COUNTRY RISK:

ITS MEASUREMENT AND IMPACT

ON FOREIGN DIRECT INVESTMENT

by

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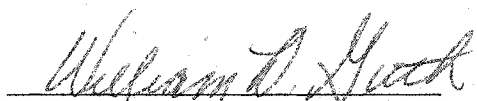

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DEDICATION

For Terra who endured many sunny afternoons in dark offices with me while I worked. She grew from an infant to a beautiful little girl while this work took shape. She was my constant inspiration and was a trouper throughout. May we now have a much better life with more time together.

This dissertation is also for my many friends and supporters who helped me stay focused as I encountered countless hurdles along the way.

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I end where I started with a final dedication and thank you for my daughter Terra who has not yet known life without mommy working all the time. I hope to change that very soon.

ABSTRACT

This dissertation contains three distinct studies that explore aspects of the phenomenon of country risk. For U.S. firms in particular, the Iran crisis and passage of the Foreign Corrupt Practices Act raised the perceived importance of country risk. Various primarily Western organizations provided risk information and ratings of differently labeled types of country risk. Researchers explored the implications of risk variance – relating it to economic development and foreign direct investment (FDI). This dissertation clarifies the field of country risk and its various measures, considers the influence of risk on FDI decisions and then explores how the risk/FDI relationship differs in emerging countries.

The first chapter evaluates the multi-faceted field of country risk that developed over the last few decades. Analysis of several prominent aggregate risk measures challenges labeling distinctions in the field. Aggregate measures of different risks provide similar ratings. Further investigation, though, reveals differences between risk components. Thus, strength in an overall construct of country risk is evident, though dissection of that risk fails.

The second chapter focuses on the relationship between country risk and FDI in the context of the *complete* FDI equation. Recent FDI research is arguably skewed and focuses mainly on market risk with less attention to market opportunity. However, theoretical analysis suggests market size may have a more dominant influence on the relationship. In addition, idiosyncratic firm considerations can alter the effect of risk on a firm's analysis of a foreign investment. Ultimately, data reveal that market size

and market growth are significant predictors of both country risk and FDI. Risk ratings, adjusted to remove this influence of market size, add little value to the overall equation.

The third paper analyzes FDI in the context of emerging markets. Recent research interest in emerging markets has been criticized for failing to adequately account for unique characteristics of these markets. This final study considers how distinct features of emerging markets influence the FDI equation. A comparison of regressions evidences differences in the influence of market elements in emerging versus other countries, and specifically finds that risk ratings have no significant effect on FDI decisions involving emerging countries.

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CHAPTER 1

WHAT'S IN A MEASURE?
NAVIGATING THE MURKY WATERS OF COUNTRY-RISK ANALYSIS

INTRODUCTION

This first study evaluates the very active field of country-risk analysis. Individual firms rely on various risk-related assessments when investing in foreign environments (see Kobrin, 1982; Yavas, 1989). Significance of country-risk ratings is suggested by findings that show popular measures correlate negatively with foreign investment levels; they also correlate with various economic indicators (see among others, Chong & Calderon, 2000; Erlich & Lui, 1999; Mauro, 1995, 1998; Murphy, Shleifer & Vishny, 1993; Wei, 2000a; see generally Shleifer & Vishny, 1993). However, limited discussion compares one risk measure to another. There is also some evidence of high correlations between different risk ratings and of construct confusion and methodological weaknesses in risk measures (Bruce, 1983; Burton & Inoue, 1983; Hertz & Thomas, 1983; Keefer & Knack, 1997; Kern, 1981; Kobrin, 1982; Lindblom, 1977; Meldrum, 2000). Thus, to understand better the usefulness of country-risk measures as management tools requires exploration and comparison of different measures.

Analyst groups have distinguished between types of country risk, with ratings that focus on political risk, economic risk, financial risk, credit risk, economic freedom and corruption. That is, analysts dissected the concept of overall country

risk into different types of specific risk more appropriate to the divergent nature of specific transactions across industries (see Bergner, 1982).[1] A lending institution focuses on a country's creditworthiness when extending debt to a foreign firm, for example. A manufacturing firm considers the potential for expropriation of its capital investments. Retail and service firms are concerned with the propensity for corruption of potential host country employees. Thus, the importance of different risks to different industries should create unique risk sensitivities and corresponding needs for different risk information (see Leavy, 1984).

Country-risk analysis, presented as a multi-faceted construct, suggests that the choice of a particular risk measure may depend on each firm's industry and the risks it faces. Yet, recent empirical work suggests there is overlap in the different risk constructs (Allayannis & Weston, 2001; Conklin, 2002; Geczy, Minton & Schrand, 1997; Sassi & Dil, 1983), evidenced by correlations between the ratings of different types of country risk (Erb, Harvey & Viskanta 1996; Keefer & Knack, 1997). Such results could challenge the idea of different types of specific risk. Differently labeled risks reflect similar country ratings. As a central contribution, this chapter clarifies and develops country risk – first analyzing existing divergent aggregate risk measures, then considering the relationships among the components of such measures. Taken individually, aggregate risk measures are fraught with problems. Yet, collectively, strength may lie in the broader field of country risk.

[1] Bergner (1982) commented that the needs of the hotel industry for risk information would differ from those of heavy equipment manufacturers or manufacturers of personal-hygiene products.

This chapter begins with a literature review of the theoretical and empirical history of risk analysis. The second section of the chapter considers the degree of distinction between aggregate measures and among the component elements of such measures. The data and results section describes various hypothesis tests. A concluding section summarizes the central findings of the study and considers the implications for future research concerning country-risk measurement.

LITERATURE REVIEW

The Origins of Country-Risk Analysis.

Country-analysis efforts date back to age-old military concerns (Barros & Souza, 1983). Spies and diplomats investigated foreign governments and assessed their military capabilities and then they relayed this information to home-country officials for military strategic planning. As foreign direct investment (FDI) increased and the numbers of multinational corporations (MNCs) rose, world events such as the Iran crisis intervened and educated firms and investors of the importance of environmental risk and how such risks differed across countries (Sassi & Dil, 1983). As one anonymous ratings executive in New York explained to The Economist: "The greater the perceived risk, . . . the greater the demand for ratings" (December 13, 1997).

Perlmutter (1969) claimed the increase in FDI reflected international and geocentric strategies struggling against environmental forces. This circumstance led to the demand for measures to assess and distinguish levels of country risk. Scholars also noted that the decisions of foreign investors often differed significantly from

those of domestic investors and they attributed this to country-risk variance (Hymer, 1960; Yavas, 1989: 52). The foreign investor faces greater overall uncertainty operating in an unfamiliar environment, and business opportunities abroad vary from those in the home market due to different economic, political and cultural factors (Yavas, 1989: 52). Yavas' sentiments agreed with Hymer's earlier comment that local firms "have the general advantage of better information about their country: its economy, its language, its laws, and its politics" (1960: 34).

Casson (1979) called the foreign investor's lack of knowledge a "liability of foreignness;" firms often have an advantage in their home market (Hymer, 1960; Hennart, 1991: 489) that is not enjoyed by foreign firms. The local firm understands the nature of the market and the impact there of local environmental elements better. The foreign entrant may have technical advantages but seeks to compensate for a lack of knowledge by using comparative information to understand how the new environment may differ from its home country. Hymer claimed that the cost of obtaining this information can be considerable for "in given countries, foreigners and nationals may receive very different treatment" (1960: 34-35). Specific "treatment" concerns mentioned by Hymer include the danger of expropriation and exchange-rate risk, elements often measured by country-risk analysts.[2]

The concerns raised by Hymer indicate differences in contract enforcement and property rights protections resulting from distinctive legal systems (see generally, Oxley, 1999). The firm's ability to enforce its contract and property rights,

should a dispute arise, influences the degree of certainty of the transaction's outcome. While firms may control some transactional risks through internal governance mechanisms (see Williamson, 1979), different legal environments provoke varying and additional transaction-related risks and costs. Firms want to anticipate country-risk events such as expropriation, war and complete market failure in order to factor such events into their investment decisions. Root (1988) explained that the risks faced within a particular national environment are often beyond the control of a firm. Root (1988) suggested dividing country risk into that risk which is concerned with controllable, transactional-environmental elements and that risk which is concerned with uncontrollable, contextual elements.[3] Country-risk analysis focuses primarily on the contextual, uncontrollable issues driven by legal processes, governmental institutions and environmental elements that define the context of a transaction.

Management scholars, practitioners and governments realize the importance of assessing and understanding country-specific institutional variance and the associated risks (Bardhan, 1997; Vogl, 1998). Foreign investment decision-makers choosing between different countries in making investment decisions would like comparative information to help them select from among alternative locations and entry methods (see Agarwal & Ramaswami, 1992; Henisz, 2000b; Kim & Hwang,

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[2] Hymer (1960: 36) concluded that these disadvantages are important, but difficult to measure.
[3] Shan (1991) responded to Root's proposition with a claim that the distinction between these two types of uncertainty is often blurred in practice. Shan explained that while relationships with governments are mainly contextual, in some countries a governmental agency may also be a contracting partner, raising transactional concerns as well.

1992; Shan, 1991). Country-risk analysis materialized in response to this need for country rating information.

The Definition of Country Risk.

Robock (1971) developed independent and dependent variables for political risk (Oetzel, Bettis & Zenner, 2001; Simon, 1982). Country-risk indices such as the International Country Risk Guide and Freedom House's Freedom in the World Index became available. As interest in country-risk analysis grew, measurement efforts expanded to encompass different risk information and inputs (see generally, Kraar, 1980; Rummel & Heenan, 1978). What began as one question developed into many questions concerning, for example, credit risk, insurance, economic and exchange rate risk, financial risk, political risk and corruption.[4] Motivation for the development of risk indices has varied. Consulting groups sell their information. More politically-oriented groups promote their rating information in a manner consistent with their political interests or agendas. Investment or financial publications supplement their offerings with ratings information. Finally, some academics have proposed their own divergent approaches to risk analysis (see Henisz, 2000a; Simon, 1983).

Researchers have used indices that consider or have evaluated risk based on observations and counts of political events such as protests and riots (Fatehi & Safizadeh, 1994), threats of terrorism (see, e.g. Harvey, 1993) or revolutions, coups, political assassinations and other violent regime changes (Barro, 1991; Barro & Sala-I-Martin, 1995; Benhabib & Spiegel, 1994). Others evaluated country risk more

broadly relying on varied measures and information (Agarwal & Ramaswami, 1992; Henisz, 2000b; Kim & Hwang, 1992; Shan, 1991).

Country-risk measures and literature now have a diversity of focus. For example, Tables 1-1 through 1-9 contain descriptive information for nine sample risk measures. Each measure has a different name suggesting that the index pertains to country risk, freedom, economic freedom, credit risk, corruption, economic risk, financial risk or political risk. Each measure draws from different information sources and has a different number and type of inputs. There are various scales and measures that draw from both quantitative and qualitative information. Some measures have a specific focus; others rely on a number of economic indicators, governmental issues, consultants' perceptions or other indices from which to draw their opinions. No one approach is identical to another. The International Country Risk Guide's (ICRG's) Political Risk Index has 12 qualitative inputs; its Economic and Financial Risk Indices each have 5 quantitative inputs. The Heritage Foundation, with 4 quantitative and 6 qualitative components, analyzes everything from the fiscal burden of the government to the degree of black market activity to develop its Index of Economic Freedom. *Euromoney's* Country Risk Index has 4 qualitative and 5 quantitative inputs. *The Institutional Investor* bases its Country Credit Ratings on qualitative information obtained through one survey. Transparency International's Corruption Perceptions Index is one of the newer indices; though, it is highly promoted. The Corruption Perceptions Index is based entirely on the ratings of other

[4] See, for example, Chong and Calderon, 2000; Delios and Henisz, 2000; Erlich and Lui, 1999;

services, including the ICRG's ratings and information from Freedom House, which prepares its own risk-related index (see Table 1-2).

Insert Tables 1-1 through 1-9 about here

The Risk Analyst Groups.

With respect to the nine referenced indices and various other country-risk ratings, each analyst group claims to have a large number of firms and others who rely on their measures. Some measures are freely available through the internet, a periodical or library holdings; risk ratings and information gathered by other services are not easily accessible and must be purchased.

The International Country Risk Guide (ICRG) has the most established risk ratings. Published monthly for over 20 years, the ICRG claims its ratings are "a standard against which other ratings can be measured," with use by "the IMF, World Bank, United Nations and many other international bodies."[5] Barron's, The Wall Street Journal and various academic institutions have relied upon ICRG's findings and have cited the strength of its measures. ICRG's materials do not describe a specific motivation for the creation of the ratings nor describe its primary audience. However, the ICRG argues: "If your company is not using the ICRG, you are missing out on the information used by banks, international organizations and your competition."[6]

Henisz, 2000a, 2000b; Mauro, 1998; North, 1990; Shleifer and Vishny, 1993.

[5] http://www.icrgonline.com/.

[6] http://www.icrgonline.com/.

Freedom House is the oldest risk analyst group. Founded approximately sixty years ago, its central concern has always been with threats to democracy and peace.[7] Freedom House began publishing its Freedom in the World Index in 1955. It claims the information is widely used by policy-makers, journalists and scholars, but specific information about users is lacking.

Heritage Foundation, established in 1972 in Washington D.C., is a conservative think tank. Heritage has a stated belief in "individual liberty, free enterprise, limited government, a strong national defense, and traditional American values."[8] Based on its ratings, Heritage has proposed the inclusion of certain countries in a global free trade association and suggested the ratings provide information that explains prosperity variance across nations. The stated audience for the index is the "international community;" though no mention is made of whether its readers are in government, industry or academia.

Contrasted with these United States-based groups, the ten-year-old Transparency International (TI) organization, based in Berlin, claims to be "the world's leading, non-governmental organization fighting corruption."[9] TI seeks to build national and global coalitions to fight domestic and international corruption, ultimately by reaching politicians who set the framework for international investment. TI widely publicizes its Corruption Perceptions Index and its more

[7] http://www.freedomhouse.org/aboutfh/index.htm.
[8] http://www.heritage.org/About/aboutHeritage.cfm.
[9] http://www.transparency.org/pressreleases_archive/2002/2002.08.28.cpi.en.html.

recently established Bribe Payor's Index, and authors of popular press business articles frequently cite TI's findings.

Of the focal analyst groups (see Tables 1-1 to 1-9), the final two are found in publications. No explicit motivation is given for the development of the ratings by either *Euromoney* or *The Institutional Investor*. Implicitly, both entities appear to have developed such ratings as standard features in their periodicals. Presumably, they do not want to have to rely on such information from an outside source.

In the last few years, there have been many new entrants into the field of country risk analysis. Some groups, such as Global Insight, Inc., gather and offer for sale comprehensive risk-related research, making distinctions between countries and industries, competing with a variety of other profit-driven organizations.[10] Others, such as PriceWaterhouse with its Opacity Index, appear to have a motive of seeking prominence in the field. Finally, research efforts have led at least one academic, Professor Witold Henisz, to create a new, political hazards measure (Henisz, 2000a). Thus, profit is a motive for some risk analyst groups, influencing policy is a motive for others and some seek to improve upon existing work.

Unfortunately, none of the analyst groups provide details concerning the relationship of their ratings to firm behavior or the value of such ratings versus those of another measure. Of the more prominent indices, seven assess country or business

[10] See, e.g., the Business Risk Service of Business Environment Risk Intelligence; the Control Risk Group's Country Risk Forecast; and the Economist Intelligence Unit's Country Risk Service.

risk using a multi-factor analysis.[11] At least four ratings have corruption as a focus or a significant focal element.[12] Other indices pertain specifically to such matters as the level of freedom, creditworthiness, political risk or constraint, financial risk, economic risk, crime and globalization of the economy.[13] While all indices develop their ratings through analysis or aggregation of underlying input information, a few indices base such rating products primarily on the indices of other rating groups.[14] With the exception of ratings developed from other indices, references by one analyst group to another and comparisons of different risk-related indices are rare. In this context of diverse ratings, comparison-shopping for the perfect risk measure, or to determine the most useful approach to country-risk measurement is difficult.

Evaluating the Field of Country-Risk Analysis.

Country-risk analysis has been defined as "the study of conditions, situations and events that might impact favorably or unfavorably on conducting business or investing in [a] country" (Yavas, 1989:51, *citing* Merrill, 1982). Under broad and specific risk labels, risk analysis efforts range from collection of descriptive information to development of specific risk ratings. Distinctions among these risk

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[11] Business Environment Risk Intelligence's Business Risk Service, Control Risk Group's Country Risk Forecast, the Economic Intelligence Unit's Country Risk Service, Euromoney's Country Risk Ratings, the International Country Risk Guide's composite risk rating, DRI-WEFA's Global Risk Service (Standard and Poor's/Global Insight), and the World Bank Group's World Business Environment Survey.

[12] The Heritage Foundation's Index of Economic Freedom (The Wall Street Journal), the International Country Risk Guide's political risk index and separately reported corruption measure, PricewaterhouseCooper's Opacity Index and Transparency International's Corruption Perceptions Index.

[13] See, among others, Tables 2, 4, 6, 7, 8; Henisz, 2000a; United Nations International Crime Victims Survey.

constructs and measures, though, are neither conceptually clear nor empirically evident. Barros & Souza (1983) suggested that full theoretical development and clarification of country-risk analysis is lacking. Yet, researchers continue to use country-risk-related measures, with little critique of the measures and few comparisons to other measures using alternative ratings systems (see, e.g., Cosset & Roy, 1991; Hines, 1995; Husted, 1999).

Some confusion should not be surprising when considering, as Kobrin (1982: 29) explained, that to disaggregate the external environment into concepts such as political, economic, social, legal and cultural variation involves a reliance on conceptual abstraction that draws from experienced reality. These common but complex divisions are interactive, reciprocal and only distinguishable on a perceptual level (1982: 29). Precise definition is very difficult when the same event "may be seen as primarily political or primarily economic depending on the observer's training and orientation" (Kobrin, 1982: 29; see also Bergsten, Keohane & Nye, 1975; Gilpin, 1975; Lindblom, 1977). For example, Meldrum (2000), an industry analyst himself, commented: "In practice, most country-risk services create risk measures using an eclectic mix of economic or socio-political indicators based on selection criteria arising from their analysts' experiences and judgment."[15]

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[14] Henisz's (2000a) Political Constraint Index and Transparency International's Corruption Perceptions Index.

[15] Meldrum (2000) pointed out that with little theoretical guidance, indices proved difficult to replicate over time as the importance of different measurement elements changed. Interestingly, in his 1999 article, Meldrum stated that country risk relevant to strategic planning falls into three categories: exchange risk, economic risk and institutional risk. One year later, Meldrum (2000) noted that analysts have tended to separate country risk into six risk categories – economic, transfer, exchange rate, location or neighborhood, sovereign and political.

Consequently, the question becomes whether different risk constructs and their measures provide clear, distinct sources of information about the external environment that capture unique aspects of country risk.

The Importance and Use of Country Risk Information.

Notwithstanding some expressed concerns about country-risk measures (see Oetzel et al., 2001), country-risk analysis became a regular activity in many international businesses and banks. In 1982, Kobrin claimed that political risk assessment had become institutionalized. In his empirical study, Kobrin found 55 percent of the firms responding to his survey had headquarters staff that reviewed how political conditions might affect potential investments (1982: 75). Yavas (1989), assessing the state of country-risk analysis, mentioned that several firms across a number of industries had in-house country-risk analysts and commented that other firms relied on the services of a number of consulting companies specializing in country-risk.

The banking industry was the first to focus on country risk. By 1981, banks were already working with second or third generation country-risk models (Davis, 1981). Management of some banks believed "a mixture of structure analyses and personal judgment" would lead to more complete decisions (Pietrabissa, 1987). For the most part, banks regard internal information as more valuable than external (Anonymous, 1993). Yet, external information is important in countries where banks have limited or emerging exposure (Lowenstein, 1992). Furthermore, research by *Euromoney* mentioned Union Bank of Switzerland, Canadian Bank and Citibank,

along with many smaller regional banks, as finding external analysis increasingly important as a check or even the only source of information on some countries (Anonymous, 1993: 369; see also Gordon, 1996). The concern of banks for unbiased, outside information led in 1983 to the creation of the Institute of International Finance, Inc. (IIF) which currently has over 320 members – commercial and investment banks, insurance companies and investment management firms – in more than 60 countries.[16] The IIF primarily serves the functions of analyzing risk in emerging markets, serving as a forum on key policy issues and promoting collaboration between members.

Significant findings also continue to accrue from empirical work relying on risk measures. In their country-risk study, Keefer and Knack (1997) found the quality of country institutions and their ability to provide property rights protections affected the ability of a country's economy to improve and to benefit from the resources in the country or injected into the country. Others have sought to identify which risk elements most directly affect specific types of FDI (see Bergara, Henisz & Spiller, 1998; Fatehi & Safizadeh, 1994; Kobrin, 1978; Nigh, 1985) or how risk variance impacts entry decisions (Agarwal & Ramaswami, 1992; Henisz, 2000b; Kim & Hwang, 1992; Shan, 1991).

Thus, interest in and reliance on country-risk measures continues to grow, and the importance of understanding variance is underscored by findings in a growing body of research and international events reported daily by the news media.

[16] www.iif.com/.

More complete evaluation of country-risk measures will provide better understanding of different types of risk and their related constructs. Through empirical analysis of sample ratings, this work seeks to fill the gap.

THE HYPOTHESES

Aggregate Country-Risk Measures.

The field presumes that country risk is multifaceted and subject to dissection into different types of risk that may be more or less important in different industry contexts. Arguably, a firm making a substantial capital investment in a country would be primarily concerned with political risk. A financial institution would be more concerned about credit or financial risk. The logic of having different risk sensitivities depending on the nature of the transactions in the industry flows directly from transaction cost economics and FDI literature (see generally, Hymer, 1960; Oxley, 1999; Williamson, 1979). Of the nine indices reflected in Tables 1-1 through 1-9, two are intended to reflect corruption levels and the others have differing expressed foci described as "country risk," "freedom in the world," "economic freedom," "credit risk," "economic risk," "financial risk" and "political risk." All measures derive from the aggregation of various component elements of risk-related information. Consistent with the bulk of the theoretical development of the field and the work of the analyst groups that promulgate such ratings, different measures should capture different aspects of country risk.

H1-1: At the aggregate level, country-risk measures will load on different factors.

The Underlying Components.

Notwithstanding the above, prior findings of high correlations between aggregate risk measures (Erb et al., 1996; Keefer & Knack, 1997; see also Cossett & Roy, 1991) undermine the presumption of the field -- that country risk is multifaceted and subject to dissection into different types of risk corresponding to differing risk concerns across industries. High correlations between risk ratings suggest that instead of differentiated indices, aggregated ratings capture the same overall construct.

Yet, each rating is the product of various components or information inputs (see Tables 1-1 to 1-9). The aggregation of such underlying information to achieve a specific risk rating may have removed relevant distinctions. Thus, the nature of the underlying components of the risk ratings – in terms of their selection, use and relationships -- gains significance. Highly correlated inputs would compound the problem of accurate measurement and understanding of country risk, by clouding the actual significance of particular information captured in each component and diminishing the distinctions between resulting aggregate risk ratings. Distinct inputs may support the existence of differences between environmental risks, even in light of other findings of correlations between aggregate measures.

While Miller (1992, 1993) and Werner, Brouthers and Brouthers (1996) supported the inclusion of a number of elements in a risk assessment, they cautioned against aggregation of those elements. In particular, Miller (1992, 1993) criticized efforts to throw everything into an uncertainty measure and Werner et al. (1996: 573)

claimed "all forms of risk may not be related to each other." Thus, their presumption was that through aggregation of distinct information into a single risk rating, the uniqueness of specific elements of underlying information is lost. As explained by researchers such as Erkut and Bozkaya (1999), data aggregation reduces the problem size, but results in the loss of information and in solution errors.

Furthermore, decisions pertaining to inclusion of inputs and decisions pertaining to the weight given each input influence the nature of the results of the risk analysis. *Euromoney's Country Risk Ratings*, for example, rely on 4 qualitative and 5 quantitative inputs, each assigned different weights (see Table 1-1). Aggregation may hide the information contained in these individual elements in a more vanilla result; the components should reflect the distinctions of different risk elements. Logic and the theoretical development support the existence of different types of risk and different risk components. A factor analysis of such inputs should not result in a finding of one factor.

H1-2: At the component level, country-risk measures will load on different factors.

THE DATA AND THE RESULTS

This study selected from a number of different risk-related indices for analysis. In addition to having different expressed foci, indices vary in scale, data source(s) and degree of reliance on qualitative versus quantitative information (see Tables 1-1 to 1-9). To insure a sufficient N for each test, selection favored indices with greater country coverage, assessed on at least an annual basis. Ultimately, the

study analyzed nine different ratings from six different ratings services. Tables 1-1 through 1-9 contain descriptive information for the nine indices.

Some of the selected indices, such as the International Country Risk Guide (ICRG) and Freedom House's Freedom in the World country ratings, date back over 20 years; other analyst groups formed more recently. The ICRG publishes new ratings monthly; the other groups publish ratings annually or bi-annually. The ICRG provides four separate indices for analysis, including its three primary indices covering political, economic and financial risk, and corruption, an element of political risk. At different times, users of the ICRG have treated separately these different ratings (Erb et al., 1996). Freedom House's Freedom in the World index is the fifth subject index. In 1995, Transparency International (TI) began publishing an annual Corruption Perceptions Index, which is the sixth index. The seventh index, also first published in 1995, is Heritage Foundation's Index of Economic Freedom affiliated with The Wall Street Journal. The final two indices are both published at least annually in periodicals. *Euromoney's* Country Risk Ratings commenced in 1982 and *The Institutional Investor's* Country Credit Ratings, first presented in 1979, round out the list of nine indices for analysis. The number of countries rated by all nine of the indices increased every year. In 1999, analysis revealed an overlap of 88 countries rated by each of the nine index services.

The data analysis proceeded with an initial decision to standardize the indices to remove variance due to the range of scales employed.[17] Index scales varied from a 5-point range for the Heritage index to a 100-point range for the ICRG Political Risk Index. Indices with smaller ranges, including Heritage, the ICRG Corruption Index (0-6), TI (0-10) and Freedom House (2-14),[18] reflected less change from year to year and, arguably, less robustness with limited distinctions between rating levels.[19] As appropriate, reversing the orientation of some of the indices provoked consistency and caused higher numbers to indicate greater risk in each case.

Relying on the standardized ratings, H1-1 was tested using a correlations table and a factor analysis. Table 1-10 reflects the degree of correlation between and among the standardized nine indices in 1999. Correlations range from a low of .31 between ICRG's Financial Risk Index and ICRG's Corruption Index, to a high of .98 between *Euromoney's* Country Risk ratings and the Country Credit ratings of *The Institutional Investor*. In general, the ICRG Financial Risk index and Freedom House's ratings are the most unique, with some of the lowest correlations. Yet, even these indices have correlations over .5 with 4 or more other measures. Thus, the correlations table suggests that H1-1 fails. The differently labeled and measured indices result in very similar ratings. This finding supports the conclusions of prior studies referenced herein that found high correlations between measures.

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[17] Testing using the original ratings was generally consistent with the results using standardized numbers.

[18] The Freedom House scale is the result of adding the two (1-7) point scales for the two component elements of the index – political rights and civil liberties.

[19] As a final note, economic risk and political risk both use a 50-point scale.

Insert Table 1-10 about here

Another approach to testing H1-1 involved the use of a factor analysis. To support H1-1, a factor analysis should evidence that the various indices load as different factors. Yet, the finding of high correlations suggest the indices will instead load as a single factor, jointly explaining a greater degree of variance than any one index alone. A factor analysis performed on the panel of data for the year 1999 agrees with the correlations table and further supports a conclusion that H1-1 fails. The multivariate factor analysis program used a maximum likelihood estimate method and a varimax rotation. The S-Plus 6 factional program had a weighted covariance estimate function. The maximum likelihood method allowed for a test of whether the specified number of factors is adequate to explain the model. Table 1-11 evidences the strong finding of a single factor among the nine indices. The table reflects the N, the variance of .65 explained by the single factor and the loading for each of the indices, ranging from a "low" of .64 to a "high" of .99. This single factor also passed the test for adequacy to explain the model. In a separate calculation, the eigenvalue for one factor was determined to be 6.11, while the eigenvalue for two factors was less than 1, at .69. Thus, both tests of H1-1 support its failure. At the aggregate level, the country-risk measures do not load on different factors.

Insert Table 1-11 about here

While the analysis of the aggregate risk indices is not able to confirm, and indeed undermines, the identification of different aspects of country risk, it may be that analysis of the risk components for the various measures evidence some distinctions. Performance of the tests of H1-2 required the underlying input information for the indices. Two of the indices – Transparency International's Corruption Perceptions Index and *The Institutional Investor's* Country Credit Ratings – provided insufficient underlying information.[20] In addition, this analysis did not include ICRG's Corruption measure that is part of its Political Risk Index. Remaining are six indices with a total of 43 inputs. Freedom House's measure has the fewest inputs with only two. The ICRG's political risk measure has the most inputs with 12. These risk components cover a range of topics. Many arguably overlap; none are identical. As Tables 1-1 through 1-9 reflect in more detail, examples of inputs include: economic performance, debt indicators, access to bank finance or short-term finance or capital markets, fiscal burden, government intervention, regulation, annual inflation, current account as a percentage of GDP, government stability, internal and external conflict risk, military in politics and religious tension.

The explanations of some of the component elements and the reason for their inclusion in the risk measure is in some cases well-explained and in others left to the presumptions of the user. For example, *Euromoney* provides sketchy information concerning the qualitative components for its measure and gives no details

[20] In addition, Transparency's rating is a composite rating taken from other ratings services and the

concerning its selection of component elements (see Table 1-1. The *Institutional Investor's* Country Credit ratings are based entirely on a survey of chief economists at leading banks and money management firms, with responses weighted based on an assessment of the particular respondent's institution – its degree of worldwide exposure and sophistication of country analysis systems (see Table 1-4). In contrast to these measures, the ICRG provides a fairly extensive discussion of the different quantitative and qualitative components included in its three central ratings; though, the reason for the inclusion of each is lacking (see Tables 1-6, 1-7 and 1-8). For example, the ICRG distinguishes between the "current account" item included in its economic risk and its financial risk measures. The former is current account as a percentage of GDP; the latter is current account as a percentage of exports of goods and services. Heritage Foundation and Freedom House provide fairly detailed descriptive information concerning the components included in their measures with some explanation of the reasoning therefor (see Tables 1-2 and 1-3). Finally, TI gives general descriptive information concerning the measures on which it bases its aggregate index, but does not provide full explanation of the reasons for inclusion nor the underlying components of each such measure it considers (see Table 1-8). Some measures also provide extensive detail concerning the sources of their information such as the specific governmental sources of quantitative information, and others provide little or no such detail.

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ratings selected vary from year to year.

An initial test of H1-2 involved looking at correlations across all 43 inputs and within each of the six risk ratings. The number of countries, for which input information was available in each analysis, was at least 134. The correlation analysis in Table 1-12 reveals little consistency across and among specific index inputs. Across the 43 different indices, correlations range from lows of –0.0092 and –0.0043[21] to a high of 0.95.[22] A review of the correlations shows certain components are highly correlated, while many other items have little correlation. In particular, there is one large (12-component) cluster that is highly correlated internally, and such inputs are further somewhat highly (from about .50 to .70) correlated with another 12 components. Interestingly, the inputs in this highly correlated cluster cover a range of political, economic, financial and social issues. A second small cluster of 3 inputs is highly correlated internally and is somewhat correlated with 13 other inputs. Finally, about 17 components are idiosyncratic in nature, with little relationship to others.

Insert Table 1-12 about here

The second test of H1-2 takes the evaluation one step further and involves a factor analysis of all of the component inputs. The factor analysis used the same statistical approach as in the test of H1-1 – first forcing one factor, then testing for multiple factors. In separate calculations, eigenvalues were calculated related to each

[21] Between Heritage's government intervention assessment and ICRG's Political Risk input of government stability and between ICRG's Economic Risk input concerning GDP growth and ICRG's Political Risk input concerning religious tension, respectively.

factor analysis. Comparative eigenvalue information revealed the most appropriate number of factors is six.[23] Table 1-13 then reflects the loadings for the six factors. Loadings at or above .50 are in bold. The number of significant inputs with loadings of at least .50 for the six factors in order is 17, 7, 4, 2, 2, and 1. The first two clusters correspond roughly with the two clusters noted in the correlations table (Table 1-12). A review of the correlations table and of the factor analysis information shows that H1-2 is supported. The 43 inputs from six different indices load as different factors.

Insert Table 1-13 about here.

The factor analysis provided additional insight into the field of country risk. While many of the inputs are distinct, the loadings from the six factors suggest that the identification of distinct risks is either extremely complicated or is not possible. The first and strongest factor includes seemingly divergent inputs – trade, monetary policy, property rights, regulation, black market, GDP as a percentage of population, inflation, socioeconomic conditions, bureaucratic quality, political risk, economic performance, credit rating, access to bank finance, access to short-term finance, access to capital markets and discount on forfeiting. The loadings of the second factor mix primarily political issues such as political rights and civil liberties with more economic considerations of wage and price policy and policies toward capital flows and FDI. In addition, while the second factor includes corruption, the black

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[22] Between *Euromoney's* Country Risk Rating inputs of political risk and credit rating.
[23] Factor analyses were run forcing from one to ten factors. Eigenvalues for the six-factor test were, respectively, 17.89, 2.88, 1.98, 1.51, 1.37 and 1.05.

market and regulation components that also address corruption are included with the first factor. The four inputs in the third factor are also more focused on political matters involving internal conflict, military in politics (also in factor two), law and order and ethnic tensions. The fourth and fifth factors are highly specialized with only 2 similar inputs each. Factor four focuses on debt and default; factor five focuses on current account information. The sixth factor has only one input – inflation. Thus, the strongest factor is broadly based and does not reflect a distinguishable risk. The second factor evidences leaning toward political information, but has elements that overlap with some contained in both the first and third factors. The last four factors have specific foci, but limited component inputs.

Thus, the factor analysis of the components raises the same concerns that develop from the tests of the aggregate measures in H1-1. Though component elements of the aggregate indices are distinct and cover a variety of issues, it is difficult to develop groupings for such components that clearly differentiate between different types of risk. The existence of readily discernable, different types of risk is in doubt. Any effort to aggregate component risk elements, to group them as inputs of one or more distinct aggregate risk measures, will be fraught with problems.

CONCLUSIONS AND IMPLICATIONS

Evidence of the importance of country risk is in firms' losses due to corruption, expropriation, war and government intervention. IBM suffered financial and reputation consequences and was subjected to a SEC investigation when news broke of bribe payments by top executives to the national bank of Argentina. Coca-

Cola recently suffered a four-month shutdown of production in Uzbekistan when its partnership with the son-in-law of the country's President became a liability because of a divorce. However, it is events like the Iran crisis, the invasion of Kuwait and the Asian financial decline that have escalated interest in country risk over the last few decades. Firms must consider such risk in their international investment and management decisions, and researchers want to evaluate the relationship between country risk and firm behavior. Unfortunately, as reflected in this and prior work, the reliability of differentiated country-risk data and of research based thereon is questionable.

The story of country risk analysis presumes that firms encounter different risks depending on the nature of their industry and resulting transactions. Political groups and governments have divergent perspectives and motivations concerning country risk. Thus, analysts tailor country-risk information to fit different needs and motivations. The result is various researchers, consultants and political organizations have developed risk measures that purport to carve country risk into distinct pieces. If the measures of these different types of risk are accurate and reliable, then they should also reflect different findings for each type of risk. Yet, analysis reveals the measures do not have different ratings. Instead, they are all capturing aspects of the same construct and collapse into one measure. Consequently, despite the theoretical support and intention, different risk measures are not identifying different types of risk. Deserving of future study is whether the manner in which these, primarily

Western organizations, seek to identify country risk prevents identification of unique aspects of that risk.

Further analysis of the various inputs into different risk measures reveals that the information underlying different aggregate measures is distinct, although their ratings are similar. While aggregation of such inputs may create a problem by removing distinctions, factor analysis of the components fails to support the existence of distinguishable risks and instead supports the existence of a broad country-risk construct. The main factors identified covers various types of risk-related information. It does not focus on a particular area such as the political, economic or financial arena. Instead, information included in the strongest factor touches on all three elements – from inflation to black market, from discounts on forfeiting to socioeconomic conditions. The second factor begins to shift to more political concerns but still mixes wage and price issues and foreign investment policies with the degree of military in politics and corruption. In addition, issues addressed in factor two also appear in factors one and three. While the first factor combines distinct components into an overall measure of country risk and the second factor evidences some confusion, there are some clear distinctions in the last four factors. As noted above, the third factor focuses primarily on political issues, the fourth focuses on debt or default, the fifth on current accounts and the sixth covered inflation. Future research can distinguish these elements further to explore their impact on firms.

A significant issue left undeveloped by this work concerns the intended audience of risk ratings and the types of information actually used by different groups – governments, industry and academia. Such audience and use information may assist in explaining motivations underlying risk-rating determinations. Risk categorization is an important element in the characterization of a country, the investment decisions of firms and the analysis of academics. For example, the International Finance Corporation and Overseas Private Investment Corporation provide support for organizations investing in emerging countries which have high risk and high growth rates.[24] A government seeking investors may benefit from having its country labeled as "emerging." A higher risk rating would better support such a determination. Therefore, government and political interests may be more relevant to risk ratings than specific firm considerations.

Furthermore, while there is little information concerning firms' use of country-risk information, available sources reflect that firms evaluate country risk using methods that range from highly complex econometric models to purely qualitative, judgment-based approaches (Field, 1980; see Miklos, 1983). Painter (1999: 52) reported risk information sources for Mobil Corporation include "outside consulting firms, extensive use of internet and personal contacts" developed through internal and external networking. [25] Painter explained there are "scores of people throughout the company who may not be trained as economists, but their jobs

[24] See http://www.ifc.org and http://www.opic.gov/.
[25] In particular, Painter mentions the use of "political risk services combined with internal analysis" (1999: 54).

incorporate economic analysis" (1999: 52). These employees are both sources and consumers of risk information. Meldrum (1998: 23) described the approach of Air Products & Chemicals to country-risk analysis as "based loosely on traditional country risk analysis" with "some fuzzy-logic," added to incorporate a longer term perspective.

Interestingly, as the process of analyzing country risk has become more common, it has not become any more systematized (Lowenstein, 1992; see also Turner, 1992). The IIF Report of the 2000 Working Group on Country Risk found "relatively robust systems of country analysis" are used by most leading, internationally active financial institutions. Yet, the results of the survey of 36 participating financial institutions explained that such country-risk analysis systems involve both "quantitative and judgmental approaches." A central use of country risk information by IIF members is to set country lending limits. Lowenstein (1992) found at J.P. Morgan this annual limit-setting event was a brainstorming session involving up to 40 people.

Though academics implicitly assume risk ratings drive FDI decisions (see, among others, Agarwal & Ramaswami, 1992; Henisz, 2000b; Kim & Hwang, 1992; Shan, 1991), the evaluation of country-risk information by firms does not reflect a strong reliance on country-risk measures. Henderson and Cecil (1996: 48), for example, found that "too many western companies enter new markets blind, carrying out limited or misguided research that leads to serious problems." They blamed lack of resources and ignorance, mixed with beliefs of intellectual or cultural superiority,

as leading to widely varied criteria and contradictory interpretations. They noted that firms often make decisions "tracking" customers and give more concern to competition and sector issues than to country risk. Finally, Henderson and Cecil concluded (1996: 48-49), "[m]any companies mistakenly assume that intelligence – obtained from banks, lawyers or their own executives – is both comprehensive and factual." Aggregate risk measures may not be the most relevant information on which to judge firm behavior. Thus, a significant implication of this study pertains not to the measures, but to the research based on them. Research seeking to find a relationship between specific risk ratings that may be themselves flawed and firms' behavior is using inappropriate and corrupt information as a proxy. Researchers need to be careful using risk ratings and should be sensitive to the fact that ratings likely were not created with them in mind. Instead, future research should focus more closely on the information that firms are using to make their international management decisions.

The intent of this study was to clarify the status of country-risk analysis and add to current knowledge of the value of country-risk information. Though logically conceived to account for variation in risk sensitivities and information concerns, risk measures labeled as capturing different types or elements of risk do not provide distinctly different results. Instead, aggregate risk measures are highly correlated and load as one factor. In the case of country risk, the similarity across aggregate indices arguably indicates strength in an underlying concept of country risk, but weakness in

the analytical efforts to distinguish between specific risk types (see generally Wind, Mahajan and Swire, 1983).

The findings both of little distinction between aggregate risk measures and concerning the six component factors raise questions about the entire field of country risk analysis. Distinctions between risk information components do not easily translate into supportable groupings of information about different types of risk. Concerns raised by Kobrin (1982) arguably intersect with the well-known views of Knight (1971) regarding the difficulty or impossibility of assigning a rating to the uncertainty of country risk. However, the fact that various aggregate measures with differing approaches result in similar ratings may evidence strength in the overall construct of country risk (see Wind et al., 1983). Collapsing various risk measures into one is also supported by previous work that promoted such aggregation across risk measures. Risk index analysis by Kaufmann, Kraay and Zoido-Lobaton (1999a, 1999b) culminated in the aggregation of 13 indices into 3 risk indicators.[26] Transparency International's Annual Corruption Perceptions Index is an aggregated index of various risk measures. Henisz (2000a) has also developed a Political Constraints Index that aggregates other information. Werner et al., (1996: 572) suggested the need for "incorporating a number of international risk variables into investigations of international risk" in their work to develop a "Perceived Environmental Uncertainty" measure (see also Miller 1993). They expressed

[26] The Kaufmann et al. study is distinguishable from this study. They did not look at underlying methodological issues, and did not test for correlations, nor test for the existence of a factor as is done herein.

concerns about reliance on a single measure and they sought to create a more comprehensive aggregated measure (see also Brouthers, 1995; Henisz, 2000a; Miller, 1993). Future work can explore the concept of a composite index. Perhaps what began as the study of a very broad construct and evolved into a series of differentiated methods and risks should return to a study of a broad construct. High correlations suggest that the implications of using different labels are only illusory.

This overview, analysis and clarification of the field of country-risk measurement paves the way for future research in a number of directions. First, valuable work can more fully explore the implications of the finding of a strong underlying country-risk construct – both among the nine measures and among their inputs. Additional work will allow for better understanding of the appropriate component elements to measure country risk. Current risk measures may provide only a subjective assessment of perceptions of country risk, not a valid source of information of actual country-risk levels. In addition, future work should challenge and re-explore the concept of distinct types of risk, going beyond the 43 components considered herein to evaluate all possible risk inputs.

With an improved understanding of country-risk information and measures, researchers can better assess the influence of country risk on a host of management concerns. Ultimately, researchers may still have the problem that risk is difficult to ascertain and is largely a matter of perception. As Kobrin (1982: 16) explained, "the relevant environment is subjective; it is perceived by individuals and organizations."

Yet, the merit of continuing country-risk work is more evident in light of recent global events and their impact on various multinational firms' operations.

In addition, to these central findings, a few other avenues are suggested by this and related research. Von der Mehden's (1983) work describing sub-national differences suggested that analysis of risk in different regions of countries might be useful. Time is another component that deserves attention in risk research. Oetzel et al. (2001) argued there should be an accounting for time and the lagging of risk information included in indices. For example, Transparency International's Corruption Perceptions Index is a composite index that for any given year reflects outcomes from other ratings services over the last three years (see Table 1-9). In turn, the supporting inputs may include dated information.

Finally, this study suggests taking the analysis to the next step by looking across industries and across firms to consider risk sensitivity differences. As future research explores these kinds of issues, scholars should eventually consider the matter of the relationship between risk ratings and ultimate reward. Inevitably, our focus should be on how risk information relates to both investment decisions and firms' profits in foreign environments. It is interesting that despite the increasingly critical sentiment toward country-risk analysis, scholars have given little attention to exposing *and explaining* the deficiencies of this seemingly legitimate industry. The time is ripe for providing more guidance to international firms seeking to understand environmental variance between investment locations.

CHAPTER 2

FACTORING RISK INTO THE EQUATION: A TRANSACTION COST ANALYSIS OF THE ROLE OF COUNTRY RISK IN FDI DECISIONS

INTRODUCTION

Over the last few decades, country risk has become a critical issue for multinational corporations (MNCs) (Husted, 1999). Initial analyses found a negative correlation between aspects of country risk and FDI (see generally, Diersen, 1999; Hines, 1995; La Porta, Lopez-de-Silanes, Shleifer & Vishny, 1997; Mauro, 1995; Salbu, 1999: 55; Wei, 2000a, 2000c). The presumption, therefore, is that country risk suppresses FDI. However, such research focuses primarily on the relationship between FDI and potential market risk, without completely explaining the involvement of potential market opportunities in the equation. Theoretical development has not fully explored whether perceived opportunities in a country or perceived risks have the greater weight in the decision. Furthermore, the relationship between market opportunity and market risk has received only limited attention in the context of FDI decisions. The purpose and general contribution of this chapter is the critical evaluation of the role of country risk in the *complete* FDI equation.

This chapter considers the elements of the FDI decision and analyzes the involvement of country risk. Self-selection and endogeneity infect the FDI decision as the attributes of the firm and the nature of its transactions influence the cost analysis (see generally, Shaver, 1998). In addition, market opportunities, measured

through such avenues as economic size and market growth, have a significant role (see Billington, 1999). The final consideration of the investing firm is the risk associated with operating in the particular country environment. Ultimately, a firm weighs potential benefits and perceived risks – both idiosyncratic and general to all such firms – to determine its FDI strategy in a particular country (see Dunning, 1979). The analysis herein challenges prior, potentially one-sided conclusions regarding the relationship between country risk and FDI and explains some contradictory results. Existing presumptions about the role of country risk in FDI decision-making do not survive scrutiny under a theoretical, empirical or application lens.

The chapter begins with a literature review that provides a transaction cost analysis framework and explains the liability of foreignness complication as a context for exploring the relationship between country risk and FDI. The second section of this chapter develops a two-part hypothesis that explains the specific role of country risk in FDI decisions. The third section describes the data and the results of the statistical analysis. The final section provides some conclusions and implications for future work that flow from the analysis.

LITERATURE REVIEW

In today's increasingly global market, to compete effectively, more companies are investing abroad, in more countries. While firms once placed limited value on their international operations, recently "[p]ower has shifted to business units responsible for performing a given function globally, and the emphasis is on

optimizing processes worldwide" (Kahn, 1998: 226). The focus on international expansion and operations has resulted in a boon of research concerning FDI. Much of this work has grown out of or been based upon the theoretical notions of transaction cost economics (Coase, 1937; Hymer, 1960).[27]

FDI in a Transaction Cost Analysis Context.

Coase's (1937) seminal work clarified the field of transaction cost economics and has more recently been used to explore and explain the behavior of MNCs (see Williamson, 1981). The foreign subsidiary exists when the costs associated with using the market exceed the costs associated with organizing and performing a transaction internally (Coase, 1937). For a MNC, this cost analysis determines how the boundaries of a firm are drawn and whether a firm conducts a particular transaction in the foreign market or internalizes the transaction and expands into the new country.

Transaction-based cost considerations underlying FDI decisions pertain to matters internal and external to the firm associated with (1) uncertainty, (2) frequency and (3) asset specificity (Williamson, 1981: 555; Coase, 1937). These elements are primary drivers of the cost analysis and ultimately determine whether the firm relies upon the market or internalizes the transaction. Such elements establish the appropriateness of FDI and suggest the optimal FDI strategy (Anderson & Gatignon, 1986). Of these elements, arguably the most significant is uncertainty.

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[27] The Capital Asset Pricing Model (CAPM) is another possible approach to the analysis of FDI decisions. However, in 1984, Stulz explained the three problems with the application of CAPM in an international investment setting (see also, Shawky and Ricks, 1981).

According to Coase (1937: 45), "[i]t seems improbable that a firm would emerge without the existence of uncertainty." Transactional uncertainty will manifest in two types as explained by Anderson and Gatignon (1986) – internal uncertainty involving the inability to predict accurately the firm's agents' productivity, and external uncertainty related to the unpredictability of the external environment. For the foreign firm in particular, external uncertainty, involving a lack of knowledge about the market (Johanson & Vahlne, 1977), can be acute. The foreign firm must cope with external environmental elements that differ from those in its native country and that vary across countries. Differences in laws, regulations, governmental institutions and cultural practices and prejudices create risks for all firms, with the foreign firm being even more vulnerable given its lack of knowledge of the nature of those country-specific characteristics.

While FDI research increasingly incorporates transaction cost analysis concepts, exploration of environmental cost issues associated with country risk has been limited. Researchers have focused on broad foreign subsidiary existence questions (Hymer, 1960) and narrow questions concerning the impact of oligopolistic reactions on FDI in a specific industry, in one country (Yu & Ito, 1988). Great strides have been made in understanding such matters as the selection decisions of MNCs (Shaver, 1998), the wide variation in modes of entry into foreign markets (Brouthers, 1995; Kogut & Singh, 1988; Shane, 1994), and international hybrid organizational forms (Oxley, 1999). Research has also shown the importance of understanding various aspects of FDI decisions, finding relationships between those aspects and

overall performance of the MNC (Brouthers, 1995; Chen & Chen, 1998; Johanson & Vahlne, 1977; Kogut & Singh, 1988; Shane, 1994; Shaver, 1998). Country risk and related environmental cost concerns do surface, though, in discussions about the liability of foreignness that faces the MNC.

The Liability of Foreignness Problem. Environmental uncertainty and country risk differences pertain to the larger issue of liability of foreignness. As environments and their governmental institutions vary, so do the nature of the uncertainty and the degree of risk associated with operating in a particular foreign environment. Obtaining information will not resolve completely the uncertainty problem for a MNC. While the MNC can evaluate transaction elements, including frequency, asset specificity and even internal uncertainty, external uncertainty is more difficult to assess when the firm is not a native.

Uncertainty plagues the foreign firm as an ongoing liability with attendant extra costs (Johanson & Vahlne, 1977). According to Johanson and Vahlne (1977), to operate successfully in the host country, the foreign firm must continually work to overcome its lack of complete knowledge of the foreign market. Johanson and Vahlne (1977) argued that, consequently, FDI internalization is a gradual process with decisions that all suffer from this lack of knowledge. So handicapped, it is more difficult for the MNC to accurately assess whether external environmental conditions present opportunities or risks (Johanson & Vahlne, 1977) (see also Zaheer &

Mosakowski, 1997).[28] Thus, performing a transaction cost analysis is more difficult for the foreign firm.

This liability of foreignness pertains to all additional costs for the foreign entrant that result from the foreign status of the firm, operating in a distant location (Zaheer & Mosakowski, 1997: 445; Hymer, 1960; Kindleberger, 1969). "The foreign enterprise must pay dearly for what the native either has acquired at no cost to the firm . . . or can acquire more cheaply" as a result of the native's knowledge of the host country (Caves, 1971:5). Stated in the opposite, the local firm will always have the advantage over the foreign firm (Hennart, 1991: 489).

The extra costs for the foreign subsidiary are difficult to quantify. Certain communication and transportation costs will increase with added distance or difficult geography. National and local governments may, formally or informally, impose additional entry fees and restrictions. Information-gathering costs to assess the opportunities and risks of conducting new ventures in the host country are higher for the foreign player. Local laws and regulations may require the establishment of relationships with local attorneys and consultants. MNCs can anticipate many of these types of costs and many will be finite. The majority of the empirical work on liability of foreignness has focused on these types of more quantifiable sources of foreign liability (see Davidson & McFetridge, 1985).

Yet, most theoretical discussions of liability of foreignness focus on costs that are difficult to anticipate and that may continue for an indeterminable time in an

[28] Their work supports the existence of a liability of foreignness (Zaheer and Mosakowski, 1997).

indeterminable amount (Johanson & Vahlne, 1977). Zaheer and Mosakowski (1997: 444), for example, suggested liability of foreignness is "a function of the social and cultural barriers" encountered by the foreign operation as it integrates into the "'local' information flow." As Casson (1979) has alluded, there is a lack of cultural understanding that underlies the knowledge limitations of the foreign entrant. These more tacit, less identifiable sources of liability of foreignness are harder to define and study. Generally, scholars recommend firms enter countries culturally similar to their home country, as measured by concepts such as psychic distance or institutional distance (Johanson & Vahlne, 1977; Kostova & Zaheer, 1999; Zaheer & Mosakowski, 1997). However, as firms become increasingly global and establish operations in more countries, the usefulness of such recommendations diminishes and the need for better understanding increases.

Unfortunately, little published research explores, identifies and dissects the costs associated with the more opaque elements and determinants of the liability of foreignness (Mezias, 2002; Zaheer & Mosakowski, 1997). Zaheer and Mosakowski (1997: 439), for example, referred to the liability of foreignness as "an assumption that has been largely unquestioned among researchers working on theories of the multinational enterprise." Work evaluating its impact on performance has tended to focus on the entire firm or on different foreign firms operating in one country and has not distinguished between subsidiaries of one or more firms operating in different countries (Zaheer & Mosakowski, 1997: 441-442). Even studies substantiating the

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Yet, they found the costs related to this liability diminish over time.

existence of a liability of foreignness have limited analysis to firms operating in one or two different countries (Buckley & Enderwick, 1984; Mezias, 2002; Zaheer, 1995).[29] A contribution of this chapter is to focus on FDI behavior of U.S. firms across many countries so as to understand better the problem of liability of foreignness.

Factoring in the Potential Benefits/Compensating Advantages of FDI. As the first to consider the problem of the subsidiary's foreign status, Hymer (1960) and Kindleberger (1969) argued that a foreign firm must posses some "compensating advantage" to overcome the "costs of foreignness." Caves (1971: 5) explained that to invest abroad a firm must consider the alternatives and anticipate some specific competitive advantage associated with a particular asset that it could effectively operationalize through production in a particular foreign location. Internal or external elements must present an opportunity for the firm that overrides the likely additional costs – both expected and uncertain.

Dunning (1979) similarly explained FDI is determined by "*net* competitive advantages" offered by the foreign market – comparing additional costs with potential rents. Dunning's eclectic paradigm theory held a firm would identify potential advantages. He explained many would arise from imperfections in various markets and would relate to ownership, location and internalization (Dunning, 1979; see also Ethier & Horn, 1990: 26). Firm-specific intangibles may allow the

[29] Buckley and Enderwick (1984) focused on worker strikes at foreign-owned firms operating in Britain. Mezias (2002) evaluated labor lawsuits pursued to judgment in the U.S. – foreign subsidiaries

organization to overcome the additional costs of doing business in a foreign location (Morck & Yeung, 1991; see also Caves, 1974). In addition, market conditions – growth, size, industry make-up – in a particular country may evidence the existence of a compensating opportunity (see generally, Billington, 1999).

The Elements of a FDI Decision.

Thus, the FDI decision under a transaction cost microscope occurs at the intersection of the firm, the transaction and the market in which the transaction might take place. As Shaver (1998) clarified, FDI decisions are "endogenous and self-selected." Idiosyncratic firm attributes, considered in combination with industry conditions, direct the strategic decisions of firms. While Shaver's (1998) work specifically pertained to entry mode selection between greenfield and acquisition, the self-selection issue also exists when firms choose between countries for foreign investment. Firms may favor entry into one country over another due to various firm-specific attributes – from prior experience with a host country market to relationships with customers who have operations in particular countries. Accordingly, any research on FDI, including this work, suffers from the limitation that such decisions likely have a significant endogenous aspect. Furthermore, as explained by Williamson (1981), the nature of the transaction is controlling. Therefore, complete understanding of FDI is only possible when research accounts for endogenous elements related to the firm and the transaction.

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versus domestic firms. Zaheer (1995) paired subsidiaries in the U. S. and Japan, and found that foreign sub-units were less profitable.

With respect to market and industry conditions, much of the work described above clarifies the involvement of two significant elements – location-related advantages and location-related risks. Again, firm- and transaction-specific issues will influence the evaluation of locational advantages and risks. Notwithstanding this limitation, measurable aspects of market variance can be dominant drivers of FDI decisions – with market opportunities attracting FDI and market risks deterring FDI. In particular, market size and growth reflect the degree of market opportunity or potential. For the foreign firm, country-risk measures arguably capture a substantial amount of market risk faced by all firms and by foreign firms in particular.

Transaction cost economics theory supports the use of country-risk measures to quantify the concept of market risk or, for the foreign firm, liability of foreignness in the new market (see Williamson, 1991). Country risk pertains to societally-driven differences in contract enforcement and property rights protections (see Oxley, 1999). Firms are incapable of having complete contracts because bounded rationality prevents every contingency from being addressed (Oxley, 1999; Williamson, 1981: 553). Therefore, as clarified by Williamson (1991: 271-276), a country's legal rules, and the application of those rules, control contracting matters. These institutional features of a country should "reduce both transaction and information costs through reducing uncertainty and establishing a stable structure that facilitates interactions" (Hoskisson, Eden, Lau & Wright, 2000).

As Kostova and Zaheer (1999) explained, cultural differences influence both formal and informal aspects of market practices and procedures. Formalized

governance structures, laws and processes and informal contracting and transactional norms, in turn, then affect firm transactions. Furthermore, the less stable the institutional elements, the higher the potential transaction costs in the environment (Williamson, 1991). In a country where executive discretion has greater influence than its laws in defining property rights, contract enforcement will be more uncertain and thus transaction costs will be higher (Hoskisson et al, 2000: 254; La Porta et al., 1997). If a judge's decision can be "bought" or a license obtained more quickly with a side payment, the reliability of the system intended to enforce contracts is questionable. These institutional conditions reflect the stability of the country's legal and political structure (Williamson, 1991). The regulatory domain of the institutional environment (Kostova & Zaheer, 1999) is weakened; the foreign firm will face increased contracting risks (Buckley & Casson, 1998). Accordingly, country-risk measures often include assessments of cultural differences reflected in behavior such as corruption, together with assessments of government stability and the quality of the country's central institutions.

Country-risk measures also often include indicators of a country's economic and financial status. Researchers have found a relationship between institutional, environmental differences such as the level of corruption and economic growth reflected by FDI and private investment compared to GDP (Brunetti, Kisunko & Weder, 1997; Keefer & Knack, 1997; Mauro, 1998: 12, 1995; Shleifer & Vishny, 1993: 611). The conclusion drawn is that corruption reduces the incentive to invest in

a particular country[30] (See also Diersen, 1999; Salbu, 1999: 55; Hines, 1995). Maskus (1998) summarized that studies have shown "a country hoping to attract FDI requires, among other factors, political and economic stability, adequate infrastructure, a strong educational system, a skilled labor force, and a large market or proximity to markets" (citing Wheeler & Mody, 1992; Grubert & Mutti, 1991; Brainard, 1993; Markusen, 1995).

Thus, foreign investment decision-makers need comparative country-risk information to select countries and determine entry methods (see Agarwal & Ramaswami, 1992; Henisz, 2000b; Kim & Hwang, 1992; Shan, 1991). In his empirical study, Kobrin found that 55 percent of the firm respondents to his survey had headquarters staff that reviewed political conditions related to potential investments (1982: 75). Yavas (1989), assessing the state of country-risk analysis, mentioned that several firms across a number of industries had in-house country-risk analysts and commented that other firms relied on the services of a number of consulting companies specializing in country-risk.

Not surprisingly, country risk has also received a significant amount of attention in recent research – both generally and in terms of its relationship with FDI and country economic conditions. Eventually, some studies began to find indications of a relationship between different country risk measures and firm FDI behavior (see generally, Hines, 1995; Mauro, 1995; Salbu, 1999: 55; Wei, 2000a, 2000c). Conclusions drawn from these studies are that higher risk suppresses FDI. However,

[30] Corruption also is associated with lower governmental spending on education and health (Mauro,

such studies have given little attention to the attractors of FDI; elements such as market size or growth have simply been controls. Thus, the conclusions concerning the relationship between country risk and FDI are potentially one-sided – lacking is evaluation of the complete formula to account for the relationships between and among FDI and *both* market opportunity and market risk.

THE HYPOTHESES

Assessment of the relationship between country risk and FDI within the complete equation should consider both FDI theoretical development and practical support. A transaction cost approach explains the FDI decision as a function of the attributes of the firm, the nature of the transaction and the opportunities and risks inherent in the market, together with the interaction between these elements. At a macro level of analysis across firms and industries, the level of FDI and the nature and degree of both opportunities and risks in each country are central variables. Information on FDI across countries has long been gathered and compared. Similarly, various organizations have acknowledged the importance of quantitative, market opportunity information -- gathering it and making it freely available. Information concerning differences in market size such as GNP and market growth should be relevant to all MNCs evaluating potential foreign investment.

Country-risk information has a different history and character. First, environmental risk is difficult to quantify and measure and risk variance received little significant attention from firms until events such as the Iran crisis brought it to

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1998: 12) that may reduce the quality of the work force in a particular country.

the forefront (Sassi & Dil, 1983).[31] Furthermore, even after the Iran crisis, firms considered country-risk from idiosyncratic perspectives (see generally Anonymous, 1993; Field, 1980; Henderson & Cecil, 1996; Lowenstein, 1992; Meldrum, 1998: Miklos, 1983; Painter, 1999; Pietrabissa, 1987). Post-Iran-crisis, research efforts first sought to define and measure country risk. Later, scholars explored the relationship between risk and firm FDI behavior. However, the central focus of such research became the relationship between FDI and risk. Market opportunity measures such as gross national product (GNP) or gross domestic product (GDP) growth moved to the role of controls (see Hines, 1995; Mauro, 1995; Wei, 2000a, 2000c). Researchers reported findings that coefficients of the controls were highly significant with little comment.

Risk as a Predictor of FDI.

From a theoretical perspective, existing work supports a conclusion that country risk suppresses FDI (see Hines, 1995; Mauro, 1995; Salbu, 1999: 55; Wei, 2000a, 2000c). However, the assessment of risk is complex and idiosyncratic by firm. Arguably, country-risk measures provide some information, but market risk must be analyzed from the perspective of the specific foreign firm. Endogenous elements will influence how foreign firms perceive and consider risk. Accordingly, the ability to predict a consistent relationship between country-risk measures in

[31] In addition to this claim that the Iran crisis focused many firms on the issue of country risk, the enactment of the Foreign Corrupt Practices Act (FCPA) in 1977 likely also played a part. By implication, Hines' (1995) work studying the impact of the FCPA on U.S. foreign business activities implicitly supports an argument that the FCPA forced U.S. firms to consider country levels of the risk-related element of corruption in their FDI decisions.

general and FDI seems unlikely. Furthermore, consideration of how firms evaluate country risk evidences the lack of a relationship between any specific ratings and firm behavior.

Practical information supports the idiosyncratic approach of firms to FDI decisions. Various researchers found that traditionally, firms evaluated political risk through internal information-gathering, relying on the opinions of employees about the non-economic environmental elements in different countries (Boyacigiller, 1990; Kobrin, Basek, Blank & La Palombara, 1980). In 1987, for example, Pietrabissa noted management of certain banks thought "a mixture of structure analyses and personal judgment" would lead to decisions that are more complete. For the most part, internal information has been considered more valuable than external (Anonymous, 1993). Kobrin et al. (1980) raised the concern that such internal risk assessments can be highly subjective, ethnocentric or biased, as the result of being somewhat ad hoc or originating from the bottom up. While in subsequent research Yavas (1989) noted a growing reliance on outside sources of country-risk information, the involvement of internal subjectivity remained dominant.

As the process of analyzing country risk has become more common, it has not become more systematic (Lowenstein, 1992; see also Turner, 1992). For example, Lowenstein (1992) found at J.P. Morgan annual country-risk analysis culminated with a brainstorming session involving up to 40 people. There is limited available information concerning the use by firms of country risk information. Yet, available sources reflect that firms evaluate countries using methods that range from highly

complex econometric models to purely qualitative, judgmentally-based approaches (Field, 1980; see Miklos, 1983). Painter (1999: 52) reported risk information sources for Mobil Corporation include "outside consulting firms, [and] extensive use of internet and personal contacts" developed through internal and external networking.[32] Painter explained there are "scores of people throughout the company who may not be trained as economists, but their jobs incorporate economic analysis" (1999: 52). These employees were both sources and consumers of risk information. Meldrum (1998: 23) described the approach of Air Products & Chemicals to country-risk analysis as "based loosely on traditional country risk analysis" with "some fuzzy-logic," added to incorporate a longer term perspective.

Finally, Henderson and Cecil (1996: 48) suggested the FDI decisions of many firms are ill-founded, based on "limited or misguided research." They noted various reasons for such ill-founded decisions – from lack of resources and ignorance to a reaction to actions by customers or competitors. Finally, they concluded (1996: 48-49):

> The most common shortcoming is an over-reliance on subjective rather than objective research – that is, general country reports and risk ratings produced by public intelligence sources and banks. . . . . Many companies [also] mistakenly assume that intelligence – obtained from banks, lawyers or their own executives – is both comprehensive and factual.

Thus, a theoretical analysis and a review of the practical applications of country risk information undermine the likelihood of a clear and significant relationship between country-risk measures and FDI decisions. The firm's risk

[32] In particular, Painter mentions the use of "political risk services combined with internal analysis"

analysis will have significant endogenous elements and the use of external risk-related information is haphazard at best. Notwithstanding others' claims to the contrary, this analysis suggests country-risk ratings are not significant predictors of FDI. A preliminary conclusion, therefore, is that country-risk measures are not significantly associated with FDI by U.S. firms.

Explaining the Contradiction and Focusing on Market Opportunity.

The conclusion that country risk variation does not explain FDI differs from the interpretations of empirics in prior research (see generally, Diersen, 1999; Hines, 1995; Mauro, 1995; Salbu, 1999: 55; Wei, 2000a, 2000c). However, further consideration of transaction cost economics theory and of related empirical findings suggests an explanation. Given the heightened complexity of the assessment of market risk by the foreign firm, the central focus of the FDI analysis logically may shift to measures of market opportunity. As noted above, FDI is the consequence of the perceived "net competitive advantages" in a particular country (Dunning, 1979). The opportunities and risks in the market are a function of the market size, market growth and industry structure, together with various issues relevant to the specific firm or transaction. Arguably, the lucrative market will more likely draw investment than the struggling market, regardless of the level of risk. Theoretical considerations support a prediction that measures of market opportunity, such as size and growth, will be more significant predictors of FDI than measures of country risk (see generally, Billington, 1999).

(1999: 54).

Noted, but dismissed by some researchers, findings of correlation between economic indicators such as GNI (gross national income) and both FDI and risk ratings provide an empirical explanation for the seeming contradiction between the central argument of this chapter and prior analysis (see among others, Chong & Calderon, 2000; Erb et al., 1996;[33] Erlich & Lui, 1999; Husted, 1999; Mauro, 1998; Murphy et al., 1993). Other than incorporating a control variable for economic level, researchers seeking to understand the relationship between FDI and country-risk have done little to explain the influence of market opportunity, as reflected in such measures as GNP (gross national product) or GNI, on their findings (see, e.g., Hines, 1995; Husted, 1999; Mauro, 1995; Wei, 2000a, 2000c).

For example, Hines' (1995) study included GDP as a control variable. He evaluated the behavior of U.S. firms after the enactment of the Foreign Corrupt Practices Act and found FDI dropped significantly in more bribe-prone, corrupt countries. Hines further commented that business in corrupt countries "fell by amounts that are associated with 30% reductions in local GDP" (1995: 2). Limiting these findings is the acknowledgement that GDP growth is a control element with a significant coefficient (1995: 10). Using a somewhat different approach, Mauro (1995) divided the level of FDI by GDP to create the dependent variable. He found a significant "negative association between corruption and investment, as well as [GDP] growth" (1995: 705).

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[33] With a primarily finance-oriented focus to the issue of country risk, Erb et al. (1996) found high correlations between each of the Moody's Investor Services rating and the Standard and Poor's

In a number of articles, Wei has also focused on the relationship between corruption and FDI (see, among others, 2000a, 2000b, 2000c). For example, Wei has compared country risk and tax rates in terms of their influence on FDI (2000a; see also 2000c). The log of GDP was a control variable in those studies and was significant in almost all of the many regressions reported. In another study, Wei (2000b), instead, used corruption as the dependent variable, arguing that the openness of a country would predict the level of corruption. GDP was a control variable. Its inclusion dramatically increased the overall significance of the regression, substantially decreasing the influence of the "openness" variable on corruption.

What is unclear from existing empirical work is a comprehensive explanation for the relationship between market opportunity measures such as (i) GDP (size) and market growth, (ii) country-risk and (iii) FDI. In particular, lacking is an understanding of the influence of country-risk-related measures on FDI after eliminating the influence of GDP. GDP's high correlation with both FDI and country risk puts it on both sides of the complete equation. Theory and empirics suggest market opportunity measures are more reliable predictors of FDI than country-risk ratings and drive the relationship that appears to be between country risk and FDI. Therefore, this analysis suggests two hypotheses merit testing. Both hypotheses fall under a broad proposition that market opportunity elements such as size and growth rate receive the greater weight in the FDI equation and both are critical determinants

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country ratings and the rankings by Institutional Investors and the International Country Risk Guide

of the level of country risk. Then, the first specific hypothesis considers the effect on the risk/FDI relationship of the removal of the influence of market opportunity in the form of market size (national income) from the country-risk measure. The second specific hypothesis tests the complete FDI equation, but focuses on market opportunity and controls for country risk. The expectation developed through the foregoing analysis is that country-risk is not the driving predictor of FDI; market opportunity is. In particular, market size and market growth should dominate the FDI decision, as better predictors of FDI than any country-risk measure.

H2-1: Market size and market growth are significant determinants of both country risk and FDI by U.S. firms, while country-risk measures provide little or no explanatory value.

H2-1a: Risk measures, after removal of the influence of market size, provide no unique information value for explaining FDI.

H2-1b: Controlling for risk adjusted to remove the influence of market size, wealthier markets with higher growth have higher levels of FDI.

THE DATA AND THE RESULTS

The Data.

The hypothesis tests involve three types of focal data. Country-risk rating data in nine different risk indices developed by six different rating services provide information for the central independent variable. The labels of the ratings suggest

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ratings (political, financial, economic and composite ratings).

foci that vary from corruption to creditworthiness. Specifically, the selected rating services include the International Country Risk Guide (ICRG) that provides four separate indices for the initial analysis – its three primary indices covering political, economic and financial risk, and corruption, an element of political risk. Freedom House's Freedom in the World index is the fifth subject index. Transparency International's (TI) Corruption Perceptions Index is the sixth index. The seventh index is Heritage Foundation's Index of Economic Freedom affiliated with The Wall Street Journal. The final two indices are both published at least annually in periodicals. *Euromoney's* Country Risk Ratings and *The Institutional Investor's* Country Credit Ratings round out the list of nine indices for analysis.

The data analysis involving the nine measures proceeded first with their standardization to remove variance due to the range of scales employed.[34] Index scales varied from a 5-point range for the Heritage index to a 100-point range for the ICRG political risk index. Indices with smaller ranges, including Heritage, the ICRG corruption index (0-6), TI (0-10) and Freedom House (2-14),[35] reflected less change from year to year and, arguably, less robustness with limited distinctions between rating levels.[36] As appropriate, reversing the orientation of some of the indices provoked consistency and caused higher numbers to indicate greater risk in each case.

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[34] Testing using the original ratings was consistent with the results using standardized numbers.
[35] The Freedom House scale is the result of adding the two (1-7) point scales for the two component elements of the index – political rights and civil liberties.
[36] As a final note, economic risk and political risk both use a 50-point scale.

Prior analysis of the nine indices in the first chapter of this dissertation revealed high correlation between ratings and confirmed that the indices load as a single factor, jointly explaining a greater degree of variance than any one index alone. Thus, all tests were performed considering the nine different indices separately and in the form of a single risk factor created from all nine. The country-risk rating information was from the year 1999 and, for each of the ten measures, covered a minimum of 88 countries.

Foreign direct investment (FDI) by U.S. firms is the dependent variable in each test. Specifically, total assets of U.S. majority-owned, non-bank foreign affiliates by country in 1999 gathered by the Bureau of Economic Analysis with the Economics and Statistics Administration of the U.S. Department of Commerce provides the FDI measure. I adjusted FDI data by population to achieve a per capita amount and took the log of this number. Population data for the year 1999 and population growth data (over the time period 1995 – 2000) are from the United Nations' InfoNation data 2002 publication. The final data pertaining to market opportunity are gross national income (GNI) (formerly known as gross national product) per capita. I took the log of GNI per capita for 1999 obtained from the 2001 World Bank Atlas.

The Influence of Risk on FDI.

The initial analysis involved the comparison of the central elements – the country risk ratings and the single risk factor, the log of FDI per capita and the log of GNI per capita. Table 1 contains descriptive statistics and includes the critical

information of the correlation of the various country-risk measures, the single risk factor and FDI data with the log of GNI per capita.

Insert Table 2-1 about here

As anticipated, given prior empirics, analysis showed very high correlations between each of the risk measures – the nine separate risk ratings and the single risk factor – and the log of GNI per capita. Specifically, those correlations range from –0.59 to –0.91. In addition, log of FDI per capita correlates with the log of GNI per capita at the level of 0.35. As a result, the preliminary conclusion underlying H2-1a has support. The test of this hypothesis compared a regression on FDI[37] using both risk and GNI[38] as independent variables with a regression of only risk, after removal of the influence of GNI on risk, on FDI. Table 2-2 contains regression information for the first regression with each of the various risk measures and GNI as independent variables. This first regression using the original, standardized risk measures reflects a significant coefficient for three of the nine separate ratings and for the single risk factor. Thus, the analysis reflects mixed results using the original ratings that are highly correlated with GNI.[39]

Insert Table 2-2 about here

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[37] References to FDI as data in this study are to the log of FDI per capita.
[38] References to GNI from here forward indicate the log of GNI per capita.
[39] This regression and all subsequent regressions in this study evaluated country information from a finite, sample data set of countries. Finite sample corrections to recalculate standard errors and p values used the estimate of the United Nations of 228 total countries and regions (www.un.org).

The removal of the influence of GNI on the country-risk ratings to achieve the distinct information value of risk measures involved a simultaneous equation approach:

$$\text{Risk} = \alpha + \beta\,(\text{GNI}) \quad \text{and} \quad \text{Information} = \text{Risk} - \alpha - \beta\,(\text{GNI})$$

Descriptive information for the adjusted risk ratings (information value) is contained in Table 2-3 and shows the 0 correlations between the ratings and GNI.

Insert Table 2-3 about here

After removal of the influence of GNI, the correlation between the information value of each risk measure and FDI dropped significantly. Not surprisingly, while a regression of the original ratings on FDI alone was highly significant, the linear regression of each adjusted rating (after removal of the influence of GNI) on FDI is not significant.[40] Though, the coefficients for four of the measures are significant, none of the regressions are significant. The regressions all evidence high p values and R-square values of 0.00 to 0.02 show the lack of explanatory value of the adjusted risk information. Table 2-4 contains information reflecting the changes in the correlation and the changes in the regression results for each of the risk ratings – original and adjusted to remove GNI – on FDI.[41]

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[40] The regressions were also run using the Robust MM method, but the results showed the Robust method was biased and supported reliance on linear regression.

[41] Appendix 2-A contains Table 2-A wherein the determinants of risk ratings are explored. The results reflect that GNI is the primary driving factor and is a constant predictor of country-risk ratings. However, population and inflation play a part in various ratings as well. The U.S. Commercial Service, Country Commercial Guide 2002 provided the inflation data.

Insert Table 2-4 about here

Growth and GNI.

The analysis of H2-1b considered the complete FDI equation. Table 2-5 reflects the results of the regression testing the relationship between FDI as the dependent variable, with independent variables of GNI, population growth and adjusted risk – the nine measures and the single risk factor. Testing revealed a robust regression was less biased than a linear regression in this instance. GNI and population are both highly significant at the 99% level. Interestingly, in this set of regressions 6 of the 10 adjusted risk measures are significant at the 90% level or higher. Table 2-6 reflects the correlations between these same variables in the FDI equation. The strongest relationship remains between FDI and GNI at a correlation of .84. In addition, population growth is correlated with FDI at -.24 and, perhaps more significantly with GNI at -.51. GNI thus has the dominating influence on FDI, with market growth a second significant element. The data support H2-1b. As a final point, while the adjusted risk measures have some influence in this final regression, the results of the simple regression reflected in Table 2-4 undermine any strong conclusions that the adjusted risk measures provide valuable information.

Insert Tables 2-5 and 2-6 about here

CONCLUSIONS AND IMPLICATIONS

Country risk is a phenomenon with which foreign firms must struggle to gain understanding. Although country-risk information has recently become more widely available, firms apply various idiosyncratic approaches to country-risk analysis, and endogenous considerations may trump external information. This study contributes to our understanding of FDI by U.S. firms and the influence of country risk by combining theoretical development, analysis of prior empirical work and evidence of the actual involvement of country-risk information in FDI decisions. Theory explains that both market opportunity and market risk are factors in the FDI decision. Theory, coupled with anecdotal evidence, predicts that country-risk measures may not be reliable predictors of FDI. Data analysis explains the inadequacy of prior work that focused primarily on the risk-FDI relationship, and reveals that market size (GNI) drives risk and is the dominant determinant of FDI. Thus, this work clarifies the true involvement of country-risk information in the *complete* FDI decision.

The explanation for the seeming contradiction between these findings and the conclusions of prior work shifts the focus from market risks to potential market opportunities. Data support the prediction that market opportunity is the main driver of FDI. Market size and market growth are significant predictors of FDI not risk. The strength of the relationship between GNI and both risk and FDI enabled findings in prior studies that supported ill-founded conclusions of a connection between the latter two variables. While arguably destroying perceptions of a relationship between country risk and FDI, this study opens new avenues for research focusing on market

opportunity measures and FDI. Further research could test whether the influence of characteristics such as national income varies when foreign entrant groups from other countries are considered.

The findings suggest other avenues of research. For example, as reflected in Table 2-A in Appendix 2-A, GNI may not be the only determinant of the level of country risk. In addition, this work and prior research efforts have not clarified the direction of the causal relationship, if any, between risk and GNI. De Mello (1997) explained that the same problem exists concerning the causal relationship between FDI and economic growth. Future research should consider whether changes in country risk provoke changes in GNI or vice versa. A better understanding of this relationship will also help lead to better understanding of the relationship between each such element and FDI. The final test results, reflected in Tables 2-5 and 2-6, raise two other issues for investigation. First, the anomalous findings that the coefficients for some, but not all, of the adjusted risk measures are significant bears further investigation in light of the other findings that the measures provide little or no explanatory value concerning FDI. In addition, population growth has a positive and significant coefficient in the complete FDI equation. Yet, it is negatively correlated with GNI and FDI at -.51 and -.24, respectively. As with risk, GNI may dominate any relationship found between population growth and FDI. Future researcher should explore this possibility.

Finally, the analysis contains suggestions for additional work on the subject of country risk. Perhaps risk information less directly affects FDI decisions of U.S.

firms due to the availability of political risk insurance for U.S. firm investments in many countries.[42] Alternatively, the self-selection nature of FDI may promote the selection of some countries based on characteristics more endogenous to particular firms; while firms invest in other countries relying more on such outside risk information. Future research should explore the idiosyncratic elements considered by firms in their individual risk analyses versus the situations in which firms rely more on outside information.

This research would not be complete without the acknowledgement of prior supporting work. There was an apparent split in country risk work involving U.S. firms – pre and post enactment of the Foreign Corrupt Practices Act (FCPA). The influence of the FCPA on U.S. MNCs is unchallenged (see Hines, 1995). In addition, around the same time, world events such as the Iran crisis educated firms and investors on the importance of environmental risk differences (Sassi & Dil, 1983). These two events dramatically changed the field of country risk analysis. Thus, contemporary research on the relationship between country risk and FDI does not generally mention related research that predates these events. Some of this older research agrees with the findings herein and contradicts recent conclusions concerning country risk and FDI. For example, in 1972, Bennett and Green concluded that political instability was a primary consideration for FDI only in certain contexts. In their literature review, they also mentioned the existence of contradictory views on whether political instability is an influential element in FDI

[42] One such source of political risk insurance for U.S. firms investing in emerging markets is through

decisions. Also relying on data that predated the FCPA, Kobrin (1975: 29) similarly found "no relationship [could] be established between FDI and variables based upon political event data." Therefore, the findings of this current study suggest reconsideration of some of these older FDI studies.

Transaction cost economics considers the origin of firms as explained through a cost analysis – selecting the hierarchy as a more efficient approach than using the pricing mechanisms in the market (Coase, 1937). Relying on various risk ratings, prior empirical findings support the contention that country risk influences FDI. However, researchers have not fully considered all the elements of the FDI equation. First, the realities of self-selection and the impact of firm and transactional issues limit all research on international expansion decisions. Second, the complete equation must account for both market risks and market opportunities. Presumably because market opportunities are readily apparent, and given the more recent development of interest in market risks, the focus of contemporary FDI/risk research has been somewhat skewed. This study acknowledges the limitations and considers both of the central macro issues likely to influence FDI – market opportunity and market risk. In the final analysis, this study questions our knowledge and assumptions concerning how firms respond to country-risk information and the influence it has on FDI. In so doing, the chapter raises questions that reach to the heart of transaction cost economics and suggests that firms may focus primarily on

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the Overseas Private Investment Corporation (see http://www.opic.gov/).

the promise of rents and much less on the risk of increased cost when considering expansion opportunities in the global market.

CHAPTER 3

EMERGING MARKETS AND FDI: HOW THE PROPERTIES OF EMERGING MARKETS AFFECT FDI

INTRODUCTION

The international community has witnessed tremendous political and economic transformation resulting in the emergence of new markets and investment opportunities. As a result of market liberalization and new privatization policies, emerging economic regions have begun playing a critical role in the global economy (Isobe, Makino & Montgomery, 2000: 468). A growing body of work focuses specifically on emerging markets. The phenomenon of emerging markets provides a new, rich research context. Emerging market opportunities differ due to rapid growth and the long-term perspective of many investors (McIlwaine, 1993). Emerging market risks are also higher (Hoskisson et al., 2000). Yet, such risks are tempered by governmentally-supported programs and host country investment incentives (see, e.g., De Mello, 1997; Fry, 1983). These distinctions raise compelling questions regarding international management decisions. First and foremost is the effect of emerging market characteristics on foreign direct investment (FDI). The central contribution of this chapter is clarification of differences in the determinants of FDI in emerging versus other, often developed countries.

Loree and Guisinger (1995) note that "developed countries liberalized their policies on inward investment well before developing countries." Investment in developed countries was commonplace. Now the international investment arena has

grown more complex, as emerging countries, at different times, have joined in the competition for international funds. Research, however, has failed to keep step with the changing global environment. In studies of emerging countries, researchers use theories originally applied to developed countries (Hoskisson et al., 2000), with little attention to reconsideration of theory in the markedly different context of emerging markets. The time is ripe to explore the unique management considerations related to these new investment arenas.

FDI decisions are complex (see Jalilian, 1996). Market considerations such as risk, size and growth are relevant along with firm and transactional characteristics (Billington, 1999; Dunning, 1979; Ethier & Horn, 1990; Morck & Yeung, 1991). Transaction cost economics and prior FDI work support a finding for all countries that market opportunity less market risk is the central equation underlying FDI decisions. In developed countries, the expectation is that profits will closely align with the opportunity minus the risk calculation for each firm. Investing in developed countries with higher risk should not merit higher rewards. But in emerging markets, financial markets are growing more rapidly. Firms may perceive as minimal the expected costs of weak institutionalization in light of expected returns, investment incentives and available risk insurance. Further, those firms that invest in emerging markets may have different motivations and different profit thresholds than those firms that invest in developing countries. As between developed and emerging countries, investment may be higher in the less risky, developed countries. Yet, within the emerging market segment, risk may have a very different impact on FDI.

Thus, this chapter tests and challenges prevailing views concerning the relationship between risk and FDI by considering whether the relationship differs in emerging country markets.

The first part of the chapter is a literature review addressing the unique features of emerging markets. The second section develops two hypotheses exploring the effect of the emerging market distinction on FDI decisions. The third section of the chapter presents the results of hypothesis tests. The fourth section discusses the ramifications of the findings of this study and suggests future avenues of research.

LITERATURE REVIEW

Emerging Market Distinctions.

From the fall of the Berlin wall to NAFTA, recent market liberalization in many regions of the world has enabled less developed countries[43] to compete more effectively for international trade. International organizations reclassified those countries as "developing" and/or "emerging."[44] The emerging/developing distinction found its way into government-affiliated groups and academic research. Certain government-sponsored organizations encourage investment in emerging markets. Correspondingly, scholars seek to understand the unique investment situations presented by the phenomenon of emerging markets and the effect of the status of a country as emerging on traditional concepts of FDI. Consequently, emerging market

[43] Prior to the use of the terms developing and emerging, Kobrin (1975), for example, distinguished between developed and less developed countries (see also Bennett and Green, 1972).
[44] The remainder of this chapter uses the terms emerging and developing interchangeably.

countries are the beneficiaries of preferential treatment by government organizations and increased attention by academics.

The IFC and OPIC. Examples of increased government involvement in emerging-market investment by U. S. firms include programs through the International Finance Corporation (IFC) and Overseas Private Investment Corporation (OPIC).[45] The IFC, established in 1956, is a member of the World Bank Group. It shares the primary objective of all World Bank Group institutions: to improve the quality of the lives of people in its developing member countries. The IFC provides financing for private sector projects, assists developing country firms to find financing in the international market and provides advice and technical support to such businesses and their governments. The IFC currently has 175 member countries that collectively determine its policies and approve its investments.[46]

OPIC began operating in 1971 with a similar mission expressed in its objective: "to promote and facilitate U.S. investment in emerging economies by helping businesses manage risk."[47] One of OPIC's specific service offerings is political risk insurance. OPIC insures U.S. businesses against losses due to currency inconvertibility, expropriation and political violence. Through the insurance and loan programs, OPIC has facilitated projects generating over $10 billion in host-government revenues, also creating nearly 668,000 host-country jobs.[48] Summary and Summary (1995) claim there are direct and indirect links between OPIC support

[45] The IFC has political support and the OPIC is a government-sponsored organization.
[46] See http://www.ifc.org/about/basicfacts/basicfacts.html.
[47] See http://www.opic.gov/.

and U. S. government policy. For example, they note that OPIC's case-by-case approach to applications for insurance allows the governmentally-sponsored organization to encourage or discourage FDI in certain countries. OPIC claims similar governmentally-sponsored efforts to promote emerging market investment exist in other developed countries. Many developing country governments have also instituted investment incentive programs to encourage further FDI (see Fry, 1983).

Academic Interest. In addition to the governmentally-sponsored attention, various scholars have focused on one or more emerging markets. In 2000, the *Academy of Management Journal* devoted an issue to emerging countries.[49] In that issue, Hoskisson et al. (2000) provided an overview of much of the current work involving emerging markets. Research supports the distinction of emerging market status and the need for further research involving such countries (Isobe et al, 2000; Ramcharran, 2000; Schollhammer & Nigh, 1984). Yet, clarity is still lacking in the field concerning the distinction of the emerging market.

Although implicitly acknowledging the importance of research on emerging markets, Hoskisson et al. (2000: 257) explain such research has faced many difficulties. They argue, for example, that "theories promulgated for developed market economies may not be appropriate for emerging economies" (2000: 257). They also note "emerging markets are not a homogenous or clearly identifiable and recognizable group" (2000: 257). The process of "emerging" suggests changes over time. A central problem with country selection is that every "emerging" country had

[48] See http://www.opic.gov/.

a different starting point and is at a different point in the "emerging" process (Hoskisson et al., 2000). In addition, even after removal of government-imposed barriers, entry barriers remain in the form of cultural differences and risk (Brouthers, Brouthers & Nakos, 1998). Ultimately, Hoskisson et al. (2000: 264) call for more comparative studies of different emerging economies. This study responds, at least in part, to this call.

Perceived Profit Opportunities in Emerging Markets.

Market differences can also promote different motives for FDI in emerging markets. It is perceptions of potential profits that drive firms to invest in such countries. De Mello (1997: 2) argued "[f]oreign investors are motivated primarily by international rent-seeking under standard profit-maximizing assumptions." A review of relevant research suggests that across countries there are many endogenous determinants of FDI. Firm and transactional considerations and their anticipated interaction with market characteristics are relevant (see Billington, 1999; Dunning, 1979; Ethier & Horn, 1990; Morck & Yeung, 1991). Of the country-specific determinants, those most commonly tested and found significant are market size, market growth and country risk (Billington, 1999; Diersen, 1999; Hines, 1995; Mauro, 1995; De Mello, 1997 (survey article); Salbu, 1999: 55; Summary & Summary, 1995; Wei, 2000a, 2000c; Weller & Scher, 2001 (evaluating multinational

[49] Vol. 43, issue 3.

bank loan involvement in countries)).[50] In particular, the formula supported by such work is:

FDI = market size + market growth – country risk

Logic supports the view that market size and market growth evidence the degree of profit potential in a given country. Country risk is the measure of the threat of increased costs related to any potential investment. The profit potential should attract investment, while risk should deter investment. Yet, this logical equation does not consider the nuances of the emerging market.

HYPOTHESES

Emerging markets present a unique situation of very high risk and very high growth, influenced by governmental support, insurance programs and host country incentives. Arguably, these unique features skew the investment decision formula (see Burton & Inque, 1987). In their finance research, Erb, Harvey and Viskanta (1995: 74) noted that though traditional factor models "are reasonably successful in characterizing the expected risk/return trade-off in developed markets, [they] fail when applied to the new emerging markets." Paradine (1996: 73) explained that "[e]xtraordinary growth rates are spurring an increasing number of organizations to invest heavily in [] developing economies." In addition, the time horizon differs for emerging market investments. The consensus is that investors in emerging markets should not expect immediate profits, but over the long-term should reap substantial

[50] This work, as with all work seeking to understand better the determinants of FDI, suffers from the limitation of not being able to account for the idiosyncratic characteristics of firms and their transactions that interact with the market elements in the FDI decision.

rewards (McIlwaine, 1993). Thus, emerging country markets present a unique set of opportunities and risks that challenge traditional views regarding FDI.

The Effect of Emerging Market Characteristics on the Determinants of FDI.

FDI decisions are highly idiosyncratic and depend on transaction, firm and environmental elements and the relationships between them (see e.g., Billington, 1999; Dunning, 1979; Ethier & Horn, 1990; Morck & Yeung, 1991). As Henisz (2000b) noted, some firms are more likely to go abroad than others are. His comments agree with Shaver's (1998) conclusions that self-selection considerations dictate firms' FDI decisions. The more experience a firm has with a particular market and the more similar the host country culture to that of the firm's home country, the more likely a firm is to invest in that country (see generally, Kobrin, 1975). Firms also follow resources and stakeholders. Therefore, the attributes of a particular environment as they relate to a particular firm could dramatically affect any FDI decision.

In developed countries, international investment is very common. Thus, stakeholder relationships are more likely to exist across borders of developed countries, and firms are more likely to have some prior experience in such markets. Developed countries are often more culturally similar or, through greater experience with other developed countries, firms have a better understanding of cultural differences in such countries. Thus, many firm-specific circumstances will positively influence investment decisions toward developed countries. However, though investment in a developed country has become "acceptable" or "common-place," the

competitive field is more established and growth opportunities are often more limited.

Market circumstances are not the same in developing countries where foreign investment has not been as common and the competitive field still provides substantial opportunities. Efforts of the IFC, OPIC and similar organizations have attempted to even the FDI playing field to encourage firms to consider both developed and emerging countries as potential investment targets.[51] The programs of the IFC and OPIC compensate for negative risks of the emerging market investment, by aiding in understanding of market differences and insuring against increased risk. Yet, such efforts have not erased the distinction between developed and emerging countries. Investment considerations differ between the two country types (see Erb et al., 1995; Isobe et al., 2000; Schollhammer & Nigh, 1984). Though, complete understanding of the effect of emerging market characteristics on significant matters such as FDI is lacking (see generally, Hoskisson et al., 2000).

Isobe et al. (2000: 480) conclude their research with the suggestion that future studies "examine the determinants and performance of foreign entry strategy into different emerging regions." Work specifically addressing the determinants of FDI has barely accounted for the impact of emerging markets as distinguished from other countries. Schollhammer and Nigh (1984) did find that investment issues for German multinational firms varied depending on whether the host country was a developed or a less developed country. A test of U.S. firms' FDI should find similar differences in

the determinants of FDI when comparing emerging countries to other countries, especially concerning market size, market growth and country risk (see generally Billington, 1999; Hines, 1995; Terpstra & Yu, 1988).

H3-1: The determinants of FDI differ between emerging market countries and other countries.

Evaluating the Increased Risk in Emerging Markets.

FDI research has commonly applied a transaction cost approach to the evaluation of investment decisions (see Anderson & Gatigon, 1986; Buckley & Casson, 1976; Delios & Henisz, 2000; Hennart, 1982). A firm will decide to create a foreign subsidiary when the costs associated with using the available goods and services in a particular market exceed the costs associated with organizing and performing a transaction internally (Coase, 1937). Two aspects of the FDI decision gain significance in the emerging market context. Characteristics of emerging markets make the cost analysis more complex and subject to firm-specific elements. In turn, these distinctions promote increased consideration of the degree of control maintained over the foreign investment.

Researchers claim emerging countries have higher environmental risk, thus raising transaction costs (Hoskisson et al., 2000). Yet, Henisz (2000b) and Shaver (1998) explain that self-selection infects FDI decisions. Some firms will be more inclined than others to enter emerging markets. Firms that have exhausted growth opportunities in most developed countries, firms with greater risk tolerance, firms

[51] Only one study has evaluated the influence of OPIC assistance on FDI. Summary and Summary

seeking wider global coverage, firms following particular resources unique to an emerging market – are examples of firms more likely to consider an emerging country for investment. Such firm-specific circumstances should only enhance the perceived opportunities in a country given a particular market size and market growth rate. Less clear is how firm specific facts interact with and alter the impact of risk in the equation.

Firms may minimize the threats associated with increased risk through increased understanding of the nature of the risks or through insurance and support programs. As Burton and Inque (1987: 1010) commented, for example, "risk varies with knowledge," and as they explained, that data collection and analysis can allow firms to balance risk ratings against the "potential profitability promised by a given location." Their work focused specifically on the risk of expropriation that can cause extreme losses; though, history reflects a very small actual impact on foreign firms (Burton & Inque, 1987).

Furthermore, the IFC and OPIC programs attempt to promote investment in emerging countries by minimizing the effect of the increased country risk. For example, OPIC insurance can compensate for the higher political risk level in most emerging markets. In addition, emerging market countries have begun offering a myriad of investment incentives. A distinction commonly applied to emerging markets is their recent effort to transform from centrally-planned economies into more open market economies with increased investment incentives (see Fry, 1983;

(1995) found no relationship between such assistance and FDI.

Hoskisson et al., 2000; Ramcharran, 2000; Rolfe, Ricks, Pointer & McCarthy, 1993). Fry (1983) noted, for example, that developing countries have offered up to 51 different types of investment incentives to foreign investors (see also Panos & Serletis, 1996; Rolfe et al., 1993). De Mello (1997) described country-specific FDI incentives as subject to distinction as fiscal, financial or non-financial in nature. Such incentives, therefore, will have a different level of appeal to different firms. Yet, overall, prior work found an increase in FDI when local governments provided investment incentives (Cho & Tung, 1998; Contractor, 1984).

Attractive growth rates and the minimization of risk concerns through various programs and investment incentives counter the deterrent effect of higher country risk in emerging markets. Ultimately, as noted by Isobe et al. (2000: 471):

> Given a high growth rate and lack of established competitors in an emerging region, some managers may consider that the strategic risks of *not* investing there may be, at least in the long term, more critical than the financial risks of investing in the region.

Higher risk and higher transaction costs associated with conducting business in a particular emerging market could also alter entry decisions – shifting foreign investment from non-FDI approaches such as exporting, to an FDI approach such as greenfield where contol by the parent is greater (see generally, Ahmed, Mohamad, Tan & Johnson, 2002;[52] Buckley & Casson, 1998; Kwon & Konopa, 1992). As

[52] Ahmed, at al. (2002) found the levels of perceived internal risk and of perceived external risk influenced the entry mode decisions of Malaysian firms. On the issue of control, they have contradictory statements in their conclusions. In addition, there was a very low response rate for the survey instrument used, thus limiting their findings.

Kwon and Konopa (1992: 62) explained, "[t]he level of risk can be moderated by the level of control."

Brouthers et al. (1998), for example, divided risk into investment and contracting risk claiming that both would promote FDI with more ownership involvement, though only the former risk was found to be significant. Total resource commitment by firms in higher risk emerging markets may be lower, but the entry mode selection may prefer forms of entry that qualify as FDI. Ultimately, firms balance control with the potential risk/cost and potential return as they make the investment decision. Investment decisions consider different entry methods as substitutes (Brouthers et al, 1998). Contractor (1984), for example, reached the conclusion that licensing is a substitute of FDI. Each mode of entry has a different level of both investment and control. Increased risk may support increased internalization so as to bring many of the transaction-related tasks under the control of the firm in the form of a subsidiary, discouraging reliance on establishing business relationships with existing foreign companies.

Work by Isobe et al. (2000) supports increased internalization, with evidence of benefits from increased involvement in higher risk environments. They noted "the greater the resource commitment to technology transfer, and the faster the entry" the greater the performance in the emerging market. Market risk can influence external market dealings differently than internal. Arguably, the internalization process reduces the influence of external market risk on those internalized transaction elements. Thus, the decision to select an entry mode that involves internalization

might be more common in higher risk environments. Therefore, risk may affect the proportionate amount of foreign entry reflected in FDI behavior as opposed to export or limited involvement entry methods. This circumstance coupled with programs and incentives that seek to promote investment in emerging countries undermines normal expectations of the relationship between risk and FDI in emerging countries.

The recent focus on emerging markets and their rapid growth potential make them attractive. Firm-specific circumstances coupled with various programs and incentives minimize the projected costs of investing in an emerging market. Furthermore, increased risk may also alter FDI decisions – promoting increased internalization. Thus, increased risk may be less of a direct deterrent and, instead, may encourage increased use of FDI forms of investment. This conclusion contradicts prior logic applied to all countries that increased risk leads to reduced FDI. Emerging markets are different. Insurance, government programs and host country incentives minimize the potential threat from higher risk and those firms seeking the increased opportunities in emerging markets may even react to increased risk by taking a greater ownership stake to take full advantage of the new market possibilities while maximizing control over their operations. The complexity of the relationship between risk and FDI makes prediction difficult. Accordingly, country risk measures will have little correlation to FDI behavior in the unique context of emerging markets.

H3-2: While a significant predictor of FDI in most developed countries, country risk loses its significance in emerging markets.

RESULTS

The Data.

The Question of Emerging Markets. Separation of country data into two categories, emerging and non-emerging, raised the possibility of different approaches to placing countries into categories. Specifically, categorization may rely on lists of emerging countries or may use a regional-based approach to distinguishing emerging from non-emerging countries. Academic work and reports of various international organizations lack consensus on the complete list of emerging/developing markets. For example, Loree and Guisinger (1995) relied on country categorization determinations by the U.S. Department of Commerce and by the Organizational for Economic Cooperation and Development when selecting 26 developing countries for their study. Hoskisson et al. (2000), who selected 64 countries for their emerging country analysis, noted most emerging market studies are limited to one emerging market country, a few countries or a particular emerging market region.[53]

The IFC identifies 151 countries as developing or emerging. Yet, this list only contains "member developing countries." Literature from OPIC is confusing. Although stating that OPIC promotes projects in approximately 140 developing countries, it identifies 116 developing countries by region in one portion of its descriptive materials; elsewhere, OPIC lists 152 developing countries.[54] Finally, the

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[53] Hoskisson et al. selected 51 countries from the IFC list of emerging and developing counties and added to this 13 transitional countries based on classifications by the European Bank for Reconstruction and Development.

[54] http://www.opic.gov/.

1997 CIA World Factbook has 72 countries listed as being emerging markets. Comparison of various lists also evidences disagreement concerning specific countries. Hong Kong, China, Singapore, Israel, Iraq, and Iran, for example, are not always characterized the same. Accordingly, the various emerging market lists provided alternative approaches to the categorization method chosen.

A regional approach may also be used to identify emerging markets. While development of a complete list of emerging or developing countries is complicated, emerging markets clearly dominate in certain regions. Latin America, Africa and Eastern Europe are prime examples. Thus, instead of focusing on particular countries an alternative way to analyze the risks and opportunities of investment in emerging/developing countries is by region (see e.g., Ramcharran, 2000). This approach is consistent with regional and socio-economic country groupings used by various country-risk analyst groups. Transparency International (TI), which developed a corruption perceptions index, commonly groups countries into 12 regions when analyzing corruption data. TI explains the groupings as "defined partly by geography and partly by their political and economic features" with an aim "to group together countries that have a similar profile and that work together in regional institutions".[55] The Business Environment Risk Index divides countries into 4 regional categories.[56] The Country Risks Group and The Economic Intelligence Unit

[55] http://www.globalcorruptionreport.org/about.htm#a1.
[56] http://www.beri.com/region.htm.

each have five regional divisions.[57] Even the Bureau of Economic Analysis presents FDI information with countries arranged in 5 groups.

The approach in this study is not to focus on a few select emerging markets. Instead, with 160 countries, the analysis used a regional approach for grouping and evaluating countries. Consistent with prior approaches as mentioned, the regional groupings reflect geographic and socio-economic considerations. The specific groups created include: (1) English-speaking, common-law countries, (2) Middle Eastern countries, (3) Western European countries, (4) Scandinavian countries, (5) Asian countries, (6) African countries, (7) Central and South American countries and (8) Eastern European and former Soviet Union countries. Appendix A contains a complete list of the countries in each group. For U.S. firms in particular, these country groupings arguably are distinguishable. English-speaking, common-law countries are the most culturally similar and have long been trading partners. Strong established relationships also exist between U.S. firms and many firms in Western Europe. These two groups along with Scandinavian countries have had, for the most part, few trading barriers. Many countries in the Asian and Middle Eastern groups are included on emerging market lists due to rapid economic growth. Yet, the degree of cultural distinction between the cultures of such countries and the U.S. is much higher. In addition, there are some significant exceptions within these groups, with very wealthy countries mixed among poor. The final three groups – Africa, Central and South America and Eastern Europe – are highly homogenous internally, with

[57] http://www.crg.com/online/crf/cf_set.htm; http://www.eiu.com/

poor, emerging countries dominating. Those final three groups comprise the emerging market countries in the data set. [58]

Market Measures and Country Risk. The hypothesis tests involve consideration of relevant market information. Foreign direct investment (FDI) by U.S. firms is the dependent variable in each test. Specifically, FDI data reflect total assets of U.S. majority-owned, non-bank foreign affiliates by country in 1999 gathered by the Bureau of Economic Analysis with the Economics and Statistics Administration of the U.S. Department of Commerce. The study proceeded using the log of FDI per capita. As noted above, prior work supports the potential relationship between FDI[59] and three specific types of market information – market size, market growth rate and country risk (see, e.g., Billington, 1999). For market size, the 2001 World Bank Atlas provided GNI data (gross national income, formerly known as gross national product) per capita for 1999. The study used the log of GNI per capita. Market growth data, in the form of population growth (over the time-period 1995 – 2000), are from the United Nations' InfoNation data 2002 publication.[60]

Country-risk data in nine different risk indices developed by six different rating services provide information for the final independent variable. The labels of the ratings suggest foci that vary from corruption to creditworthiness. Specifically,

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[58] Early in the work on this study, three other data sets were tested with results generally similar to those presented herein. These other data sets relied on emerging market lists of the IFC, the CIA and Hoskisson et al. (2000).

[59] All subsequent references herein to FDI in a data context are intended to mean log of FDI per capita.

[60] De Mello (1997) noted that others used economic growth as the "growth" variable in FDI research. De Mello questioned this decision noting that the direction of the causal flow between FDI and economic growth is unclear. Thus, in this study population growth is the measure for market growth.

the selected rating services include the International Country Risk Guide (ICRG), which provides four separate indices for the initial analysis – its three primary indices covering political, economic and financial risk, and corruption, an element of political risk. Freedom House's Freedom in the World index is the fifth subject index. Transparency International's (TI) Corruption Perceptions Index is the sixth index. The seventh index is Heritage Foundation's Index of Economic Freedom affiliated with The Wall Street Journal. The final two indices, published in periodicals, are *Euromoney's* Country Risk Ratings and *The Institutional Investor's* Country Credit Ratings.

The data analysis involving the nine measures proceeded first with their standardization to remove variance due to the range of scales employed.[61] Index scales varied from a 5-point range for the Heritage index to a 100-point range for the ICRG political risk index. Indices with smaller ranges, including Heritage, the ICRG corruption index (0-6), TI (0-10) and Freedom House (2-14),[62] reflected less change from year to year and, arguably, less robustness with limited distinctions between rating levels.[63] As appropriate, reversing the orientation of some of the indices provoked consistency and caused higher numbers to indicate greater risk in each case.

Prior analysis of the nine indices in the first chapter of this dissertation revealed high correlation between ratings and confirmed that the indices load as a

[61] Testing using the original ratings was consistent with the results using standardized numbers.
[62] The Freedom House scale is the result of adding the two (1-7) point scales for the two component elements of the index – political rights and civil liberties.

single factor, jointly explaining a greater degree of variance than any one index alone. Thus, all hypothesis tests evaluated the nine different indices separately and used a single risk factor created from all nine. The country-risk ratings were from the year 1999 and, for each measure, covered a minimum of 88 countries.

There was also an adjustment made to all of the risk measures to account for their high correlation with GNI.[64] Removal of the influence of GNI allowed for more accurate testing of the relationship between each risk measure and FDI. The removal of the influence of GNI involved the following simultaneous equation approach:

$$\text{Risk} = \alpha + \beta(\text{GNI}) \quad \text{and} \quad \text{Information} = \text{Risk} - \alpha - \beta(\text{GNI})$$

Table 3-1 reflects descriptive information for the data set. As expected, in the data set, GNI and FDI are higher in the non-emerging countries. Yet, market growth and the single risk factor are higher in emerging countries. The descriptive information concerning the nine individual risk indices is also included. All but two of the individual ratings show higher risk in the emerging markets than in the non-emerging markets. Interestingly, Freedom House's Freedom in the World index has a mean of –0.08 for emerging countries and a mean of 0.16 for non-emerging countries – a seeming contradiction. ICRG's political risk measure reflects a mean for both emerging and non-emerging countries at 0.

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[63] As a final note, economic risk and political risk both use a 50-point scale.
[64] All subsequent references herein to GNI are intended to mean log GNI per capita.

Insert Table 3-1 about here

The Hypothesis Tests.

H3-1 expects to see differences in the results of the following regression comparing emerging and non-emerging country data sets:

FDI = f(Market Size, Market Growth, Country Risk, error)

H3-2 expects that the country risk coefficient will not be significant in the emerging countries. The tests for both hypotheses compare the emerging and non-emerging countries.

Table 3-2 contains the regression results for the above equation. A robust regression approach generally proved superior to a linear regression.[65] Reflected on the table are the results of the ten regressions using each of the nine individual risk measures and the single risk factor. The sample size, proportion of the variance explained and coefficient information are provided, with the coefficient information specific for each risk measure and in summary fashion for GNI and growth. The regression evaluated country information from finite, sample data sets of countries. Finite sample corrections to recalculate standard errors and p values used the estimate of the United Nations of 228 total countries and regions (www.un.org) and then subtracted out the number of countries included in the other data set. This

[65] In all cases, with the emerging countries, the test for bias showed robust regression to be superior to linear. However, with the non-emerging countries, the bias test results were mixed. Arguably, the bias tests on the regressions using *Euromoney's* ratings and the using ICRG's political risk support switching to a linear regression. Yet, for the sake of simplicity, all regression information described herein is from robust regressions.

resulted in a fairly conservative approach to the adjustment of standard error, t value and p value information.

Insert Table 3-2 about here

Table 3-2 reflects divergence between the regression results, comparing emerging countries with other or non-emerging countries. The differences are primarily related to the relationship between country risk and FDI; though, the results concerning the independent variable of population growth also reflect some distinctions. The coefficients of risk are generally significant for non-emerging countries and are generally not significant for emerging countries. The growth coefficient has a much broader range of value and of significance in the non-emerging countries than in the emerging countries. In addition, the proportion of the variation explained by the robust regression model was significantly higher for non-emerging countries than for emerging countries. Yet, the sample size was smaller in the first group. Finally, the GNI coefficient information is fairly consistent across both groups. In general, the differences in the data support H3-1.

As for H3-2, the regression results for the non-emerging countries are generally consistent with prior findings of negative relationship between country risk and FDI (Hines, 1995; Mauro, 1995; Wei, 2000a). For 6 of the 10 risk ratings, the coefficient is highly significant at above the 98% level. The four ratings that are not significant are those provided by Freedom House, Transparency International and the ICRG's corruption measure and financial risk measure. In support of H3-2, however,

the coefficients for risk are generally not significant for the emerging countries. Only the ratings by Freedom House and by the Heritage Foundation have significant coefficients. The other 8 indices, including the single risk factor, do not provide sufficiently significant information to the equation. Emerging markets have distinct characteristics that minimize or remove the relationship between country-risk rating information and FDI. H3-2 is, for the most part, supported.

CONCLUSIONS AND IMPLICATIONS

This study began with the simple question whether the distinct characteristics of emerging markets affect the determinants of FDI. Emerging markets are generally distinguished by their high country risk and high growth rates. Yet, these elements alone do not explain the complete story. Application of existing theory primarily created and tested with respect to developed countries may not be appropriate for application to emerging markets (Hoskisson et al., 2000). In particular, other aspects of emerging markets not accounted for in the accepted FDI equation likely affect the previously accepted relationships. Higher risk should result in reduced investment. Yet, investments in emerging markets can take advantage of risk- and cost-minimizing elements such as government support, risk insurance and investment incentives. In addition, firm specific considerations and FDI decision elements altering the degree of control incorporated into an investment can support FDI even in light of increased risk.

The results of this study support an argument that emerging markets are different. The FDI equation is different and country risk has, at best, a limited

relationship with FDI in emerging markets. The various counteractive measures have previously received some attention (see, e.g., De Mello, 1997; Fry, 1983; Summary & Summary, 1995). This study supports additional exploration of the circumstances that compensate for increased risk – from governmentally-sponsored support and risk insurance to investment incentives offered by host countries. Similarly, work exploring the influence of risk on different types of foreign investment gains support from this study and can be expanded in future work (see Brouthers et al., 1998; Kwon & Konopa, 1992). Risk levels may also be important in understanding gradual FDI processes that begin in a non-ownership, non-FDI form and progress to an ownership/FDI position (see generally, Johanson & Vahlne, 1977).

A logistical issue in this research involved the division of the country sample into emerging and non-emerging countries. Limited consensus on the identification of emerging countries complicated this effort slightly. While a significant body of work has centered on emerging markets, prior work has not clarified which countries are included. In addition as Hoskisson et al. (2000) noted, countries are at different places in the process of emerging. This circumstance makes identification and comparison difficult. To date most research appears limited by convenience or data availability to a select number of emerging countries. A central significant avenue of research suggested by this study is the development of an identification categorization system for emerging countries.

A potential, politically-related problem with identification confusion results from the significance for a country of being assigned such status. Having an

emerging market label allows a country to more readily encourage FDI given the risk insurance and other support programs that then become available. Yet, obtaining the designation as an emerging country is not a straightforward process. Organizations such as the IFC base their identification of emerging markets on their membership ranks. To identify a country as an emerging market, the country must be a member of the IFC and the membership is the decision-making body. The more valuable a country perceives the services of the IFC to be, the more the country will lobby for inclusion on the list. The fact that the IFC has categorized 151 of their 175 members as emerging would seem to support this potential bias. To some extent, the same situation may be true with the OPIC. Notwithstanding the identification difficulties encountered, this study provides support for efforts to better understand how the distinct characteristics of emerging markets evolve. Further exploration of emerging markets can uncover other relevant distinctions. This field of study has immense potential.

In 1972, Bennett and Green observed that work on the determinants in foreign investment decisions is sparse (1972: 182). There has been significant progress in the area of FDI research, but most of the work involves developed countries (Hoskisson et al. 2000). When less developed or developing countries have been the focus of research, the purpose has not generally been to distinguish the category of countries (see Hoskisson et al., 2000) or to find differences between emerging and non-emerging countries. The time is ripe to expand exploration of both

emerging markets and FDI to understand better the significant distinctions of such countries and the implications of those distinctions for investing firms.

TABLE 1-1
***EUROMONEY'S* COUNTRY RISK INDEX**
Origination Year: 1982

INPUT NAME	WEIGHT	TYPE OF MEASURE	INPUT RATING SOURCE	NOTES
1. Political risk	25%	Qualitative	Considers the assessment of risk analysts, risk insurance brokers, bank credit officers.	
2. Economic risk	25%	Qualitative	*Euromoney*'s Global Economic Projections.	
3. Debt indicators	10%	Quantitative	Calculates World Bank debt service to exports, current account balance to GNP and external debt to GNP.	Rated developing countries that did not report debt data to the World Bank with a zero.
4. Debt in default or rescheduled	10%	Quantitative	Calculates the amount of debt in default or rescheduled over the last 10 years, as shown in the World Bank world debt tables.	
5. Credit rating	10%	Quantitative	Calculates the average of the sovereign ratings published in Moody's, Standard & Poor's and Fitch IBCA.	Rated developing countries that did not report debt data to the World Bank with a zero.
6. Access to Bank Finance	5%	Quantitative	Calculates disbursements of private, long-term, un-guaranteed loans as a percentage of GNP.	Rated developing countries that did not report debt data to the World Bank with a zero. In addition, assigned OECD countries not reporting debt a 5.
7. Access to short-term finance	5%	Qualitative	Calculates the number of memberships in OECD consensus groups and whether coverage is available from the U.S. Exim Bank and the NCM UK.	
8. Access to capital markets	5%	Qualitative	Considers the assessments of heads of debt and loan syndicates concerning how easily a country might tap international bond and syndicated loan markets.	
9. Discount on forfeiting	5%	Quantitative	Calculates average maximum tenor available and forfeiting spread over risk-less countries (the U.S. is given as the example), based on average maximum tenor minus spread.	Countries for which forfeit information is not available score zero on discounting forfeiting.

Reference: *Euromoney* periodical.

TABLE 1-2
FREEDOM HOUSE: FREEDOM IN THE WORLD INDEX
Origination Year: 1972

INPUT NAME	WEIGHT	TYPE OF MEASURE	INPUT RATING SOURCE	NOTES
1. Political rights	50%	Qualitative	Rating scale (1 to 7) based on foreign and domestic news reports, NGO publications, think tank and academic analyses and individual professional contacts using a checklist of political risk issues.	Each of the checklist items is given 0 to 4 points with a total of 32 potential points. The totals support assignment of the country to a category with a 1 to 7 rating overall. Staff adjust the category up or down based on country issues, such as extreme violence, that is not caught by the checklists.
2. Civil rights	50%	Qualitative	Rating scale (1 to 7) based on foreign and domestic news reports, NGO publications, think tank and academic analyses and individual professional contacts using checklists pertaining to (a) freedom of expression and belief, (b) association and organizational rights, (c) rule of law and human rights and (d) personal autonomy and economic rights.	Each of the checklist items is given 0 to 4 points with a total of 56 potential points. The totals support assignment of the country to a category with a 1 to 7 rating overall. Staff adjust the category up or down based on country issues, such as extreme violence, that is not caught by the checklists

Reference: www.freedomhouse.org/

TABLE 1-3
HERITAGE FOUNDATION (*The Wall Street Journal*):
THE INDEX OF ECONOMIC FREEDOM
Origination Year: 1995

INPUT NAME	WEIGHT	TYPE OF MEASURE	INPUT RATING SOURCE	NOTES
1. Trade Policy	10%	Quantitative	Rating scale (1 to 5) considers the average tariff rate, with higher rates receiving higher (worse) scores. Specific information sources used include: Economist Intelligence Unit's EIU Country Reports; International Monetary Fund, Government Finance Statistics Yearbook and International Financial Statistics; Office of the U.S. Trade Representative, National Trade Estimate Report on Foreign Trade Barriers; U.S. Department of State, Country Commercial Guides and Country Reports on Economic Policy and Trade Practices; World Bank, World Development Indicators; World Trade Organization, Trade Policy Reviews; and official government publications of each country.	When tariff rate information is not available, Heritage staff rating determines the average rate through analysis of tariff revenue and duties as a percentage of imports, or based on the overall tariff structure. Heritage staff also considers other issues such as corruption.
2. Fiscal Burden of Government	10%	Quantitative	Rating scale (1 to 5) of tax rates (top income rate, marginal rate and corporate tax rate) and the level of government expenditures, measured as a percent of GDP. Specific information sources for taxation include: Ernst & Young, The Global Executive and Worldwide Corporate Tax Guide; International Monetary Fund Staff Country Report, Selected Issues and Statistical Appendix; Economist Intelligence Unit, Country Commerce, Country Profile, and Country Report; U.S. Department of State, Country Commercial Guides; and official government publications of each country. For government expenditures, sources include: OECD data (for member countries); International Monetary Fund, Government Finance Statistics Yearbook, and International Monetary Fund Staff Country Report, Selected Issues and Statistical Appendix; Standard & Poor's, Sovereigns Ratings Analysis; Asian Development Bank, Key Indicators of Developing Asian and Pacific Countries; African Development Bank, ADB Statistics Pocketbook; European Bank for	

			Reconstruction and Development, Country Strategies; Inter-American Development Bank; U.S. Department of State, Country Commercial Guides; and official government publications of each country.	
3. Government Intervention in the Economy	10%	Quantitative	Rating scale (1 to 5) considers government consumption as a percentage of GDP, government ownership of businesses and industries, share of government revenues from state-owned enterprises and government ownership of property, and economic output produced by government. Specific information sources for information on government intervention in the economy include: International Monetary Fund, Government Finance Statistics Yearbook; U.S. Department of State, Country Commercial Guides and Country Reports on Economic Policy and Trade Practices; Economist Intelligence Unit, Country Report; World Bank, World Development Indicators; and official government publications of each country.	Heritage staff, rating data for the share of total revenues from state-owned enterprises and government ownership of property not readily reported, looks both for data on total revenues from state-owned enterprises and government ownership of property and for data on total government revenues and then calculate the percentage of total revenues represented by revenues from state-owned enterprises and government ownership of property.
4. Monetary Policy	10%	Quantitative	Rating scale (1 to 5) considers a country's weighted average annual rate of inflation – using the last 10 years of inflation data and giving the greatest weight to the most recent information and the least to the oldest. Sources for information used include: International Monetary Fund, International Financial Statistics; International Monetary Fund, World Economic Outlook; and Economist Intelligence Unit, Country Report.	Heritage staff notes that "when governments have comprehensive price and wage controls, measured inflation may be distorted."
5. Capital Flows and Foreign Investment	10%	Qualitative	Rating scale (1 to 5) evaluates policies toward foreign investment, including: Foreign investment code; Restrictions on foreign ownership of business; Restrictions on the industries and companies open to foreign investors; Restrictions and performance requirements on foreign companies; Foreign ownership of land; Equal treatment under the law for both foreign and domestic companies; Restrictions on repatriation of earnings; Availability of local financing for foreign companies. Information sources on capital flows and foreign investment include: Economist Intelligence Unit, Country Commerce, Country Profile and Country	

			Report; International Monetary Fund, Annual Report on Exchange Arrangements and Exchange Restrictions; Office of the U.S. Trade Representative, National Trade Estimate Report on Foreign Trade Barriers; U.S. Department of State, Country Commercial Guides; U.S. Department of State, Country Reports on Economic Policy and Trade Practices; and official government publications of each country.	
6. Banking and Finance	10%	Qualitative	Rating scale (1 to 5) evaluates how open the banking and finance systems of the country are based on: Government ownership of banks; Restrictions on the ability of foreign banks to open branches and subsidiaries; Government influence over the allocation of credit; Government regulations; Freedom to offer all types of financial. Sources of relevant information used include: Economist Intelligence Unit, Country Commerce, Country Profile, and Country Report; U.S. Department of State, Country Commercial Guides; U.S. Department of State, Country Reports on Economic Policy and Trade Practices; and official government publications of each country.	
7. Wage and Prices	10%	Qualitative	Rating scale (1 to 5) considers the extent to which the government allows the market to determine wages and prices based on: Minimum wage laws; Freedom to set prices privately without government influence; Government price controls and the extent to which government price controls are used; Government subsidies to businesses that affect prices; Government role in setting wages. Sources of relevant information used include: Economist Intelligence Unit, Country Commerce, Country Profile, and Country Report; U.S. Department of State, Country Commercial Guides; U.S. Department of State, Country Reports on Human Rights Practices; and U.S. Department of State, Country Reports on Economic Policy and Trade Practices.	
8. Property Rights	10%	Qualitative	Rating scale (1 to 5) evaluates the degree to which private property rights are protected and enforced by laws and the government, based on: Freedom from government influence over the judicial system; Commercial code defining contracts; Sanctioning of foreign arbitration of contract	

			disputes; Government expropriation of property; Corruption within the judiciary; Delays in receiving judicial decisions; Legally granted and protected private property. Sources of relevant information used include: Economist Intelligence Unit, Country Commerce; U.S. Department of State, Country Commercial Guides and Country Reports on Human Rights Practices.	
9. Regulation	10%	Qualitative	Rating scale (1 to 5) evaluates how easy/difficult it is to open a business considering: Licensing requirements to operate a business; Ease of obtaining a business license; Corruption within the bureaucracy; Labor regulations, such as established work weeks, paid vacations, and parental leave, as well as selected labor regulations; Environmental, consumer safety, and worker health regulations; Regulations that impose a burden on business. Sources of relevant information used include: Economist Intelligence Unit, Country Commerce and Country Report; U.S. Department of State, Country Commercial Guides and Country Reports on Economic Policy and Trade Practices; Office of the U.S. Trade Representative, National Trade Estimate Report on Foreign Trade Barriers; and official government publications of each country.	
10. Black Market Activity	10%	Qualitative	Rating scale (1 to 5) initially evaluated this issue considering: Smuggling; Piracy of intellectual property in the black market; Agricultural production supplied on the black market; Manufacturing supplied on the black Market; Services supplied on the black market; Transportation supplied on the black Market; Labor supplied on the black market. As Transparency International's Corruption Perceptions Index began available, Heritage factored it in and it became the primary focus of analysis. In addition to Transparency International's Index (commenced in 1995), Heritage relied on additional sources of relevant information, such as: U.S. Department of State, Country Commercial Guides and Country Reports on Economic Policy and Trade Practices; Economist Intelligence Unit, Country Commerce, Country Profile, and Country Report; Office of the U.S. Trade Representative, National Trade Estimate Report on Foreign Trade	For countries not covered by Transparency International's Corruption Perception Index, Heritage staff used the original approach to evaluate country black market scores. If Transparency International's index for a particular year has not yet come out, Heritage staff uses the prior year's index. Heritage staff further notes that information in the black market is much harder to obtain for less developed countries.

			Barriers; official U.S. government cables supplied by the U.S. Department of Commerce and U.S. Department of State, available through the National Trade Data Bank of the United States; and official government publications of each country.	

Reference: **http://www.heritage.org/**

TABLE 1-4
***INSTITUTIONAL INVESTOR'S* COUNTRY CREDIT RATINGS**
Origination Year: 1979

INPUT NAME	WEIGHT	TYPE OF MEASURE	INPUT RATING SOURCE	NOTES
No separate inputs, only 1 rating number given	100%	Qualitative	Uses information from chief economists at leading international banks and money management firms. Institutional Investor staff keeps the identification of the respondents confidential. They weight responses differently based on their assessment of the degree of worldwide exposure and sophistication of the country analysis systems of the respondents' organizations.	Survey respondents do not rate their home countries. The initial opinions of survey respondents are on a 10-point scale. *Institutional Investor* staff converts this information to a 100-point scale.

Reference: *Institutional Investor* periodical.

TABLE 1-5
INTERNATIONAL COUNTRY RISK GUIDE – CORRUPTION INDEX
Origination Year: 1970

INPUT NAME	WEIGHT	TYPE OF MEASURE	INPUT RATING SOURCE	NOTES
One input only	100%	Qualitative	Rating (6 point scale) evaluates corruption, considering, for example, how long a government has been in power and the nature of any one-party or non-elected government.	This measure is an input to the broader measure of political risk by the ICRG.

Reference: http://www/icrgonline.com/; *International Country Risk Guide,* published monthly by the PRS Group, a division of IBC USA Financial Services Inc.

TABLE 1-6
INTERNATIONAL COUNTRY RISK GUIDE – ECONOMIC RISK INDEX
Origination Year: 1970

INPUT NAME	WEIGHT	TYPE OF MEASURE	INPUT RATING SOURCE	NOTES
1. GDP per head	10%	Quantitative	Rating scale (5 point) based on GDP per head of population, in U.S. dollars, compared across countries to determine the percent of the average.	
2. Real Annual GDP Growth	20%	Quantitative	Rating scale (10 point) based on the annual change in estimated GDP, at constant 1990 prices, as a percentage increase or decrease.	
3. Annual Inflation Rate	20%	Quantitative	Rating scale (10 point) based on the unweighted average Consumer Price Index for the inflation rate and calculates the percentage change.	
4. Budge Balance as a Percentage of GDP	20%	Quantitative	Rating scale (10 point) based on the general government budget balance (excluding grants) as a percentage of estimated GDP and then scales this percentage.	
5. Current Account as a Percentage of GDP	30%	Quantitative	Rating scale (15 point) based on the estimated balance on the current account of the balance of payments, in U.S. dollars, expressed as a percentage of the estimated GDP in U.S. dollars.	

Reference: http://www/icrgonline.com/; *International Country Risk Guide,* published monthly by the PRS Group, a division of IBC USA Financial Services Inc.

TABLE 1-7
INTERNATIONAL COUNTRY RISK GUIDE – FINANCIAL RISK INDEX
Origination Year: 1970

INPUT NAME	WEIGHT	TYPE OF MEASURE	INPUT RATING SOURCE	NOTES
1. Total Foreign Debt as a Percentage of GDP	20%	Quantitative	Rating scale (10 point) based on estimated gross foreign debt, in U.S. dollars, expressed as a percentage of GDP in U.S. dollars.	
2. Foreign Debt Service as a Percentage of Exports of Goods and Services	20%	Quantitative	Rating scale (10 point) based on estimated foreign debt service, in U.S. dollars, expressed as a percentage of the sum of total estimated exports of goods and services, in U.S. dollars.	
3. Current Account as a Percentage of Exports of Goods and Services	30%	Quantitative	Rating scale (15 point) based on the balance of current account of the balance of payments, in U.S. dollars, expressed as a percentage of the sum of estimated total exports of goods and services, in U.S. dollars.	
4. Net International Liquidity as Months of Import Cover	10%	Quantitative	Rating scale (5 point) based on estimated total official reserves, in U.S. dollars, including official holdings of gold, but excluding the use of IMF credits and foreign liabilities of the monetary authorities, divided by the average monthly merchandise import cost, in U.S. dollars.	
5. Exchange Rate Stability as a Percentage of Change	20%	Quantitative	Rating scale (10 point) based on the appreciation or depreciation of a currency against the U.S. dollar over a calendar year as a percent change.	For the U.S., the comparative currency in 1999 was the German mark.

Reference: http://www/icrgonline.com/; *International Country Risk Guide,* published monthly by the PRS Group, a division of IBC USA Financial Services Inc.

TABLE 1-8
INTERNATIONAL COUNTRY RISK GUIDE – POLITICAL RISK INDEX
Origination Year: 1970

INPUT NAME	WEIGHT	TYPE OF MEASURE	INPUT RATING SOURCE	NOTES
1. Government Stability	12%	Qualitative	Rating evaluates the government's ability to carry out its declared program(s) and its ability to stay in office, and considers the type of governance, the cohesion of the government and governing party or parties, the closeness of the next election, the government's command of the legislature and popular approval of government policies.	
2. Socioeconomic Conditions	12%	Qualitative	Rating evaluates the degree of public satisfaction with government policies, based on a variety of variables from infant mortality and medical provision to housing and interest rates.	It is possible for a developed country to have a lower score than a developing country. For example, a developed country may react more negatively to an increase in unemployment.
3. Investment Profile	12%	Qualitative	Rating evaluates the government's attitude on inward investment considering: the risk to operations; taxation; repatriation; and labor costs.	
4. Internal Conflict	12%	Qualitative	Rating evaluates the level of political violence in a country and its actual or potential impact on governance. At one end are countries with no armed opposition to the government and the government does not engage in arbitrary violence, direct or indirect, against its own people. At the other end are countries embroiled in on-going civil war. Between are countries with a threat to the government or business that may take a variety of forms.	
5. External Conflict	12%	Qualitative	Rating evaluates risk to the incumbent government and to inward investment and considers trade restrictions, embargoes and other circumstances that can adversely affect foreign investment.	
6. Corruption	6%	Qualitative	Rating evaluates corruption, considering, for example, how long a government has been in power and the nature of any one-party or non-elected government.	
7. Military in Politics	6%	Qualitative	Rating evaluates the degree of involvement of military in politics, through any actual or created, external or internal threat.	

8. Religious Tensions	6%	Qualitative	Rating evaluates the degree of religious tension considering the degree of domination of society or government by any religious group, the degree of suppression of religious freedom, or the desire of any religious group to express its own identity, separate from its identity to the country.	
9. Law and Order	6%	Qualitative	Rating evaluates law and order separately: "Law" is the measure of the strength and impartiality of the legal system. "Order" is the degree of popular observance of the law.	
10. Ethnic Tensions	6%	Qualitative	Rating evaluates the tension attributable to racial, nationality or language divisions with consideration to degree of intolerant and uncompromising behavior between any such groups.	
11. Democratic Accountability	6%	Qualitative	Rating evaluates how responsive government is to its people, going beyond consideration of the nature of elections to whether government follows the consensus of the public.	
12. Bureaucracy Quality	4%	Qualitative	Rating evaluates the institutional strength and quality of the bureaucracy, considering the level of expertise, autonomy, policy changes and administrative consistency.	

Reference: http://www/icrgonline.com/; *International Country Risk Guide,* published monthly by the PRS Group, a division of IBC USA Financial Services Inc.

TABLE 1-9
TRANSPARENCY INTERNATIONAL'S CORRUPTION PERCEPTIONS INDEX
Origination Year: 1995

INPUT NAME	WEIGHT	TYPE OF MEASURE	INPUT RATING SOURCE	NOTES
Detail concerning inputs is limited and changes yearly	Unknown	Most or all data sources appear to involve a qualitative measure.	Transparency International staff (TI) considers various risk measures and information sources, changing the mix annually depending on availability and perceived reliability of different sources. TI based the 1999 index, for example, on data covering some or all of the the period from 1997 through 1999 from the following sources: Political & Economic Risk Consultancy, Asian Intelligence Issue; Gallup International, 50th Anniversary Survey; Wall Street Journal, Central European Economic Review, Annual Survey; Freedom House, Nations in Transit; Institute for Management Development, World Competitiveness Yearbooks; World Economic Forum, Global Competitiveness Report and African Competitiveness Report; Political Risk Services, International Country Risk Guide; World Bank/Basel University, World Development Report, Private Sector Survey; Economist Intelligence Unit, Country Risk Service and Country Forecast; and "International Working Group," International Crime Victim Survey.	

Reference: http://www.transparency.org/surveys/index.html.

TABLE 1-10
CORRELATIONS AMONG AGGREGATE RISK INDICES
(1999)

	Euromny	Inst'l Inv	Heritage	Corruptn	EconRisk	Financial	Freedom	Political
Euromoney								
Inst'l Investor	.98							
Heritage	.80	.79						
Corruption	.63	.61	.51					
Econ. Risk	.77	.78	.68	.52				
Financial Risk	.63	.66	.55	.31	.75			
FreedomHouse	.64	.64	.62	.65	.46	.35		
Political Risk	.77	.78	.66	.76	.70	.48	.68	
Trans. Int'l	.87	.87	.74	.78	.72	.47	.63	.79

TABLE 1-11
FACTOR ANALYSIS OF NINE AGGREGATE RISK MEASURES
(1999)

N	88
Variance Explained	.65
SS of loading	5.89
Eigenvalue	6.11
Loadings:	
Euromoney	.99
Inst'l Investor	.99
Heritage	.81
Corruption	.64
Econ Risk	.79
Finance Risk	.65
FreedomHouse	.65
Political Risk	.79
Trans Int'l	.88

TABLE 1-12: CORRELATIONS TABLE OF RISK COMPONENTS

	INDEX INPUT	H5	H7	H6	IP6	H1	IP7	FH1	FH2	IP11	H8	IP12
H5	H For. Invest.	1.00	0.65	0.67	0.35	0.50	0.36	0.60	0.66	0.54	0.58	0.49
H7	H Wages/Prices	0.65	1.00	0.69	0.36	0.46	0.41	0.56	0.59	0.51	0.61	0.49
H6	H Bank/Finance	0.67	0.69	1.00	0.36	0.51	0.45	0.52	0.60	0.47	0.65	0.55
IP6	IP Corruption	0.35	0.36	0.36	1.00	0.44	0.61	0.58	0.59	0.60	0.50	0.58
H1	H* Trade	0.50	0.46	0.51	0.44	1.00	0.50	0.55	0.55	0.45	0.62	0.54
IP7	IP Mil. in Pol.	0.36	0.41	0.45	0.61	0.50	1.00	0.61	0.65	0.62	0.60	0.69
FH1	FH* Pol. Rights	0.60	0.56	0.52	0.58	0.55	0.61	1.00	0.93	0.82	0.58	0.59
FH2	FH Civil Lib.	0.66	0.59	0.60	0.59	0.55	0.65	0.93	1.00	0.83	0.66	0.66
IP11	IP Demo. Acc.	0.54	0.51	0.47	0.60	0.45	0.62	0.82	0.83	1.00	0.52	0.59
H8	H Prop. Rights	0.58	0.61	0.65	0.50	0.62	0.60	0.58	0.66	0.52	1.00	0.78
IP12	IP Bur. Quality	0.49	0.49	0.55	0.58	0.54	0.69	0.59	0.66	0.59	0.78	1.00
E1	E* Pol. Risk	0.47	0.48	0.56	0.60	0.62	0.70	0.57	0.65	0.51	0.82	0.86
E2	E Econ. Perf.	0.44	0.43	0.50	0.60	0.60	0.65	0.53	0.61	0.50	0.79	0.83
E5	E Credit Rating	0.46	0.42	0.52	0.61	0.63	0.66	0.57	0.63	0.51	0.77	0.84
E7	E ST Finance	0.43	0.44	0.51	0.51	0.56	0.61	0.52	0.58	0.45	0.82	0.80
E8	E Cap. Markets	0.47	0.41	0.50	0.61	0.62	0.66	0.58	0.63	0.55	0.75	0.83
E9	E Dis. On For.	0.42	0.43	0.48	0.54	0.58	0.59	0.45	0.50	0.39	0.74	0.76
IE1	IE* GDP/Pop.	0.36	0.36	0.43	0.53	0.61	0.60	0.46	0.52	0.41	0.74	0.76
E6	E Bank Finance	0.29	0.33	0.38	0.48	0.59	0.54	0.39	0.45	0.32	0.72	0.73
H10	H Black Market	0.44	0.52	0.56	0.47	0.60	0.56	0.45	0.53	0.38	0.81	0.74
IP2	IP Socio. Cond.	0.32	0.38	0.41	0.52	0.44	0.57	0.35	0.46	0.35	0.68	0.74
H9	H Regulation	0.54	0.61	0.58	0.39	0.52	0.53	0.47	0.52	0.41	0.80	0.65
H4	H Mon. Policy	0.29	0.33	0.39	0.33	0.31	0.40	0.25	0.36	0.26	0.65	0.57
IP9	IP Law + Order	0.23	0.20	0.30	0.51	0.37	0.62	0.29	0.39	0.33	0.51	0.59
IP4	IP Internal Con.	0.25	0.25	0.26	0.47	0.34	0.71	0.42	0.47	0.41	0.49	0.52
IE3	IE Inflation	0.20	0.22	0.29	0.34	0.19	0.35	0.20	0.28	0.23	0.47	0.46
IF1	IF* Frn. Debt**	0.19	0.17	0.25	0.29	0.40	0.38	0.19	0.20	0.19	0.38	0.40
IE4	IE Bdgt. Bal.**	0.43	0.39	0.43	0.38	0.34	0.39	0.33	0.44	0.39	0.48	0.50
E3	E Debt Indicat.	0.45	0.42	0.46	0.27	0.42	0.44	0.33	0.42	0.44	0.49	0.45
E4	E Default/Resh.	0.35	0.31	0.34	0.17	0.34	0.25	0.27	0.36	0.28	0.36	0.35
H3	H Gov Interven.	0.42	0.44	0.30	0.20	0.26	0.09	0.41	0.39	0.32	0.29	0.23
IE2	IE GDP Growth	0.06	0.06	0.06	0.09	-0.12	-0.02	0.02	0.07	0.10	-0.07	-0.01
IE5	IE Cur. Acct.**	0.27	0.33	0.29	0.28	0.28	0.35	0.27	0.30	0.24	0.44	0.42
IF2	IF Debt Serv.	0.05	0.07	0.15	0.08	0.11	0.28	0.05	0.11	0.01	0.27	0.19
IF3	IF Cur. Acct.	0.25	0.34	0.28	0.36	0.27	0.43	0.27	0.30	0.30	0.43	0.46
IF4	IF Int'l. Liq.	0.28	0.22	0.24	0.06	0.25	0.11	0.19	0.20	0.16	0.32	0.21
IF5	IF Ex. Rt. Stab.	0.04	0.08	0.09	0.20	0.10	0.14	0.10	0.16	0.18	0.25	0.23
IP1	IP* Gov. Stab.	-0.05	-0.06	-0.04	0.05	-0.14	0.06	0.07	-0.03	-0.04	0.14	0.07
IP3	IP Inv. Profile	0.40	0.44	0.43	0.31	0.20	0.40	0.34	0.42	0.34	0.43	0.41
IP5	IP Ext. Con.	0.27	0.32	0.34	0.36	0.32	0.38	0.44	0.45	0.32	0.34	0.30
IP8	IP Rel. Tensions	0.25	0.27	0.26	0.37	0.36	0.37	0.45	0.43	0.31	0.24	0.25
IP10	IP Ethnic Ten.	0.13	0.03	0.07	0.27	0.16	0.41	0.13	0.17	0.25	0.19	0.23
H2	H Fiscal Burden	-0.03	0.00	-0.05	-0.28	-0.14	-0.32	-0.20	-0.19	-0.20	-0.07	-0.28

	INDEX INPUT	E1	E2	E5	E7	E8	E9	IE1	E6	H10	IP2	H9
H5	H For. Invest.	0.47	0.44	0.46	0.43	0.47	0.42	0.36	0.29	0.44	0.32	**0.54**
H7	H Wages/Prices	0.48	0.43	0.42	0.44	0.41	0.43	0.36	0.33	**0.52**	0.38	**0.61**
H6	H Bank/Finance	**0.56**	**0.50**	**0.52**	**0.51**	**0.50**	0.48	0.43	0.38	**0.56**	0.41	**0.58**
IP6	IP Corruption	**0.60**	**0.60**	**0.61**	**0.51**	**0.61**	**0.54**	**0.53**	0.48	0.47	0.52	0.39
H1	H* Trade	**0.62**	**0.60**	**0.63**	**0.56**	**0.62**	**0.58**	**0.61**	**0.59**	**0.60**	0.44	**0.52**
IP7	IP Mil. in Pol.	0.70	**0.65**	**0.66**	**0.61**	**0.66**	**0.59**	**0.60**	**0.54**	**0.56**	**0.57**	**0.53**
FH1	FH* Pol. Rights	**0.57**	**0.53**	**0.57**	**0.52**	**0.58**	0.45	0.46	0.39	0.45	0.35	0.47
FH2	FH Civil Lib.	**0.65**	**0.61**	**0.63**	**0.58**	**0.63**	**0.50**	0.52	0.45	0.53	0.46	**0.52**
IP11	IP Demo. Acc.	**0.51**	**0.50**	**0.51**	0.45	**0.55**	0.39	0.41	0.32	0.38	0.35	0.41
H8	H Prop. Rights	**0.82**	0.79	0.77	**0.82**	0.75	0.74	0.74	0.72	**0.81**	**0.68**	**0.80**
IP12	IP Bur. Quality	**0.86**	**0.83**	**0.84**	**0.80**	**0.83**	0.76	0.76	0.73	0.74	**0.74**	**0.65**
E1	E* Pol. Risk	1.00	**0.94**	**0.95**	**0.92**	**0.93**	**0.92**	**0.87**	**0.85**	**0.82**	**0.80**	0.70
E2	E Econ. Perf.	0.94	1.00	**0.93**	**0.88**	**0.89**	**0.87**	**0.88**	**0.87**	**0.81**	**0.81**	**0.64**
E5	E Credit Rating	0.95	0.93	1.00	**0.88**	0.93	**0.88**	**0.87**	**0.87**	0.79	0.78	**0.67**
E7	E ST Finance	0.92	**0.88**	**0.88**	1.00	**0.85**	**0.83**	**0.85**	**0.86**	0.79	0.78	**0.68**
E8	E Cap. Markets	0.93	0.89	0.93	**0.85**	1.00	**0.91**	**0.84**	**0.83**	0.73	0.73	**0.63**
E9	E Dis. On For.	0.92	**0.87**	**0.88**	**0.83**	0.91	1.00	0.79	**0.80**	0.75	0.73	**0.62**
IE1	IE* GDP/Pop.	**0.87**	**0.88**	**0.87**	**0.85**	**0.84**	0.79	1.00	**0.87**	0.76	0.78	**0.66**
E6	E Bank Finance	**0.85**	**0.87**	**0.87**	**0.86**	**0.83**	**0.80**	**0.87**	1.00	0.78	0.72	**0.60**
H10	H Black Market	**0.82**	**0.81**	0.79	0.79	0.73	0.75	0.76	0.78	1.00	**0.69**	**0.69**
IP2	IP Socio. Cond.	**0.80**	**0.81**	0.78	0.78	0.73	0.73	0.78	0.72	**0.69**	1.00	**0.61**
H9	H Regulation	0.70	**0.64**	**0.67**	**0.68**	**0.63**	**0.62**	**0.66**	**0.60**	**0.69**	**0.61**	1.00
H4	H Mon. Policy	0.70	0.70	**0.66**	0.75	**0.60**	**0.63**	**0.60**	**0.69**	**0.62**	0.77	**0.53**
IP9	IP Law + Order	**0.67**	**0.66**	**0.65**	**0.57**	**0.68**	**0.66**	**0.60**	**0.59**	**0.58**	0.63	0.43
IP4	IP Internal Con.	**0.57**	**0.54**	**0.55**	**0.50**	**0.51**	**0.50**	0.48	**0.45**	0.49	**0.54**	0.35
IE3	IE Inflation	**0.54**	**0.55**	**0.51**	**0.55**	0.44	0.49	0.43	0.46	0.48	**0.62**	0.39
IF1	IF* Frn. Debt**	**0.50**	0.47	0.47	0.40	0.46	**0.50**	0.47	0.38	0.36	0.39	0.40
IE4	IE Bdgt. Bal.**	0.48	**0.50**	0.48	0.40	0.45	0.42	0.42	0.32	0.44	0.42	0.38
E3	E Debt Indicat.	**0.50**	0.43	0.46	**0.50**	0.45	0.41	0.31	0.38	0.42	0.33	0.45
E4	E Default/Resh.	0.36	0.30	0.34	0.37	0.34	0.32	0.18	0.27	0.34	0.26	0.28
H3	H Gov Interven.	0.19	0.18	0.23	0.21	0.20	0.14	0.07	0.05	0.24	0.08	0.27
IE2	IE GDP Growth	-0.04	-0.02	-0.03	-0.07	-0.03	-0.01	-0.13	-0.13	-0.08	0.04	-0.03
IE5	IE Cur. Acct.**	0.47	0.46	0.39	0.43	0.37	0.40	0.39	0.31	0.39	0.41	0.38
IF2	IF Debt Serv.	0.26	0.25	0.22	0.21	0.16	0.20	0.16	0.14	0.13	0.27	0.18
IF3	IF Cur. Acct.	0.48	0.44	0.40	0.43	0.37	0.37	0.38	0.31	0.41	0.42	0.38
IF4	IF Int'l. Liq.	0.34	0.25	0.28	0.28	0.31	0.34	0.25	0.18	0.16	0.18	0.31
IF5	IF Ex. Rt. Stab.	0.34	0.34	0.33	0.25	0.29	0.32	0.29	0.25	0.27	0.35	0.17
IP1	IP* Gov. Stab.	0.08	0.06	0.04	0.07	0.09	0.08	0.01	0.02	0.09	0.08	0.08
IP3	IP Inv. Profile	0.38	0.33	0.33	0.41	0.31	0.35	0.25	0.28	0.41	0.40	0.33
IP5	IP Ext. Con.	0.30	0.27	0.28	0.31	0.25	0.19	0.24	0.18	0.34	0.24	0.14
IP8	IP Rel. Tensions	0.28	0.29	0.32	0.29	0.30	0.23	0.29	0.20	0.24	0.21	0.19
IP10	IP Ethnic Ten.	0.28	0.25	0.29	0.27	0.29	0.24	0.27	0.21	0.20	0.27	0.17
H2	H Fiscal Burden	-0.25	-0.27	-0.26	-0.11	-0.33	-0.30	-0.29	-0.22	-0.15	-0.19	-0.02

	INDEX INPUT	H4	IP9	IP4	IE3	IF1	IE4	E3	E4	H3	IE2	IE5
H5	H For. Invest.	0.29	0.23	0.25	0.20	0.19	0.43	0.45	0.35	0.42	0.06	0.27
H7	H Wages/Prices	0.33	0.20	0.25	0.22	0.17	0.39	0.42	0.31	0.44	0.06	0.33
H6	H Bank/Finance	0.39	0.30	0.26	0.29	0.25	0.43	0.46	0.34	0.30	0.06	0.29
IP6	IP Corruption	0.33	**0.51**	0.47	0.34	0.29	0.38	0.27	0.17	0.20	0.09	0.28
H1	H* Trade	0.31	0.37	0.34	0.19	0.40	0.34	0.42	0.34	0.26	-0.12	0.28
IP7	IP Mil. in Pol.	0.40	**0.62**	0.71	0.35	0.38	0.39	0.44	0.25	0.09	-0.02	0.35
FH1	FH* Pol. Rights	0.25	0.29	0.42	0.20	0.19	0.33	0.33	0.27	0.41	0.02	0.27
FH2	FH Civil Lib.	0.36	0.39	0.47	0.28	0.20	0.44	0.42	0.36	0.39	0.07	0.30
IP11	IP Demo. Acc.	0.26	0.33	0.41	0.23	0.19	0.39	0.44	0.28	0.32	0.10	0.24
H8	H Prop. Rights	**0.65**	**0.51**	0.49	0.47	0.38	0.48	0.49	0.36	0.29	-0.07	0.44
IP12	IP Bur. Quality	**0.57**	**0.59**	**0.52**	0.46	0.40	0.50	0.45	0.35	0.23	-0.01	0.42
E1	E* Pol. Risk	0.70	**0.67**	**0.57**	**0.54**	**0.50**	0.48	**0.50**	0.36	0.19	-0.04	0.47
E2	E Econ. Perf.	0.70	**0.66**	**0.54**	**0.55**	0.47	**0.50**	0.43	0.30	0.18	-0.02	0.46
E5	E Credit Rating	**0.66**	**0.65**	**0.55**	**0.51**	0.47	0.48	0.46	0.34	0.23	-0.03	0.39
E7	E ST Finance	0.75	**0.57**	**0.50**	**0.55**	0.40	0.40	**0.50**	0.37	0.21	-0.07	0.43
E8	E Cap. Markets	**0.60**	**0.68**	**0.51**	0.44	0.46	0.45	0.45	0.34	0.20	-0.03	0.37
E9	E Dis. On For.	**0.63**	**0.66**	**0.50**	0.49	**0.50**	0.42	0.41	0.32	0.14	-0.01	0.40
IE1	IE* GDP/Pop.	**0.60**	**0.60**	0.48	0.43	0.47	0.42	0.31	0.18	0.07	-0.13	0.39
E6	E Bank Finance	**0.69**	**0.59**	**0.45**	0.46	0.38	0.32	0.38	0.27	0.05	-0.13	0.31
H10	H Black Market	**0.62**	**0.58**	0.49	0.48	0.36	0.44	0.42	0.34	0.24	-0.08	0.39
IP2	IP Socio. Cond.	0.77	0.63	**0.54**	**0.62**	0.39	0.42	0.33	0.26	0.08	0.04	0.41
H9	H Regulation	**0.53**	0.43	0.35	0.39	0.40	0.38	0.45	0.28	0.27	-0.03	0.38
H4	H Mon. Policy	1.00	0.51	0.42	0.72	0.25	0.32	0.37	0.32	0.09	0.00	0.37
IP9	IP Law + Order	0.51	1.00	**0.65**	0.41	0.37	0.37	0.25	0.14	-0.06	-0.02	0.16
IP4	IP Internal Con.	0.42	**0.65**	1.00	0.45	0.28	0.34	0.29	0.18	0.10	-0.01	0.21
IE3	IE Inflation	0.72	0.41	0.45	1.00	0.18	0.37	0.28	0.28	0.07	0.23	0.30
IF1	IF* Frn. Debt**	0.25	0.37	0.28	0.18	1.00	0.23	0.25	0.02	0.02	-0.11	0.43
IE4	IE Bdgt. Bal.**	0.32	0.37	0.34	0.37	0.23	1.00	0.31	0.23	0.28	0.13	0.38
E3	E Debt Indicat.	0.37	0.25	0.29	0.28	0.25	0.31	1.00	0.73	0.37	0.07	0.26
E4	E Default/Resh.	0.32	0.14	0.18	0.28	0.02	0.23	0.73	1.00	0.39	0.14	0.14
H3	H Gov Interven.	0.09	-0.06	0.10	0.07	0.02	0.28	0.37	0.39	1.00	0.10	0.16
IE2	IE GDP Growth	0.00	-0.02	-0.01	0.23	-0.11	0.13	0.07	0.14	0.10	1.00	0.04
IE5	IE Cur. Acct.**	0.37	0.16	0.21	0.30	0.43	0.38	0.26	0.14	0.16	0.04	1.00
IF2	IF Debt Serv.	0.26	0.17	0.26	0.32	0.23	0.24	0.22	0.21	0.10	0.22	0.28
IF3	IF Cur. Acct.	0.37	0.22	0.25	0.26	0.37	0.37	0.38	0.14	0.11	-0.01	0.83
IF4	IF Int'l. Liq.	0.13	0.07	0.10	0.22	0.23	0.15	0.24	0.21	0.07	0.11	0.22
IF5	IF Ex. Rt. Stab.	0.43	0.16	0.22	0.55	0.07	0.21	0.02	-0.01	-0.07	0.27	0.16
IP1	IP* Gov. Stab.	0.07	0.17	0.24	0.05	0.03	-0.05	0.06	0.03	-0.01	0.10	-0.03
IP3	IP Inv. Profile	0.38	0.29	0.34	0.42	0.03	0.34	0.25	0.23	0.13	0.28	0.22
IP5	IP Ext. Con.	0.22	0.17	0.47	0.30	0.06	0.23	0.27	0.31	0.26	-0.04	0.34
IP8	IP Rel. Tensions	0.08	0.28	0.36	0.07	0.16	0.16	0.07	-0.04	0.20	0.00	0.07
IP10	IP Ethnic Ten.	0.16	0.45	**0.61**	0.19	0.21	0.15	0.17	0.04	-0.02	-0.14	0.04
H2	H Fiscal Burden	0.02	-0.33	-0.11	0.04	-0.04	-0.04	0.02	0.11	0.24	0.02	-0.07

	INDEX INPUT	IF2	IF3	IF4	IF5	IP1	IP3	IP5	IP8	IP10	H2
H5	H For. Invest.	0.05	0.25	0.28	0.04	-0.05	0.40	0.27	0.25	0.13	-0.03
H7	H Wages/Prices	0.07	0.34	0.22	0.08	-0.06	0.44	0.32	0.27	0.03	0.00
H6	H Bank/Finance	0.15	0.28	0.24	0.09	-0.04	0.43	0.34	0.26	0.07	-0.05
IP6	IP Corruption	0.08	0.36	0.06	0.20	0.05	0.31	0.36	0.37	0.27	-0.28
H1	H* Trade	0.11	0.27	0.25	0.10	-0.14	0.20	0.32	0.36	0.16	-0.14
IP7	IP Mil. in Pol.	0.28	0.43	0.11	0.14	0.06	0.40	0.38	0.37	0.41	-0.32
FH1	FH* Pol. Rights	0.05	0.27	0.19	0.10	0.07	0.34	0.44	0.45	0.13	-0.20
FH2	FH Civil Lib.	0.11	0.30	0.20	0.16	-0.03	0.42	0.45	0.43	0.17	-0.19
IP11	IP Demo. Acc.	0.01	0.30	0.16	0.18	-0.04	0.34	0.32	0.31	0.25	-0.20
H8	H Prop. Rights	0.27	0.43	0.32	0.25	0.14	0.43	0.34	0.24	0.19	-0.07
IP12	IP Bur. Quality	0.19	0.46	0.21	0.23	0.07	0.41	0.30	0.25	0.23	-0.28
E1	E* Pol. Risk	0.26	0.48	0.34	0.34	0.08	0.38	0.30	0.28	0.28	-0.25
E2	E Econ. Perf.	0.25	0.44	0.25	0.34	0.06	0.33	0.27	0.29	0.25	-0.27
E5	E Credit Rating	0.22	0.40	0.28	0.33	0.04	0.33	0.28	0.32	0.29	-0.26
E7	E ST Finance	0.21	0.43	0.28	0.25	0.07	0.41	0.31	0.29	0.27	-0.11
E8	E Cap. Markets	0.16	0.37	0.31	0.29	0.09	0.31	0.25	0.30	0.29	-0.33
E9	E Dis. On For.	0.20	0.37	0.34	0.32	0.08	0.35	0.19	0.23	0.24	-0.30
IE1	IE* GDP/Pop.	0.16	0.38	0.25	0.29	0.01	0.25	0.24	0.29	0.27	-0.29
E6	E Bank Finance	0.14	0.31	0.18	0.25	0.02	0.28	0.18	0.20	0.21	-0.22
H10	H Black Market	0.13	0.41	0.16	0.27	0.09	0.41	0.34	0.24	0.20	-0.15
IP2	IP Socio. Cond.	0.27	0.42	0.18	0.35	0.08	0.40	0.24	0.21	0.27	-0.19
H9	H Regulation	0.18	0.38	0.31	0.17	0.08	0.33	0.14	0.19	0.17	-0.02
H4	H Mon. Policy	0.26	0.37	0.13	0.43	0.07	0.38	0.22	0.08	0.16	0.02
IP9	IP Law + Order	0.17	0.22	0.07	0.16	0.17	0.29	0.17	0.28	0.45	-0.33
IP4	IP Internal Con.	0.26	0.25	0.10	0.22	0.24	0.34	0.47	0.36	0.61	-0.11
IE3	IE Inflation	0.32	0.26	0.22	0.55	0.05	0.42	0.30	0.07	0.19	0.04
IF1	IF* Frn. Debt**	0.23	0.37	0.23	0.07	0.03	0.03	0.06	0.16	0.21	-0.04
IE4	IE Bdgt. Bal.**	0.24	0.37	0.15	0.21	-0.05	0.34	0.23	0.16	0.15	-0.04
E3	E Debt Indicat.	0.22	0.38	0.24	0.02	0.06	0.25	0.27	0.07	0.17	0.02
E4	E Default/Resh.	0.21	0.14	0.21	-0.01	0.03	0.23	0.31	-0.04	0.04	0.11
H3	H Gov Interven.	0.10	0.11	0.07	-0.07	-0.01	0.13	0.26	0.20	-0.02	0.24
IE2	IE GDP Growth	0.22	-0.01	0.11	0.27	0.10	0.28	-0.04	0.00	-0.14	0.02
IE5	IE Cur. Acct.**	0.28	0.83	0.22	0.16	-0.03	0.22	0.34	0.07	0.04	-0.07
IF2	IF Debt Serv.	1.00	0.24	0.21	0.12	0.14	0.05	0.18	-0.04	0.01	0.14
IF3	IF Cur. Acct.	0.24	1.00	0.16	0.16	0.00	0.22	0.33	0.07	0.14	-0.12
IF4	IF Int'l. Liq.	0.21	0.16	1.00	0.30	0.15	0.10	-0.02	0.01	0.13	0.04
IF5	IF Ex. Rt. Stab.	0.12	0.16	0.30	1.00	0.10	0.26	0.12	-0.01	0.09	0.01
IP1	IP* Gov. Stab.	0.14	0.00	0.15	0.10	1.00	0.19	-0.03	-0.01	0.10	-0.01
IP3	IP Inv. Profile	0.05	0.22	0.10	0.26	0.19	1.00	0.31	0.23	0.13	-0.08
IP5	IP Ext. Con.	0.18	0.33	-0.02	0.12	-0.03	0.31	1.00	0.33	0.20	0.06
IP8	IP Rel. Tensions	-0.04	0.07	0.01	-0.01	-0.01	0.23	0.33	1.00	0.30	-0.05
IP10	IP Ethnic Ten.	0.01	0.14	0.13	0.09	0.10	0.13	0.20	0.30	1.00	-0.04
H2	H Fiscal Burden	0.14	-0.12	0.04	0.01	-0.01	-0.08	0.06	-0.05	-0.04	1.00

* As indicated, the subindex information pertained to the following country risk indices, more fully identified in Tables 1 - 9: F = Freedom House; H = Heritage; IE = ICRG Economic Risk; IF = ICRG Financial Risk; IP = ICRG Political Risk; E = Euromoney's Country Risk Index. ** Indicates the input is as a percentage of GDP.

TABLE 1-13: FACTOR LOADINGS OF RISK COMPONENTS

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
FH* Pol. Rights	.28	**.91**		.11		
FH Civil Lib.	.35	**.88**		.17		
H* Trade	**.50**	.40		.26		-.14
H Fiscal Burden	-.20	-.18	-.16	.17		.43
H Gov Interven.		.37	-.17	.39		.14
H Mon. Policy	**.72**		.16		.14	.43
H For. Invest.	.29	**.56**	-.12	.35		.13
H Bank/Finance	.40	.44		.34	.10	.19
H Wages/Prices	.31	**.50**	-.14	.31	.17	.24
H Prop. Rights	**.71**	.39		.24	.18	.20
H Regulation	**.63**	.29		.25	.17	.14
H Black Market	**.77**	.25	.11	.17	.15	.12
IE* GDP/Pop.	**.87**	.24	.14		.14	
IE GDP Growth						.24
IE Inflation	**.53**		.27		.12	**.51**
IE Bdgt. Bal.**	.35	.28	.12	.13	.25	.15
IE Cur. Acct.**	.30	.14			**.87**	
IF* Frn. Debt**	.41		.15		.35	-.24
IF Debt Serv.	.16		.20	.13	.25	.21
IF Cur. Acct.	.28	.15		.11	**.85**	
IF Int'l. Liq.	.26			.23	.11	
IF Ex. Rt. Stab.	.37		.10	-.16		
IP* Gov. Stab.			.25			.28
IP Socio. Cond.	**.77**	.15	.27		.20	.22
IP Inv. Profile	.26	.31	.15			.41
IP Internal Con.	.34	.34	**.70**		.10	.15
IP Ext. Con.		.41	.21	.11	.26	.25
IP Corruption	.40	**.51**	.30		.26	
IP Mil. in Pol.	.41	**.51**	**.51**	.12	.24	
IP Rel. Tensions	.15	.45	.18			
IP Law + Order	**.57**	.18	**.56**			
IP Ethnic Ten.	.13	.12	**.61**			
IP Demo. Acc.	.20	**.81**	.15	.19		
IP Bur. Quality	**.71**	.41	.19	.17	.20	
E* Pol. Risk	**.86**	.33	.22	.19	.21	
E Econ. Perf.	**.87**	.30	.19		.19	
E Debt Indicat.	.25	.18	.20	**.81**	.18	
E Default/Resh.	.20	.14		**.74**		.17
E Credit Rating	**.86**	.33	.21	.16	.12	
E Bank Finance	**.88**	.13	.14			
E ST Finance	**.85**	.26	.14	.21	.16	
E Cap. Markets	**.82**	.35	.22	.18		-.19
E Dis. On For.	**.85**	.20	.20	.17	.14	-.11

TABLE 2-1
DESCRIPTIVE INFORMATION

Risk/Other Variable	N	MINIMUM	MAXIMUM	MEAN	STD. DEV.	Cor. w/LogGNI cap
Euromoney*	157	-1.96	1.89	0.06	0.93	-0.91
Institutional Invest*	130	-2.02	1.48	0.00	1.00	-0.90
Heritage Intern'l*	156	-2.34	2.51	0.02	1.02	-0.76
Freedom House*	159	-1.32	1.74	0.01	0.99	-0.66
Transparency Int.*	99	-2.03	1.43	0.17	0.96	-0.84
ICRG Corruption*	135	-2.14	2.53	0.11	0.99	-0.59
ICRG Political*	135	-2.00	3.48	-0.03	1.04	-0.71
ICRG Financial*	135	-1.88	3.03	0.07	0.94	-0.66
ICRG Economic*	135	-1.78	4.24	0.22	1.08	-0.67
Single Risk Factor	88	-11.46	8.45	-1.44	5.68	-0.91
LogFDI per capita	106	-6.31	4.80	-1.44	2.36	0.35
LogGNI per capita	144	4.61	10.67	7.50	1.60	

* Each of the nine separate risk indices was standardized. Such standardization was performed on multiple years (1995 – 2001) of each index. The variance in mean and standard deviation in some instances from the 0 and 1 levels expected reflects the focus on the single year of data -- culled after standardization. The single risk factor is based on those standardized numbers.

TABLE 2-2
PRELIMINARY REGRESSION WITH RISK MEASURES
Linear Regression: FDI = GNI + Country-Risk Rating

Risk Index	N	R-Sq.	GNI Coeff	p-value	Risk Coeff	p-value*
Euromoney	98	.65	1.34	**0.00**	0.06	0.42
Institutional Invest	93	.66	1.28	**0.00**	-0.11	0.34
Heritage Intern'l	98	.66	1.05	**0.00**	-0.56	**0.00**
Freedom House	98	.65	1.23	**0.00**	-0.20	**0.10**
Transparency Int.	81	.72	1.08	**0.00**	-0.47	**0.02**
ICRG Corruption	94	.65	1.27	**0.00**	-0.02	0.44
ICRG Political	94	.66	1.18	**0.00**	-0.21	0.11
ICRG Financial	94	.66	1.34	**0.00**	0.18	0.15
ICRG Economic	94	.65	1.23	**0.00**	-0.12	0.22
Single Risk Factor	78	.72	1.04	**0.00**	-0.09	**0.04**

* The p values reflect a correction to adjust for the finite sample using the total countries and regions estimate of the United Nations of 228 (www.un.org).

TABLE 2-3
DESCRIPTIVE INFORMATION – ADJUSTED COUNTRY-RISK MEASURES
(INFORMATION VALUE)
(Using the original standardized risk numbers and removing the influence of GNI on each)

Risk/Information	N	MINIMUM	MAXIMUM	MEAN	STD. DEV.	Cor. w/LogGNI cap
Euromoney	142	-0.89	1.09	0.00	0.37	0.00
Institutional Invest	118	-1.17	1.25	0.00	0.43	0.00
Heritage Intern'l	143	-1.53	1.95	0.00	0.61	0.00
Freedom House	143	-1.36	2.35	0.00	0.71	0.00
Transparency Int.	97	-1.24	1.17	0.00	0.52	0.00
ICRG Corruption	120	-1.48	1.90	0.00	0.81	0.00
ICRG Political	120	-1.61	2.93	0.00	0.72	0.00
ICRG Financial	120	-1.81	1.96	0.00	0.66	0.00
ICRG Economic	120	-1.48	2.56	0.00	0.75	0.00
Single Risk Factor	87	-4.65	7.84	0.00	2.40	0.00

TABLE 2-4
HYPOTHESIS 2-1A – CORRELATION AND REGRESSION RESULTS
Linear Regression: FDI = Country-Risk Rating (original vs. adjusted to remove GNI influence)

	Correlation w/FDI		Regr. Coef. p-value		Regression p-value		R-Sq of Regression	
	Orig.	Adj.	Orig.	Adj.	Orig.	Adj.	Orig.	Adj.
Euromoney	-0.72	-0.08	0.00	0.22	0.00	**0.56**	0.52	**0.00**
Institutional Invest	-0.74	-0.15	0.00	0.16	0.00	**0.44**	0.55	**0.01**
Heritage Intern'l	-0.69	-0.08	0.00	**0.03**	0.00	**0.15**	0.47	**0.02**
Freedom House	-0.48	-0.05	0.00	0.16	0.00	**0.45**	0.23	**0.01**
Transparency Int.	-0.76	-0.06	0.00	**0.05**	0.00	**0.19**	0.57	**0.02**
ICRG Corruption	-0.46	0.10	0.00	0.17	0.00	**0.47**	0.21	**0.01**
ICRG Political	-0.62	-0.08	0.00	0.20	0.00	**0.51**	0.39	**0.00**
ICRG Financial	-0.43	-0.07	0.00	**0.10**	0.00	**0.33**	0.18	**0.01**
ICRG Economic	-0.55	-0.15	0.00	0.27	0.00	**0.64**	0.30	**0.00**
Single Risk Factor	-0.80	-0.12	0.00	**0.10**	0.00	**0.31**	0.65	**0.01**

TABLE 2-5
H2-1B ROBUST REGRESSION RESULTS*

	Regression Statistics		Coefficient Statisics**		
	N	Variance***	Coef	StdE	P-value
Intercept			-15.23	.91	**.00**
GNI			1.61	.10	**.00**
Pop Growth			.67	.14	**.00**
Adjusted Risk	77	.62	-.09	.05	**.06**
Adj. Euromoney	97	.53	-.29	.39	.23
Adj. Institutional Invest	92	.56	-.43	.31	**.08**
Adj. Heritage	97	.54	-.91	.25	**.00**
Adj. Freedom House	97	.54	-.45	.21	**.03**
Adj. Transparency Int'l	80	.59	-.31	.21	**.07**
Adj. ICRG Corruption	93	.52	-.11	.20	.29
Adj. ICRG Political	93	.53	-.42	.27	**.06**
Adj. ICRG Financial	93	.53	**.18**	.24	.23
Adj. ICRG Economic	93	.53	-.09	.21	.34

* The table reflects the results of separate regressions run for each of the risk measures – the single risk factor and the nine individual risk ratings. The regression results for the intercept, GNI and population growth are from the regression run using only the adjusted risk factor.

** The p-values and standard errors of the coefficients reflect a correction to adjust for the finite sample using the total countries and regions estimate of the United Nations of 228 (www.un.org).

*** Variance is the proportion of variation in response explained by the robust regression model.

TABLE 2-6
CORRELATIONS TABLE*

	N	FDI	GNI	Growth
FDI				
GNI		**.84**		
Pop Growth		-.24	-.51	
Adjusted Risk Factor	77	-.10	-.02	-.02
Adj. Euromoney	97	-.05	-.07	.07
Adj. Institutional Invest	92	-.07	-.07	.12
Adj. Heritage	97	-.13	-.01	-.10
Adj. Freedom House	97	-.07	-.01	.27
Adj. Transparency Int'l	80	-.12	-.02	-.14
Adj. ICRG Corruption	93	-.06	-.07	.18
Adj. ICRG Political	93	-.06	-.00	.22
Adj. ICRG Financial	93	.08	.04	-.08
Adj. ICRG Economic	93	-.05	-.02	-.08

* Separate correlations were run for each of the risk measures – the single risk factor and the nine individual risk ratings. The statistical package relied upon for the analysis, S-Plus, runs correlations as a panel without allowing for different "n's" that might be possible when one-on-one variable correlations are run. Thus, the n varies for each of the correlations as reflected for each of the risk measures. This does allow for some variance in the exact correlations between the other variables as the n changes (FDI vs. GNI vs. population growth). The correlations given for these first three items are from the correlations table run using only adjusted risk.

TABLE 3-1
DESCRIPTIVE STATISTICS OF DATA SET

		Regional Data Set	
		Emerg	Other
Population	**Mean**	16,798	73,027
	Std Dev	27,642	212,245
Growth Rate	**Mean**	**1.54**	**1.41**
	Std Dev	1.34	0.98
GNI	**Mean**	**6.91**	**8.61**
	Std Dev	1.17	1.72
FDI	**Mean**	**-2.23**	**-0.44**
	Std Dev	1.78	2.62
Adjusted Risk	**Mean**	**0.47**	**-0.69**
	Std Dev	2.59	1.91
Freedom House	**Mean**	-0.08	0.16
	Std Dev	0.69	0.73
Heritage	**Mean**	0.02	-0.04
	Std Dev	0.63	0.59
ICRG Corruption	**Mean**	0.02	-0.04
	Std Dev	0.74	0.92
ICRG Econ Risk	**Mean**	0.04	-0.07
	Std Dev	0.82	0.63
Euromoney	**Mean**	0.12	-0.22
	Std Dev	0.36	0.27
ICRG Fin. Risk	**Mean**	0.04	-0.07
	Std Dev	0.69	0.62
Inst'l Investor	**Mean**	0.14	-0.22
	Std Dev	0.38	0.40
ICRG Pol. Risk	**Mean**	0.00	0.00
	Std Dev	0.80	0.57
Transparency Int.	**Mean**	0.10	-0.16
	Std Dev	0.49	0.53

TABLE 3-2
ROBUST REGRESSION RESULTS: EMERGING VS. OTHER COUNTRIES

	REGIONAL GROUPS									
	Emerg					Other				
	N	Prop. Var. *	Coef Sign	Value	P value **	N	Prop. Var.*	Coef Sign	Value	P value **
Log GNI per cap			+	1.42 – 1.55	**.00**			+	1.44 – 2.19	**.00**
Growth rate			+	.51 - .66	**.00 - .03**			+ ***	.22 – 1.60	**.00 - .29**
Adjusted Risk	46	.53	-	-.02	.35	31	.57	-	-.28	**.01**
Freedom House	58	.44	-	-.67	**.00**	39	.66	-	-.10	.39
Heritage	58	.39	-	-.41	**.07**	39	.66	-	-1.52	**.00**
ICRG Corruption	54	.39	-	-.22	.24	39	.65	-	-.10	.37
ICRG Econ Risk	54	.38	+	.12	.35	39	.65	-	-.75	**.01**
Euromoney	58	.39	-	-.13	.44	39	.61	-	-2.86	**.00**
ICRG Fin. Risk	54	.38	-	-.09	.39	39	.63	+	.22	.36
Inst'l Investor	54	.46	-	-.15	.35	38	.60	-	-2.32	**.00**
ICRG Pol. Risk	54	.39	-	-.14	.38	39	.86	-	-1.54	**.00**
Transparency Int.	49	.50	-	-.07	.41	31	.68	-	-.35	.28

* Prop. Var. is the Proportion of variation in response to and explained by the model. The information is given by risk measure.

** The p values reflect a correction to adjust for the finite sample using the total countries and regions estimate of the United Nations of 228 (www.un.org), adjusted by the number of countries included in the other group. Thus, for calculations involving emerging market countries, the finite sample correction conservatively assumed the total number of emerging countries to be 228 – 62 countries listed as other = 166. The correction for other market countries involved the calculation of 228 – 98 countries listed as emerging = 130.

*** The coefficient for growth rate is not significant in the regressions involving other countries with the following risk data by the following groups: Freedom House, Heritage Foundation, ICRG Corruption Index, ICRG Financial Risk Index and Transparency International.

APPENDIX 2-A

TABLE 2-A

Linear Regression: Risk = GNI + population + inflation *

	Regressn		Size-GNI		Populatn		Inflation	
	n	Rsq	Coef	p	Coef	p	Coef	p
Euromoney	103	.86	-.52	**.00**	.00	**.00**	.01	**.00**
Institutional Invest	93	.86	-.57	**.00**	.00	**.00**	.01	**.00**
Heritage Intern'l	104	.61	-.43	**.00**	.00	.14	.01	**.02**
Freedom House	104	.40	-.37	**.00**	.00	**.09**	-.00	.22
Transparency Int.	80	.70	-.53	**.00**	.00	.47	.00	.18
ICRG Corruption	92	.35	-.35	**.00**	.00	.13	.01	.11
ICRG Political	92	.51	-.40	**.00**	.00	**.10**	.01	**.06**
ICRG Financial	92	.57	-.35	**.00**	.00	**.00**	.02	**.00**
ICRG Economic	92	.59	-.38	**.00**	.00	**.10**	.02	**.00**
Single Risk Factor	74	.86	-3.22	**.00**	.00	.15	.06	**.00**

* The p-values of the coefficients reflect a correction to adjust for the finite sample using the total countries and regions estimate of the United Nations of 228 (www.un.org).

APPENDIX 3-A
COUNTRY GROUPINGS

Group 1: English/Anglo-oriented

Australia
Bahamas
Canada
Great Britain
Ireland
New Zealand
Panama
United States

Group 2: Middle East

Bahrain
Cyprus
Egypt
Iran
Iraq
Israel
Jordan
Kuwait
Lebanon
Libya
Oman
Pakistan
Qatar
Saudi Arabia
Syria
United Arab Emirates
Yemen

Group 3: Western Europe

Austria
Belgium
France
Germany
Italy
Luxembourg
Malta
Monaco
Portugal
Spain
Switzerland

Group 4: Scandinavia

Denmark
Finland
Iceland
Netherlands
Norway
Sweden

Group 5: Asia/India

Bangladesh
Brunei
Burma
Cambodia
China
Fiji
Hong Kong
India
Indonesia
Japan
Laos
Malaysia
Nepal
Philippines
Singapore
South Korea
Sri Lanka
Thailand
Taiwan
Vietnam

Group 6: Africa

Algeria
Angola
Benin
Botswana
Burkina
Burundi
Cameroon
Cape Verde
Chad
Congo/Zaire
Cote D'Ivoire
Ethiopia
Gabon
Gambia
Guinea
Kenya
Lesotho
Madagascar
Malawi
Mali
Mauritius
Morocco
Mozambique
Namibia
Niger
Nigeria
Rwanda
Senegal
Sierra Leone
South Africa
Sudan
Swaziland
Tanzania
Tunisia
Uganda
Zambia
Zimbabwe

Group 7: South/Central America

Argentina
Barbados
Belize
Bolivia
Brazil
Chile
Columbia
Costa Rica
Cuba
Dominican Republic
Ecuador
El Salvador
Guatemala
Guyana
Haiti
Honduras
Jamaica
Mexico
Nicaragua

Paraguay
Peru
Suriname
Trinidad and Tobago
Uruguay
Venezuela

Group 8: Russia/Eastern Europe

Albania
Armenia
Azerbaijan
Belarus
Bulgaria
Croatia
Czech Republic
Estonia
Georgia
Greece
Hungary
Kazakhstan
Latvia
Lithuania
Moldova
Mongolia
North Korea
Poland
Romania
Russia
Slovenia
Slovakia
Turkey
Ukraine

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