

Country Risk Analysis

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Over the past twenty years a number of countries faced severe financial and economic problems, sometimes leading to a sudden crisis. Just remember the so-called *Latin-American debt crisis*, a major financial crisis during the period 1982-1990, the longstanding problems in the Japanese economy at the start of the 1990s, the so-called *Asia-crisis* that started in 1997, where international investors withdrew more or less suddenly from a number of South-East Asian countries for fear that they would lose on their investments in these countries, the default of Russia in 1998 and the financial crisis that Argentina faces since 2002.

These crises are a few in a series of crises that show the increasing risk of international loans and international investments over the last decades of the previous century. Usually, they influence the creditworthiness of the countries involved long after the crisis. For example, in 1993, Japan was still seen as the second creditworthiest country in the world according to Euromoney rankings: in 1997 Japan fell to place 13 and in 2002 to place 16.

In addition, these crises have increased attention for the analysis of country risk, in particular for the determinants of defaults and payment arrears and the determinants of appropriate risk premiums in financial contracts. Consequently, much effort has been put into research into the concept of country risk and into the determinants of default and payment arrears.

The aim of this study is to present the state of the art of country risk analysis. What is country risk? How can country risk be measured? What are the main results of research into country risk indicators? How do rating agencies and banks assess country risk and use the results of country risk analysis? These are just a few questions that we discuss in this study.

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June 2003

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PERSONAL DATA

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Introduction

Country risk is inherent to cross border financial transactions and country risk is hence an old phenomenon. Nevertheless, until the early 1970s country risk hardly ever featured in economic literature and major credit rating agencies paid little attention to it. Only in the 1980s did banks start to develop country risk systems to assess country risk.

In the recent past, two developments have contributed to an increase in attention for country risk and country risk analysis in research papers and handbooks and with rating agencies. First, the removal of barriers between national financial markets that started in the 1950s, caused an increasing number of cross border financial transactions. This liberalization of the financial markets increased the number of countries that participate in the international financial markets. Second, over the past decades a number of countries faced severe financial problems. To list some 'highlights':

- In 1982 the Mexican government decided to stop interest and redemption payments on foreign debts. This action of the Mexican government basically started the so-called *Latin-American debt crisis*, a major financial crisis lasting from 1982 till 1990. Note that Mexico again faced a financial crisis in 1994.
- At the start of the 1990s a fall in the excessive real estate prices in Japan caused longstanding problems in the Japanese economy.
- Furthermore, 1997 marks the start of the so-called *Asia-crisis* where international investors withdrew more or less suddenly from a number of South-East Asian countries for fear that they would lose out on their investments in these countries. The previously much praised Asian Tigers suddenly became the tame sheep of the world economy.
- In 1998 Russia defaulted and was labeled 'Russia, financial outcast' on the cover of *The Economist* (February 6th, 1999).
- Finally, Argentina has faced a financial crisis since December 2002.

These crises are just a few in a series of crises that have increased the risk of international loans and international investments over the last decades of the previous century.¹ In addition, these crises have influenced the creditworthi-

¹ See Eichengreen (1991) for problems on financial markets at the start of the 20th century.

ness of the countries involved. For example, in 1993, Japan was still seen as the second creditworthiest country in the world according to Euromoney rankings. In 1997 Japan fell to place 13 and in 2002 to place 16.

This sequence of problems basically started the interest in financial and economic crises, in particular in the causes and consequences of crises and in types of crises.² Alongside this type of literature, more attention has been paid to country risk analysis: the analysis of the risk of investing in a foreign country and the assessment of this risk both in a theoretical sense and in empirical research.

Country risk analysis is a complex issue. It is not easy to assess the risk of a country. For example, it is not obvious how to determine the liquidity and the solvency of countries. Judging political risk is not simple either. Furthermore, all information must be compressed, preferably in one single number. Given these facts it is not surprising that a number of rating agencies have failed to adjust the risk of the Asian Tigers on the eve of the Asian crisis.³

Who should take an interest in country risk analysis? Is it not possible to simply diversify this risk? The idea that country risk is not relevant because it is non-systematic risk and can hence be eliminated via diversification is too simple. First, diversification can only reduce risk if the various country risks are negatively correlated. This does not always hold. For example, the start of the Latin-American debt crisis coincided with the aftermath of the second oil crisis (1979) and was the start of a worldwide recession. Second, the full fruits of diversification can only be reaped if one invests in the world portfolio. This may be possible for investors, but is not always possible for firms. Normally, firms only deal with a limited number of foreign countries. Therefore, the analysis of country risk is relevant for firms, banks, governments and international (export) credit insurers.

Even if firms continuously insure themselves against country risk, analysis of country risk is relevant, if only to check whether the insurance premium does not outweigh the insured risks. It is thus not surprising that attention for country risk analysis has increased strongly: country risk has become big business. Rating agencies that used to focus on the credit rating of firms have broadened their risk assessment with country risk analysis and in a brochure of The Economist Intelligence Unit country risk reports are recommended because these enable the buyer to '(...) make more accurate judgements of a country's economic and political stability'. Besides, attention for country risk analysis is growing in international finance textbooks (Levi (1996), Obstfeld

2 Garretsen et al. (1999) is an excellent survey of the developments in the literature on financial crises.

3 There are other intriguing 'political' reasons why rating agencies seem to be reluctant in downgrading. First, downgrading can lead to self-fulfilling prophecies and second, downgrading can easily lead to deteriorating relations with countries and firms. Be-

cause rating agencies are heavily dependent on the cooperation of firms and countries for their ratings, they must be careful when downgrading. Note in this respect that the role of rating agencies increases under Basel II (see chapter 5) and not all agencies are happy with this part of the proposal (see Rating Agencies: Reluctant Watchdogs, The Economist, June 9-15, 2001, p. 86).

and Rogoff (1996), Baker (1998), Madura (1999)). To summarize, attention for country risk analysis and in particular empirical research into the determinants of country risk has increased.

The object of this research is to detect variables that can explain default of countries. The value of credit ratings has been questioned as well: in how far do these credit ratings adequately predict a change in country risk? Less attention has been paid to the concept of country risk (what is country risk and how does country risk link up with current theories concerning risk analysis?) even though these are important questions as the above remarks about diversification illustrate.

Aim and Scope of this Study

The aim of this study is to present the state of the art of country risk analysis. What is country risk? How can country risk be measured? Is it important to pay attention to country risk? What are the main results of research into country risk indicators? How do rating agencies and banks assess country risk and how do they use the results of country risk analysis? These are just a few questions to be addressed in this study. The study focuses on the relation between theory and empirical evidence. We will briefly discuss the management of country risk, in particular in the banking sector.

The study is organized as follows. Chapter 2 discusses the concept of country risk, the interpretation of country risk and the way country risk is measured. In chapter 3 we discuss empirical research into country risk.

Chapters 4, 5 and 6 deal with the practice of country risk analysis. Chapter 4 surveys country risk analyses and ratings that are provided by major credit rating agencies. Because rating agencies have become important providers of country risk analyses, we also discuss how these agencies construct risk ratings.

Chapter 5 investigates how central banks and the Bank for International Settlements react to country risk as regards the supervision of commercial banks. In addition, we discuss international evidence of banks with cross-border lending and debt restructuring.

Finally, chapter 6 focuses on the question how commercial banks measure and analyse country risk.

Chapter 7 presents a summary and conclusions.