The International Country Risk Guide: An Empirical Evaluation

Suhejla Hoti

Department of Economics, University of Western Australia (Suhejla.Hoti@uwa.edu.au)

Abstract: Country risk has become a topic of major concern over the last two decades for the official institutions and private market operators involved in international financial operations. A detailed assessment of country risk and its impact on such operations is crucial. Consequently, the number of country risk ratings that are being compiled by various commercial rating agencies has increased substantially in recent years. Although rating agencies compile country risk ratings as measures of the ability and willingness of countries to service their financial obligations, the relevance and accuracy of the various agency risk ratings is open to question. The paper evaluates the rating system of one representative rating agency, namely International Country Risk Guide, which is the only agency to provide detailed and consistent monthly data over an extended period of time for a large number of countries. Moreover, the paper provides an international comparison of country risk ratings for four developing countries, as compiled by the International Country Risk Guide, The time series data permit a comparative assessment of the country risk ratings, and highlight the importance of economic, financial and political risk ratings as components of a composite risk rating.

1. INTRODUCTION

Over the last two decades the risks associated with engaging in international relationships have increased substantially, and become more difficult to analyse and predict for decision makers in the economic, financial and political sectors. Country risk is a measure of country creditworthiness, and refers to the ability and willingness of a country to service its international financial obligations. With the globalisation of world trade and liberalisation of capital markets, the international financial community has been facing an increasing number of financial crises in both developed and developing countries, involving large associated costs to official institutions, private entities, and market operators.

A detailed assessment of country risk and its components, namely, economic, financial, and political, is crucial for evaluating the stability of the international financial community. The impact of country risk on international relationships is of serious concern for all the parties involved in such operations. Consequently, the number of country risk ratings compiled by various commercial rating agencies has increased substantially in recent years. Rating agencies, such as Moody's, Standard and Poor's, Euromoney, Institutional Investor, the Economist Intelligence Unit, International Country Risk Guide, Political Risk Services, and Fitch IBCA, compile country risk ratings as measures of the risks associated with international operations across countries. This is of particular importance for the developing countries. Country risk ratings help these countries to gain access to capital markets, and provide official institutions and private market operators with essential tools to assess and manage such risk.

The plan of the paper is as follows. Section 2 provides a brief description of the country risk rating industry. A detailed description of the rating system of the International Country Risk Guide, which is the only risk rating agency to provide detailed and consistent monthly data over an extended period for a large number of countries, is given in Section 3. Country risk ratings for four developing countries, as compiled by the International Country Risk Guide from January 1984, are compared in Section 4. Some concluding remarks are given in Section 5.

2. COUNTRY RISK RATING AGENCIES

Ever since the Third World debt crisis in the early 1980s, the number of country risk ratings compiled by commercial agencies such as Moody's, Standard and Poor's, Euromoney, Institutional Investor, Economist Intelligence Unit, International Country Risk Guide, Political Risk Services, Fitch IBCA, Business Environment Risk Intelligence S.A., S.J. Rundt & Associates, and Control Risks Group, has increased substantially. Country risk ratings are measures of the ability and willingness of countries to service the financial obligations to its foreign creditors and investors. Risk rating agencies provide qualitative and quantitative country risk ratings, combining information about alternative measures of economic, financial and political risk ratings, to obtain a composite country risk rating.

However, the importance and relevance of such risk measures is open to question. Failure by the rating agencies to predict a number of financial crises demands a thorough evaluation of agency rating systems. Rating systems have changed, especially after the South East Asian crises, to accommodate factors such as contingent liabilities and the adequacy of international reserves (Bhatia, 2002). For a qualitative comparison of seven prominent rating agencies, namely Moody's, Standard and Poor's, Euromoney, Institutional Investor, Economist Intelligence Unit, International Country Risk Guide, and Political Risk Services, see Hoti and McAleer (2002) and Hoti (2003).

In order to evaluate the importance and relevance of country risk ratings, it is necessary to analyse the criteria employed by rating agencies. For this purpose, the paper analyses the rating system of the International Country Risk Guide (ICRG) as a representative of agency rating systems. According to the ICRG, its risk ratings have been cited by experts at the IMF, World Bank, United Nations, and other international institutions, as a standard against which other ratings can be measured. The ICRG has been acclaimed by publications such as Barron's and The Wall Street Journal for the strength of its analysis and rating system [http://www. icrgonline.com].

3. ICRG COUNTRY RISK RATINGS

Since January 1984, the ICRG has been compiling economic, financial, political and composite risk ratings for 90 countries on a monthly basis. As of October 2002, the four risk ratings were available for a total of 140 countries and 144 entries, with the extra four entries relating to the former sovereign states of Czechoslovakia, East Germany, West Germany and the USSR.

Several issues relating to the ICRG coverage of the listed countries should be emphasised. Some sovereign states, such as the former Soviet Republics and the former Communist Block countries, have been covered only recently. Furthermore, structural changes are, in general, not accommodated in the risk ratings. The ICRG rating system was adjusted in late-1997 to reflect the changing international climate created by the ending of the Cold War. Prior to this structural change, the financial risk ratings were entirely subjective because of the lack of reliable statistics. By 1997, the risk assessments were made by the ICRG on the basis of independently generated data, such as from the IMF, which could be referenced consistently over time.

Until the dissolution of the former Federal Republic of Yugoslavia, ICRG covered Yugoslavia, which comprised all six republics. After the dissolution, Yugoslavia refers to the currently constituted Federal Republic of Yugoslavia, comprising the Republic of Serbia and Montenegro, which includes the UN-administered southern province of Kosovo and the northern province of Vojvodina. Since December 1998, ICRG has been covering separately two of the former Yugoslavian republics, namely Croatia and Slovenia, which are now internationally recognized sovereign states. Data for the other two new sovereign states, namely Bosnia-Herzegovina and the Former Yugoslav Republic of Macedonia, are not currently available. The ICRG coverage of the former East and West Germany also merits discussion. After the fall of the Berlin Wall in November 1989, East and West Germany were reunited, so there is only one entry for Germany in the ICRG series from October 1990. Data for the former West Germany and East Germany are available separately for January 1984 – September 1990 and June 1984 – September 1990, respectively.

The ICRG rating system comprises 22 variables, representing three major components of country risk, namely economic, financial and political. These variables essentially represent risk-free measures. There are 5 variables representing each of the economic and financial components of risk, while the political component is based on 12 variables.

Economic risk rating measures a country's current economic strengths and weaknesses. In general, when a country's strengths outweigh its weaknesses it presents a low economic risk, and when its weaknesses outweigh its strengths the country presents a high economic risk. This permits an assessment of the ability to finance its official, commercial, and trade debt obligations. The 5 economic variables, and the range of risk points assigned to each, are as follows:

(i)   GDP per Head of Population (0-5);
(ii)   Real Annual GDP Growth (0-10);
(iii) Annual Inflation Rate (0-10);
(iv)   Budget Balance as a Percentage of GDP (0-10);
(v)   Current Account Balance as a Percentage of GDP (0-15).

Financial risk rating is another measure of a country's ability to service its financial obligations. This rating assesses a country's financial environment based on the following 5 financial variables and their associated risk points:

(i)   Foreign Debt as a Percentage of GDP (0-10);
(ii)   Foreign Debt Service as a Percentage of Export in Goods and Services (0-10);
(iii) Current Account as a Percentage of Export in Goods and Services (0-15);
(iv)   Net Liquidity as Months of Import Cover (0-5);
(v)   Exchange Rate Stability (0-10).

Political risk rating measures the political stability of a country, which affects the country's ability and willingness to service its financial obligations. The 12 political risk variables, and the range of risk points assigned to each, are as follows:

(i)   Government Stability (0-12);
(ii)   Socio-economic Conditions (0-12);
(iii) Investment Profile (0-12);
(iv)   Internal Conflict (0-12);
(v)   External Conflict (0-12);
(vi)   Corruption (0-6);
(vii) Military in Politics (0-6);
(viii) Religious Tensions (0-6);
(ix)   Law and Order (0-6);
(x)   Ethnic Tensions (0-6);
(xi)   Democratic Accountability (0-6);
(xii) Bureaucracy Quality (0-4).

Using each set of variables, a separate risk rating is created for the three components. The 5 variables for the economic risk rating are weighted equally to give a score of 50 points, the 5 variables for the financial risk rating are weighted equally to give a score of 50 points, and the 12 variables for the political risk rating are weighted equally to give a score of 100 points. As the composite risk rating is obtained by dividing the sum of the three component risk ratings by 2, the economic and financial components account for 25% each and the political component accounts for 50% of the composite risk rating.

In all cases, the lower (higher) is a given risk rating, the higher (lower) is the associated risk. In essence, the country risk rating is a measure of country creditworthiness. The ranges of the ICRG risk ratings for economic, financial, political and composite risk are 0-50, 0-50, 0-100, and 0-100, respectively. In order to facilitate direct comparison, in this paper the range of the four risk ratings is given as 0-100.

4.   COMPARISON OF ICRG RATINGS FOR FOUR SELECTED COUNTRIES

The risk ratings and volatilities are discussed for four developing countries, namely Albania, Argentina, Indonesia, and Iraq. Following the ICRG classification method, the four countries represent 4 geographical regions, namely East Europe (Albania), South America (Argentina), East Asia and the Pacific (Indonesia), and Middle East and North Africa (Iraq). Data for these countries have been collected since January 1984, apart from Albania, for which the data are available from October 1985. Each of these countries has a low risk rating for each of the four categories, which is consistent with high associated risks.

Risk rating indexes and volatilities for the four countries are given in Figures 1a-4a. For each country, the risk rating indexes and volatilities are denoted ECO-R, FIN-R, POL-R, and COM-R for the economic, financial, political and composite risk rating indexes, respectively. Defining volatility as the squared deviation of each observation from the respective sample mean risk rating index, the four volatilities are denoted ECO-V, FIN-V, POL-V, and COM-V.

The descriptive statistics for the four risk ratings by country are given in Table 1, in which the four countries are ranked according to their means for the economic, financial, political and composite risk ratings. Iraq has the lowest mean risk ratings in all four risk categories, and hence is ranked last. The rankings are generally similar across the four risk ratings, with a mean range of 1.25 and a mode of 2. Argentina and Indonesia have the highest range of 2 from the lowest (3) to the highest ranking (1) across the four risk ratings. In terms of

Table 1: Descriptive Statistics for Risk Ratings by Country

Country	Ratings	Mean	SD	Min	Max	Rank
Albania	ECO	47.4	14.6	16	74	3
	FIN	63.6	6.9	42	70	2
	POL	61.2	5.2	46	71	2
	COM	58.3	6.5	41	69	2
Argentina	ECO	53.3	19.5	21	84	2
	FIN	52.2	20.3	16	78	3
	POL	66.4	8.3	50	78	1
	COM	59.6	13.5	36	76	1
Indonesia	ECO	66.6	9.5	36	77	1
	FIN	64.5	16.8	36	88	1
	POL	50.8	9.0	39	67	3
	COM	58.2	9.7	41	72	3
Iraq	ECO	42.3	11.2	21	59	4
	FIN	29.1	17.7	4	66	4
	POL	32.5	5.8	16	41	4
	COM	34.1	7.2	20	49	4

Note: Economic, financial, political, and composite risk ratings are denoted as ECO, FIN, POL, and COM, respectively.

the mean rank for the four risk ratings, Argentina and Indonesia are followed by Albania, and Iraq.

The risk rating indexes and associated volatilities for the four countries are given in Figures 1a-4a. There are substantial changes in the means of the risk rating indexes, as well as in their associated volatilities. Information on the profiles for the four countries has been obtained from The Economist: Country Briefings [http://www.economist.com/countries/].

Albania has a reasonably flat index for each risk rating index, but with two dramatic falls for each index and high associated volatilities. The first fall occurred in 1991, which saw the collapse of the Communist Regime, and the second was in 1997, due to the collapse of the economy-wide pyramid schemes. Argentina has reasonably similar patterns for all four risk rating indexes, as well as for three associated volatilities, the exception being financial risk ratings. All four risk indexes follow a decreasing trend after 2000, due to the severe financial and banking crises that hit the country. The indexes are similar for economic, financial and composite risk ratings for Indonesia, as are their associated volatilities, but are different for political risk ratings. In 1997, Indonesia was hit by the economic and financial crises, which caused a dramatic fall for each index and high associated volatilities. In the case of Iraq, the patterns are distinctly different, with substantial variations in all four risk rating indexes for Iraq (including falls

in three of the four indexes during the Gulf Crisis in early 1991).

Risk returns are defined as the monthly percentage change in the respective risk rating indexes. For each country the risk returns in Figures 1b-4b are denoted ECO-R, FIN-R, POL-R and COM-R for the economic, financial, political and composite risk returns, respectively. Defining volatility as the squared deviation of each observation from the respective sample mean risk return, the four volatilities associated with the risk returns are denoted ECO-V, FIN-V, POL-V and COM-V, respectively.

Table 2 reports the descriptive statistics for the four risk returns by country. All the means of the four risk returns for the four countries are close to zero, with standard deviations ranging from 0.0205 (Indonesia) to 0.1117 (Iraq) for economic risk returns, 0.0310 (Indonesia) to 0.1391 (Iraq) for financial risk returns, 0.0137 (Indonesia) to 0.0558 (Iraq) for political risk returns, and 0.0103 (Indonesia) to 0.0486 (Iraq) for composite risk returns. Of the four countries, Iraq has the highest standard deviation for the four risk returns, while Indonesia has the lowest standard deviation for the four risk returns.

There is no general pattern of skewness for the four risk returns for the four countries, with all four risk returns being negatively skewed for

Table 2. Descriptive Statistics for Risk Returns by Country

Country	Returns	Mean	SD	SK
Albania	ECO	0.0016	0.0853	-2.3776
	FIN	-0.0005	0.0400	-0.8775
	POL	-0.0001	0.0301	-0.5235
	COM	0.0002	0.0276	-2.1586
Argentina	ECO	0.0026	0.0636	-0.5162
	FIN	0.0006	0.0585	-3.8034
	POL	0.0008	0.0207	0.2672
	COM	0.0012	0.0222	-1.4046
Indonesia	ECO	0.0000	0.0205	2.6154
	FIN	-0.0011	0.0310	-3.3830
	POL	-0.0007	0.0137	-0.8328
	COM	-0.0007	0.0103	-0.7032
Iraq	ECO	0.0033	0.1117	-0.7442
	FIN	0.0036	0.1391	1.6272
	POL	0.0030	0.0558	0.8633
	COM	0.0033	0.0486	-0.6748

Note: Economic, financial, political, and composite risk returns are denoted as ECO, FIN, POL, and COM, respectively. Skewness is denoted as SK.

Albania. While both the financial and political risk returns are positively skewed for Iraq, only the political risk return is positively skewed for Argentina. Economic risk returns are the only positively skewed risk returns for Indonesia.

Table 3 reports the correlation coefficients for the four risk returns by country. The economic, financial and political risk returns seem to be highly correlated with the composite risk returns, but not with each other. For three countries, namely Albania, Argentina, and Iraq, the highest correlation coefficient is between the political and composite risk returns. Of these three countries, the second highest correlation for Albania and Iraq is between economic and composite risk returns, while for Argentina the second highest correlation coefficient is between financial and composite risk returns. For Indonesia, the highest correlation coefficient is between the financial and composite risk returns, and the second highest correlation coefficient is between political and composite risk returns.

Table 3. Correlation Coefficients for Risk Returns by Country

Country	Returns	ECO	FIN	POL	COM
Albania	ECO	1.000	0.077	0.312	0.725
	FIN	0.077	1.000	0.089	0.477
	POL	0.312	0.089	1.000	0.749
	COM	0.725	0.476	0.749	1.000
Argentina	ECO	1.000	0.063	-0.021	0.581
	FIN	0.063	1.000	0.276	0.623
	POL	-0.021	0.276	1.000	0.675
	COM	0.581	0.623	0.675	1.000
Indonesia	ECO	1.000	0.124	0.047	0.572
	FIN	0.124	1.000	0.244	0.727
	POL	0.047	0.244	1.000	0.649
	COM	0.572	0.727	0.649	1.000
Iraq	ECO	1.000	-0.056	0.026	0.603
	FIN	-0.056	1.000	0.205	0.520
	POL	0.026	0.205	1.000	0.653
	COM	0.603	0.520	0.653	1.000

Note: Economic, financial, political, and composite risk returns are denoted as ECO, FIN, POL, and COM respectively. Skewness is denoted as SK.

The risk returns and associated volatilities for the four countries are given in Figures 1b-4b. Substantial differences are evident in the risk returns, as well as in their volatilities. Albania has noticeable outliers for three of the four risk returns, the exception being political risk returns, for which there is a clustering of volatilities. Argentina has outliers in the case of financial and composite risk returns, and clustering for the other two risk returns. With the exception of composite risk returns for Indonesia, outliers are more obvious than clustering. Outliers are also evident for Iraq in the case of financial and political risk returns, but there is little evidence of clustering of volatilities.

5. CONCLUDING REMARKS

This paper discussed in detail the rating system of the International Country Risk Guide, which is the only risk rating agency to provide detailed and consistent monthly data over an extended period for a large number of countries. A comparison of ICRG country risk ratings, risk returns and their associated volatilities was provided for four developing countries, representing four geographic regions. The time series data permitted a comparative assessment of the international country risk ratings, and highlighted the importance of economic, financial and political risk ratings as components of a composite risk rating.

6. ACKNOWLEDGEMENTS

7. REFERENCES

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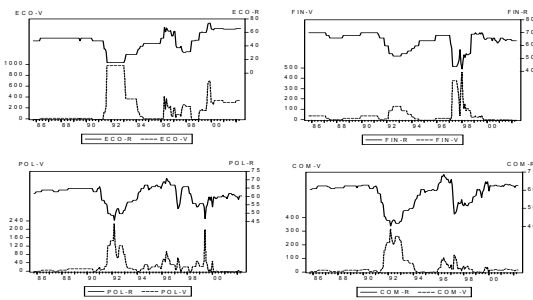**Figure 1a:** Risk Rating Indexes and Volatilities for Albania

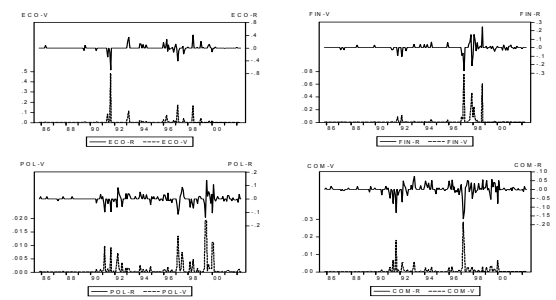**Figure 1b:** Risk Returns and Volatilities for Albania

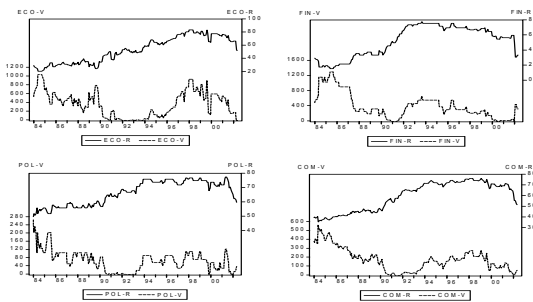**Figure 2a:** Risk Rating Indexes and Volatilities for Argentina
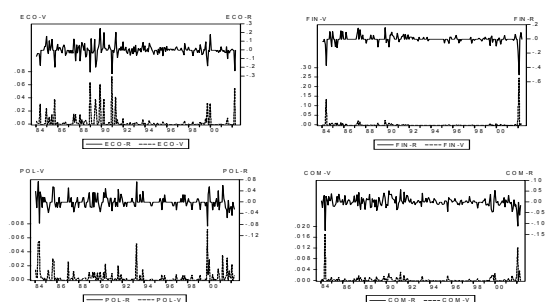

Figure 2b: Risk Returns and Volatilities for Argentina

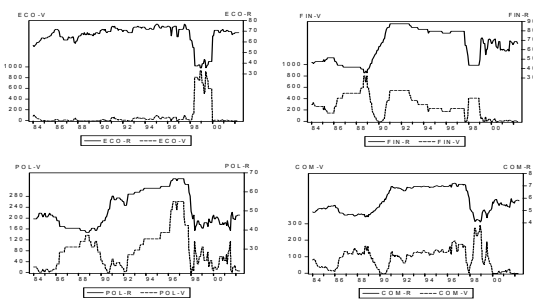**Figure 3a:** Risk Rating Indexes and Volatilities for Indonesia

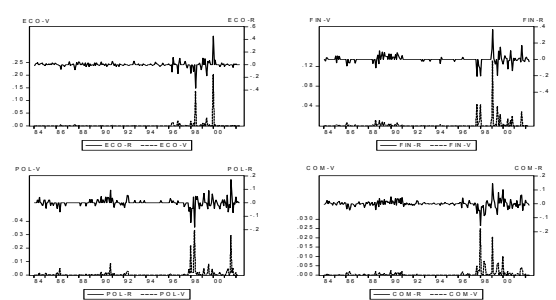**Figure 3b:** Risk Returns and Volatilities for Indonesia

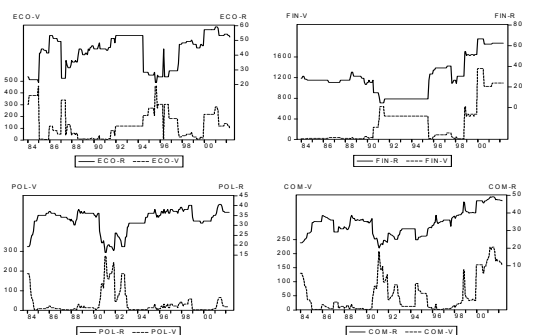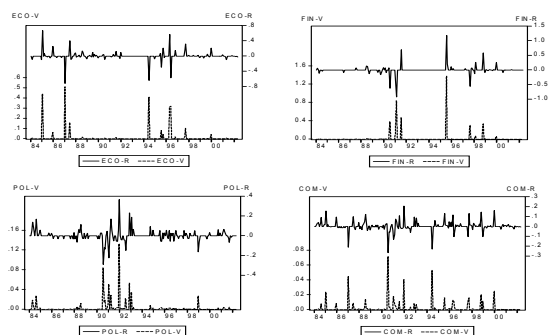**Figure 4a:** Risk Rating Indexes and Volatilities for Iraq

Figure 4b: Risk Returns and Volatilities for Iraq

Note: Economic (ECO), Financial (FIN), Political (POL) and Composite (COM) risk rating indexes and their associated volatilities are denoted by R and V, respectively.

Note: Risk returns (R) and their associated volatilities (V) refer to the rates of change in the respective risk rating indexes.