

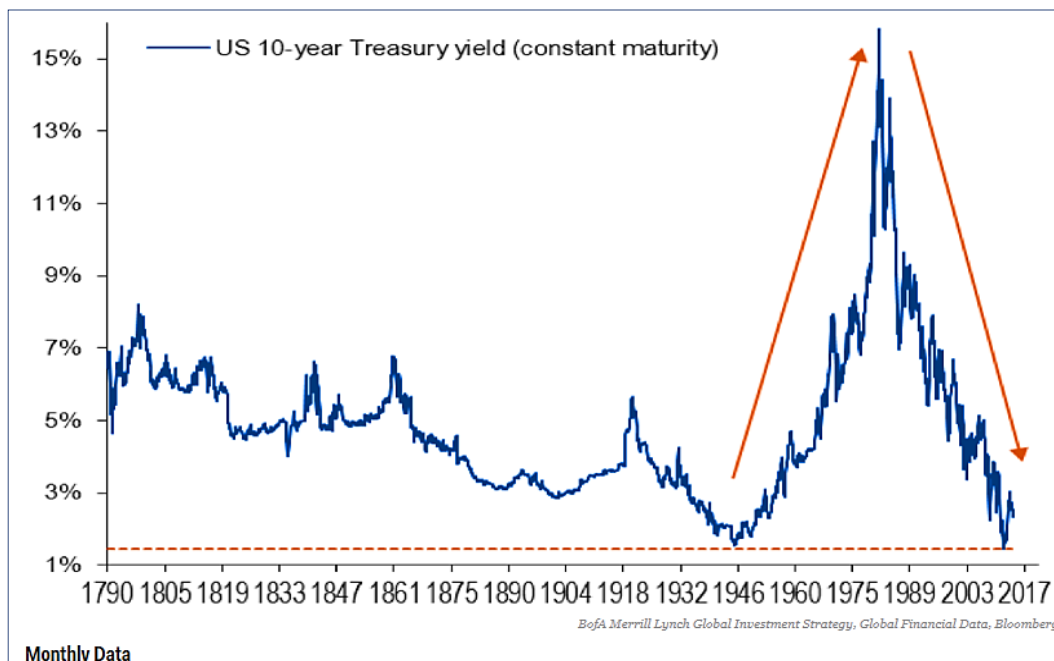
Second, if the issuer is a private entity, the component of risk premium will be also determined by the risk analysis of the entity and the industry where it operates. So, total risk premium on the Eurobond issued by the private entity is the risk premium from country risk analysis where the entity operates, coupled with the risk premium from the analysis of entity credit riskiness as well as industry specific analysis where the entity operates.

Graph 1&2: Emerging Market Bonds (JP Morgan EMBI) Spread over US Treasuries



Source: CBonds





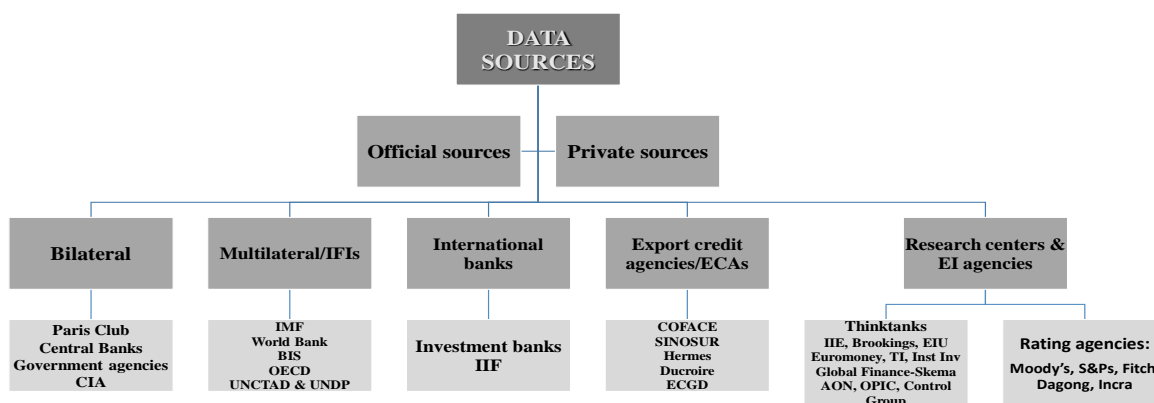
7. What are the key sources of country risk information a risk analyst can rely on:

Currently there are many institutions that provide country risk analysis data. Institutions like Standard & Poor's, Fitch, Moody's, DAGONG, INCRA, ICRG, TAC, Hermes, Euromoney, Coface and Economist Intelligence Unit issue regular monthly or quarterly country risk analysis.

Developing a reliable country risk analysis is much easier now compared to many years ago, given a wide range of publications and data for assessing country risk. An important source of country risk analysis is balance of payment and macroeconomics data from the country. One can find this data on the national bureau of statistics and central bank of the respected country. But before using this data, you have to analysis whether the government of the country tends to manipulate the data or not. A country with low governance and high corruption tends to manipulate those kinds of data for their own political purpose. In such a case, it is better to use the data from the international financial institutions such as IMF, World Bank, and Bank for International Settlements (BIS). An institution such as IMF, provides comprehensive financial data of a country in the International Financial Statistics monthly database. The IMF has also another database that can be accessed freely, which is World Economic Outlook (WEO) database that is updated periodically. The Bank for International Settlements (BIS) also provides important data such as international bank loans and deposits, the latter being a proxy for assessing capital flight. Useful trade and FDI data can be obtained from UNCTAD.

Graph 2: Data Sources Diagram for Country Risk Analysis

Major sources of country risk intelligence



Political analysis, including governance and corruption issues, also plays an important factor in country risk analysis. Political analysis includes data on national institutions, governance and corruption, system of government, relationship between executive and legislative, as well as political parties and elections. This type of information can be gathered from independence political observers or institutions. Economist Intelligence Unit (EIU) provides informative sources for this kind of data, through EIU Country Profile. Governance. The level of corruption can be observed through Transparency International, the ICRG database, and the World Bank's governance database.

8. What are the risk parameters of a sovereign borrower?

There are several risk parameters that a country risk analyst must assess in measuring riskiness of a sovereign borrower. Macroeconomic indicators such as inflation, interest rate, exchange rate policy, and economic growth as well as independency of the central bank can develop important risk parameters from the macroeconomics side.

Balance of payment data also can be important risk parameters. This includes trade balance, current account deficit, capital account, and international reserve data. Various liquidity and solvency ratios can be developed from balance of payment data to assess country indebtedness and their ability to fulfill their financial commitment.

9. What is a J-Curve evolution in a current account balance?

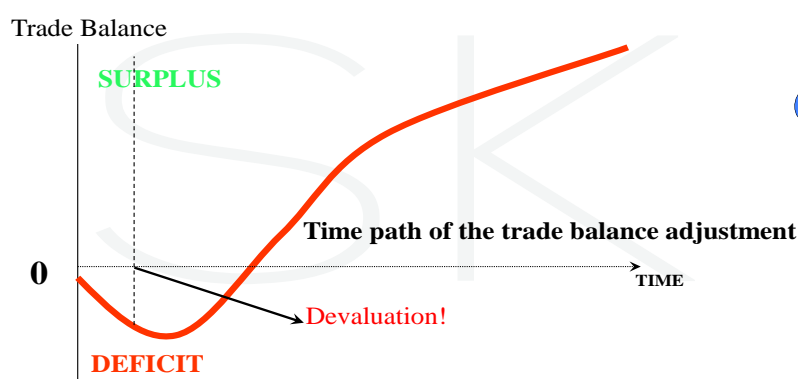
The J-curve illustrates the shape of a country's trade balance following a devaluation. Trade elasticities are key parameters regarding the lag in the shift from a trade deficit to a sustainable surplus. A lower exchange rate initially means cheaper exports and more expensive imports, making the current account worse (a bigger deficit or smaller surplus).. After a while, though, the volume of exports will start to rise because of their lower price to foreign buyers, and domestic consumers will buy fewer of the costlier imports. Eventually, the trade balance will improve on what it was before the devaluation. If there is a currency appreciation there may be an inverted J-curve.

Following the depreciation/devaluation of the currency, the volume of imports and exports will remain on certain level due in part to pre-existing contracts for imported goods that have to be honored. However, the depreciation in the currency will cause the price of imports to rise and

therefore total spending on imports will subsequently increase. This situation, coupled with the inertia of the external demand for exports and the domestic demand for imports, causes the initial worsening of the trade balance. But within around 18 months, a depreciation in the exchange rate can have the desired effect of improving the current account balance. Indeed, demand for exports gradually picks up while domestic consumers will switch their expenditure to domestic products and away from expensive imported goods and services. Equally, many foreign consumers may switch to purchasing cheaper products exported by the country that devaluates its currency, instead of their own domestically produced goods and services. This is represented on the diagram by the movement towards a trade surplus.

Picture 3: Evolution of Trade Balance – J Curve.

TIME LAGS, ELASTICITIES AND THE ADJUSTMENT MECHANISM: "J CURVE"



10. How does a country manage to finance its deficit? With sustainable long-term financing inflows or with volatile short-term finance?

The best way to financing the current account deficit is using sustainable long-term financing inflows rather than short-term financing. Mainly because long-term financing provides less volatility on balance of payment and therefore provides policy space for the government to perform consistent economic policies.

Long term financing in capital account can be separated into two main part, which are non debt-creating flows and long term debt-creating flows. Non-debt creating flows include portfolio and Foreign Direct Investment (FDI). This type of financing is the best way to finance current account deficit, since there is no obligation to pay interest and principal. It provides budget flexibility to the government to finance the economy. Long-term debt creating flows can be classified into three main sources,

1. Long-term debt from international financial institutions such as IMF, World Bank, regional development banks such as Asian Development Bank, or other multilateral creditors. Usually, debt from international financial institutions provides cheaper cost of fund and longer maturities, although with stricter conditionality than private institutions;
2. Long and medium-term loans from official bilateral creditors (i.e., governments of the Paris Club);
3. Long-term debt from private international institutions such as international commercial banks, mutual fund, and hedge funds. This type on debt could be a loan or Eurobond issued by the country's government.

11. What are the key liquidity and solvency ratios that any country risk analyst must consider:

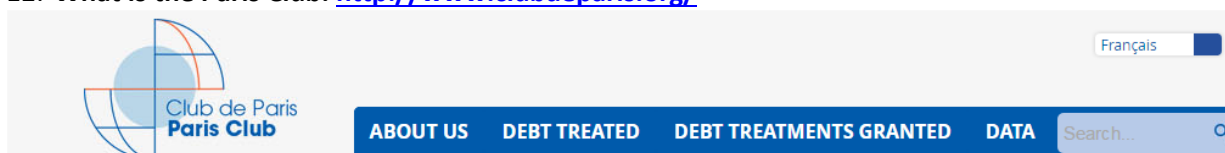
Liquidity Risk ratios:

- **Debt Service Ratio (Interest+Principal/Exports of goods and services):** This ratio provides a good indicator to measure how a country can fulfill its debt obligation based on its ability to provide foreign exchange from export revenues. The higher the ratio, the riskier the country. The threshold usually used in this ratio is 33%
- **Interest Ratio (Interest/Export):** Provide an indicator to measure current proportion of total interest that a country has to pay in its total export revenues. The higher the ratio (above 25%), the riskier the country.
- **Current Account Balance/GDP:** Provide an indicator to measure whether the country lives beyond its means or not. The higher the deficit ratio, the riskier the country since it consumes more than its overall income.
- **Reserve/Import ratio:** This ratio is an important indicator, especially to measure the ability of a country to finance their import based on their current reserve. The lower the ratio, the riskier the country. Usually, if the ratio is below 6 months, it should be a warning indicator for the country risk analyst.
- **Import/GDP ratio:** Provide an indicator that show how import-dependent is the country's economy. It thus provides a measure of a country's dependency on foreign trade partners.
- **Growth rate of exports/Average external interest rate:** This ratio provides an important indicator to measure the ability of a country to provide timely interest payments for their external debt with increasing export revenues. It indicates whether the country's export growth rate can match the average interest rate on its external debt. It also measures the effectiveness of the debt-financed investment proceeds. The higher the ratio, the more dynamic the economy.

Solvency Risk ratios

- **Debt/Export ratio:** Is an indicator to measure total stock of debt compared to country's export. A ratio above 150% should be a warning indicator for a country risk analyst.
- **Debt/GDP ratio:** Is an indicator to measure indebtedness of a country, with comparing total debt of a country to total value of the economy, which represented by GDP. A ratio higher than 100% is a warning sign that a country is highly indebtedness. However much depends on the structure of the country's debt that is, its main creditors, the average maturity, interest rates floating or fixed, and more generally global market access.
- **ST Debt/Reserves:** Is an indicator to measure the ability of country's foreign reserves to service its short-term liabilities. The higher the ratio, the riskier a country.

12. What is the Paris Club: <http://www.clubdeparis.org/>



The Paris Club is a confidential ad-hoc forum of debt negotiations between OECD country creditors and their sovereign debtors. It only deals with official or officially-guaranteed credits (Coface, Hermes, ECGD, and US Eximbank). The first meeting with a debtor country was in 1956 when Argentina agreed to meet its public creditors in Paris. Since then, the Paris Club or ad hoc groups of Paris Club creditors have reached >430 agreements concerning 90 debtor countries. Since 1983, the total amount of debt covered in these agreements has been \$585 billion.

The Paris Club has remained strictly informal: voluntary gathering of creditor countries willing to treat in a co-ordinated way the debt due to them by the developing countries. It can be described as a "non institution". The creditor countries (19 countries including Russia) meet 10 to 11 times a year, for negotiation sessions or to discuss among themselves the situation of the external debt of debtor countries or methodological issues on the debt of developing countries. These meetings are held in Paris. The Chairman is a senior official of the French Treasury. Deputies to the Chairman in the French Treasury serve as co-president and vice-president. The current Chairman is the head of the French Government Treasury.

A debtor country comes to the Paris Club for a negotiation when an appropriate programme is supported by the IMF and shows that the country is not able to meet its debt obligations and thus needs a new payment arrangement with its external creditors. Good governance is assumed to be a prerequisite!

13. What is the London Club: <https://www.iif.com/>



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The London Club is an ad hoc forum for restructuring negotiations formed by private institutions. Each London Club is formed at the initiative of the debtor country and is dissolved when a restructuring agreement is signed. Ad hoc London Club "Advisory Committees" are chaired by a leading financial bank. Recently, Advisory Committees have included representatives from nonbank creditors (fund managers holding sovereign bonds). The first meeting of London Club took place in 1976 in response to Zaire's debt payment problem.

The Institute of International Finance, Inc. (IIF), is the global association of financial institutions. Created in 1983 in response to the international debt crisis, the IIF has evolved to meet the changing needs of the financial community. Members include most of the world's largest commercial banks and investment banks, as well as insurance companies and investment management firms.

Among the Institute's Associate members are MNCs, trading companies, ECAs, and multilateral agencies. The Institute has more than 450 members headquartered in more than 70 countries at end-2014. It provides members with in-depth country risk analysis of emerging market countries in Asia, Africa and the Middle East, as well as Eastern Europe and Latin America.