

# **Economic Freedom and Short-term Real Interest Rate Premia in Less Developed Countries:**

*A study of the explanatory value of the Fraser Institute's Economic Freedom  
Index in determining real interest rate spreads for LDC's*

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## **Abstract**

This research studies the relationship between economic freedom in less developed countries (LDC's) and the corresponding short term real interest rate premia required in those countries to attract creditors. Although the phenomenon of higher real interest rates in LDC's is a commonly accepted occurrence, there is still much debate over what to attribute the risk premia to and which risk factors are most significant. Previous studies have used country credit ratings, conditional economic convergence, economic growth, fiscal and monetary policy, and political freedom to explain observed premia in real interest rates. This study approaches the issue of real interest rate premia for LCD's by focusing instead on economic freedom, which is a broad measure that incorporates many of the political, legal, economic, and fiscal factors that have been applied individually in previous studies. As its measure of economic freedom, the research employs annual data collected from the Fraser Institute's Economic Freedom of the World Index (EFW). The study compiles average EFW scores and average real interest rate spreads for 60 countries from 1995-2002. Regression analyses based on this data show a significant negative relationship between economic freedom and real interest rate premia (lower premia for economically free countries), which becomes stronger as the countries are grouped by region (Asia, Africa, Latin America, Eastern Europe, OECD). The study concludes by examining the relationship between real interest rate spreads and individual components of the EFW index, such as property rights and freedom to trade. The results of these analyses show that economic freedom and several components of the EFW index have significant explanatory value in determining short term real interest rate premia and should therefore be a considered criterion when making investments in emerging market sovereign debt.

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## **I. Introduction**

The relationship between risk and return is one of the most highly documented and fundamental relationships in all of finance. The relationship stands as the basis of efficient financial markets and at the core of modern portfolio theory. Despite the many complicated measures of risk and return, denotations such as beta, alpha, *ex ante* risk and return, *ex post* risk and return, unsystematic risk and systematic risk, and variance, at its heart, the relationship between risk and return remains a function of common sense. Investors expect to be compensated for taking financial risks. Moreover, investors expect to be compensated for taking on risk in a manner commensurate with the amount of risk being undertaken. Although proponents of modern portfolio theory would continue this discussion to describe the types of risks encountered by investors and which they are to be compensated for, this basic relationship between risk and return is sufficient for the purposes to be outlined in this work.

As would be expected, these same basic concepts of the risk-return relationship should apply across asset classes and country borders. Although investing in sovereign debt in a developed country is a very different procedure than investing in sovereign debt from an emerging market, it should be expected that the same risk-return concepts apply. Investors should be compensated through an expected return proportional to the risks they are undertaking. As financial markets and instruments develop, these differing risk levels are monetized through interest rate premiums, spreads, devaluations, appreciations, and many other market phenomena that signal changing expectations about the future risk or expected return associated with the financial instrument.

One observed market phenomenon has been the historically high real interest rates in LDC's as compared to real rates of return in developed countries. This observable trend intuitively makes sense, since LDC's have over time presented a greater risk to creditors than more developed, stable economies. Although high real rates of return have been observed and expected by the academic community, there is still much debate over which factors to attribute this real interest rate premium to. Some of the approaches to this issue have attempted to explain real interest rate premia through country credit ratings, conditional economic convergence, economic growth, fiscal and monetary policy, and political freedom. Despite the volume of research, there is still no clear factor or set of factors that explain real interest rate premia for LDC's.

Developing a clear set of driving factors for the real interest rate premia stands as an extremely important task, since investment in emerging markets through investment funds, American Depository Receipts (ADR's), and sovereign debt has been growing rapidly. In fact, for countries such as Mexico, U.S. investors hold as much as 25% of the equity market (Thomas and Warnock, 2002). As emerging markets continue to attract investment dollars, it is important to determine which factors drive the risk of investment in an LDC, just as it would be important to understand the risk component of any security in which one is investing.

In order to better understand these sources of risk, this research proposes to determine the relationship between short-term real interest rate premia for LDC's and economic freedom. The developed world has provided an example of how sound political, economic, and legal institutions can lead to enhanced financial and economic stability. This stability leads to a decreased perception of risk of investing in developed

countries and smaller real interest rate premia. This research attempts to formalize this relationship. The measure of economic freedom implemented in the research is the Fraser Institute's Economic Freedom of the World Index (EFW). This five-component index ranks countries based on structure of government, security of property rights, access to sound money, freedom to trade internationally, and business regulation. After compiling average EFW scores and average real interest rate premia for 60 countries from 1995-2002, the study finds a significant negative relationship between economic freedom and real interest rate premia. When the 60 countries are broken in regions (Asia, Africa, Latin America, Eastern Europe, OECD), this relationship becomes even more robust. Through this analysis, the research displays how economic freedom is a significant factor in determining short term real interest rate spreads and should therefore be considered when investing in the sovereign debt of emerging markets.

## **II. Background Studies**

The study of emerging markets and their financial and economic dynamics has been an ongoing process. One key impediment to this process has been an overall lack of consistent and reliable data from which to determine relationships and trends. Recently, more consistent data for a larger range of countries has become available, allowing researchers to delve into questions such as the sources of real interest rate premia for LDC's.

Studies in this subject area have logically progressed over the last 25-30 years. Early studies focused on determining if there indeed was some sort of real interest rate premia for LDC's. After finding that this was the case over time, researchers moved forward and devoted their work to determining the sources of these premia. As explained

earlier, data became an obstacle at this point, as some of the most consistent and useful data, such as the Economic Freedom of the World Index, has only become available in the last 10 years. Despite these barriers, many researchers were still able to add value through their research to country risk analysis during this time period. Several of the models used to help explain real interest rate premia focused on country credit ratings, conditional economic convergence, economic growth, fiscal and monetary policy, and political freedom. Although these techniques have had some success, there is still debate over which factors are truly behind real interest rate premia for LDC's. This research hopes to shed light on this debate by implementing some of the new data now available to researchers of emerging markets.

#### ***A. The Real Interest Rate Premium: Does it Exist?***

Before any rigor can be applied in determining the sources of real interest rate premia for LDC's, it must first be determined that there is a premium. Intuitively, it would be expected that LDC's did carry a risk premium, since over time they have presented a greater loan risk to investors. Early researchers in this area keyed in on this fact and formulized the relationship between LDC's and higher real interest rates. Aliber (1973) was one of the first researchers to approach this issue, relating differences in real interest rates to differences in political risk. He defined political risk as "the probability that the authority of the state will be interposed between investors in one country and investment opportunities in other countries" (p. 1453). In other words, political risk is the risk that future controls will be placed on capital flows. Dooley and Isard (1980) refined this idea, arguing that there was a historical tendency for LDC governments to go substantially into debt to foreigners and to renege on this debt through capital controls,

taxation, or outright default. Over time, investors become aware of this tendency and are reluctant to lend to LDC's unless they are properly compensated through higher real rates of return. For the period from 1970-1974, Dooley and Isard (1980) found that a 2% annual political premium was required for nonresidents to hold the excess supply of German outside debt.

By the mid 1980's, the concept of a risk premium for LDC's was becoming more accepted. A lack of real interest rate correlation across countries continued to be observed and documented through the works of Mishkin (1984), Cumby and Obstfeld (1984), Mark (1985), Cumby and Mishkin (1986), and Gaab, Granziol, and Horner (1986). Although new explanations for observed real interest rate differences, such as level of debt and barriers to capital movement, began to surface, the general idea of a risk premium for LDC's continued as the norm. Darby (1986) associated a country's real interest rate premium to its level of foreign borrowing.

The incomplete linkage of real interest rates internationally appears to reflect risk premiums which vary with the size of a nation's foreign borrowing (Darby, 1986, p. 420)

Others, such as Koraczyk (1985), suggested that differing real rates of return may be due to market segmentation or barriers to capital movement across currencies. However, overall he suggested that a major driver of differing real rates was the common sense concept that "in a world with risk-averse investors, differences in risk will lead to differences in expected returns" (Koraczyk, 1985, p. 350). At this point during the 1980's, the real question being asked in the research community shifted from whether

there was a real interest rate premium for LDC's to what factors were most significant in determining the observed premia.

### ***B. Possible Explanations for the Real Interest Rate Premium***

Studies focused on determining the source of real interest rate premia for LDC's have approached the subject in several manners. In examining the results of these many studies, it is helpful to break the studies into three distinct types; political, financial, and economic. The political approaches have examined the property rights, legal structure, and stability of the country's government to determine risk premiums for LDC's. The financial approaches are by far the most widely used and tested. These approaches have focused on Debt/GDP ratios, country credit ratings, discounted exchange rates, dividend yields, and price-to-book ratios to obtain a valid measure of country risk. A final measure implemented by researchers has been the economic approach, which focuses on financial integration to explain cross-country differences in real interest rates.

### ***C. Political Approaches***

As explained earlier, some of the initial work in the study of emerging markets began with the hypothesis that political risk was a driving factor behind observed real interest rate premiums. After observing differing cross country real interest rates, Aliber explained that

differences in political jurisdiction lead to political risk. Political risk need not reflect any dramatic political events; rather investors need only be concerned that the authorities might apply exchange controls between the date a foreign investment is made and the date when repatriation is expected. Thus, political risk is associated with the legal jurisdictions in which various financial assets are issued. (Aliber, 1973, p. 1453)

Recent studies have reiterated these early beliefs on the impact of political risk on real interest rate spreads for emerging markets. Using analyst estimates of political risk, Diamonte, Liew, and Stevens (1996) found that political risk is a statistically significant determinant of stock returns in emerging markets. Moreover, tests of subjective risk assessment by international bankers have reiterated the relationship between perceived political risk and credit prices. Based on an *Institutional Investor* (June 1979) survey of 90 banks involved in international lending, Feder and Ross (1982) found that a systematic relation between bankers' subjective probabilities and credit terms existed in the Euromarket. Furthermore, on an aggregate level, political risk premia have been shown to relate to the overall supply and demand of capital. Dooley (1986) found that political risk premia had a significant negative relationship with capital flight, signifying that as risk premia increased less capital flight occurred. Dooley explained that this was the case because the differential risk faced by the investor decreases as he is compensated more handsomely through a greater risk premium. Therefore, Dooley's work provides further evidence for the necessity of a risk premium to obtain and maintain needed capital for LDC's. Bekaert, Erb, Harvey, and Viscanta (1997) take these approaches even further and make the case that political risk is a priced risk in emerging markets and that increased political ratings lead to lower costs of capital.

#### ***D. Economic Approaches***

Economic approaches have focused on international financial integration as an explanation of cross country differences in real interest rates. The integration framework, as outlined by Lothian (2002), states real interest rate equalization and real stock return equalization as conditions for financial integration. Any deviations from these conditions

point to a lack of complete integration. Thus, a real interest rate premium for LDC's could be the result of not having financially integrated capital markets. Francis, Hasan, and Hunter (2002) solidify this point by studying pre- and post liberalization periods for several emerging markets. They determined that liberalization of capital markets significantly affected the nature of the risk premium. Countries which lacked liberalized and integrated capital markets carried a risk premium, as exhibited through excess expected returns embedded in their exchange rate.

For a small sample of large, developed countries, Obstfeld and Taylor (2002) found that real interest rate differentials have stayed relatively close to a zero mean over the long run. However, as described in Lothian (2002), short term real interest rates for LDC regions, such as Asia, Africa, and Latin America, have experienced far greater cross-country deviations in real returns over the long run (1970-2000), as compared to OECD cross-country real rate deviations. As increased variance is often associated with increased risk, these more varied deviations in real interest rate returns for LDC regions provide further evidence for a risk premium for LDC regions and their component countries.

### ***E. Financial Approaches***

Studies focused on financial ratios and data, such as Debt/GDP ratios, country credit ratings, discounted exchange rates, dividend yields, and price-to-book ratios, have been the most widely used in recent attempts to determine sources and evidence of real interest rate premia. In studying real interest rate differentials across European countries, Flavin and Limosani (1998) found that Debt/GDP ratios were a significant factor for determining real interest rate risk premia. However, in a study of OECD countries,

Stanford (1997) found that Debt/GDP ratios were only significantly correlated with real interest rates for 10 percent of the study's total regressions. Moreover, Stanford found a negative relationship between real interest rates and Debt/GDP ratios twice as many times as a positive relationship was found.

Conflicting conclusions for Debt/GDP ratios have led several researchers to try to discern country risk premia from exchange rates, dividend yields, price/book ratios, and country credit ratings. Francis, Hasan, and Hunter (2002) found that in the case of several emerging markets, higher probabilities of financial distress were proportional to the excess returns expected from holding the currency. Therefore, higher risk premia were compensated through higher expected currency returns. Analysis of equity markets have also developed some relationships between real interest rate premia, dividend yields, price/book ratios, and country credit ratings. In a study of 40 countries, Erb, Harvey, and Viskanta (1995) found that countries with the highest credit risk also have the highest dividend yields. Continuing this effort, Erb, Harvey, and Viskanta (1996) also found a relationship between lower credit risk countries and low price/book ratios. For a broad section of government bond markets for both developed and emerging markets, Erb, Harvey, and Viskanta (1997) discover strong correlation between sovereign real yields and risk ratings. This correlation once again reinforces the relationship between country risk and real interest rate premia.

#### ***F. Summary of Previous Studies: Lessons Learned***

As displayed in the previous sections, many different methods have been implemented in the past 20 years to determine the sources of real interest rate premia for LDC's. Despite these many attempts, no clear method has proven to overwhelmingly

predict real interest rate premia. A reason for this may be due to the difficulties of studying emerging markets in general. Lack of data, changing environments, and differing circumstances among LDC's make any complete description of their real interest rate dynamics inherently challenging. However, a few key lessons can be learned from previous research so as to improve attempts to determine the sources of real interest rate premia in the future.

1. Emerging markets are complex entities and as such require broad descriptions to fully explain their complicated dynamics.
2. Previous data on emerging markets was riddled with breaks and consistent large adjustments. New, more accurate data is therefore crucial in discerning the correct relationships.
3. Due to the complexity of emerging markets, our best hope is to continue to evaluate their real interest rates in comparison to a multitude of factors, so that further down the line, a more complex theory of real interest rate premia may be developed.

### ***G. The Case for Economic Freedom as a Determinant of Real Interest Rate Premia***

With these three lessons in mind, this research introduces economic freedom, as measured by the Economic Freedom of the World Index, as a key factor in determining real interest rate premia for LDC's. It is believed that the EFW framework for determining real interest rate spreads is a positive step in developing a more complex theory for real rates of return, since it is driven by the lessons taught from previous research attempts. Some of the most successful attempts in the past have relied on country credit and risk ratings. These ratings are broad measures of political, economic, and financial risk factors as determined by ratings agencies. The EFW framework builds off this success by applying an even broader framework, which includes a detailed

analysis of property rights, freedom to trade, business regulation, access to sound money, and government tax and debt structure. Moreover, the EFW approach outlined in this research relies on relatively new, accurate data for 60 countries from the Fraser Institute and the International Monetary Fund's International Financial Statistics (IFS) database for 1995-2002. By applying a broad index, such as the EFW, to determine relationships between economic freedom and real interest rates in LDC's for relatively new data, the author tries to follow in the footsteps of previous researchers and shed light on the sources of real interest rate premia, which have been elusive in previous attempts thus far.

### **III. Research Objectives**

This study extends previous research in three ways:

1. The research introduces a new framework (the EFW framework) by which to determine real interest rate premia for LDC's.
2. The research employs the new EFW framework for a sample of 60 countries, using recent, up-to-date data. This sample size provides a more diverse representation than that of samples used in previous research, which lacked either a large number of observations (10-20 countries) or diversity of observations (data only for developed or emerging markets).
3. The study directly approaches the issue of real interest rate premia for LDC's. As opposed to previous studies which have approached the issue as a side note to other topics, such as financial integration, exchange rate determination, and equity market returns, this research attempts to directly determine observed real interest rate spreads and to provide an explanation for these spreads through the EFW framework.

## **IV. Hypotheses**

By implementing the EFW framework, the study tests the following hypotheses:

**H<sub>1</sub>:** Average scores from the “chain-linked” index of the Economic Freedom of the World Index should exhibit a negative relationship when compared to average real interest rate spreads (spread over the OECD average) for the 60 observed countries (In other words, higher economic freedom should be correlated with low real interest rate spreads).

**H<sub>2</sub>:** The property rights and freedom to trade components of the Economic Freedom of the World Index should exhibit negatively correlated average scores when compared to average real interest rate spreads (Greater property rights and freedom to trade should be correlated with low real interest rate spreads).

Hypothesis 1 and 2 both follow the conclusions of prior work in this field, which has found that more developed and economically free countries have on the margin had lower real interest rate spreads than developing countries which still may apply capital control and other restraints (thus constituting a greater risk to investors).

## **V. Methodology**

The research is basically composed of 3 main parts, each with its own subset of steps:

### **A. Real Interest Rate Spread Data (1995-2002)**

1. Collection of short-term and long-term government interest rate data and corresponding CPI data from 1990-2004 for each observation.
2. Calculation of real interest rates for 1990-2004 based on the nominal interest rate and CPI data.

3. Calculation of 5-year rolling averages of the real interest rates for 1995-2002.
4. Calculation of the 1995-2002 average of the 5-year rolling averages of real rates for each observation and for 5 regional groups (Africa, Asia, Eastern Europe, Latin America, OECD Countries).
5. Comparison of 4 regional groups versus the OECD average real interest rates for 1995-2002 to display the real interest rate premia.
6. Determination of real interest rate spreads by subtracting the OECD real interest rate average from individual country real rates.

**B. Economic Freedom of the World Index Average Scores (1995-2002)**

1. Calculation of average “chain linked” index EFW scores for each observation and for each regional group for 1995-2002.
2. Calculation of average EFW scores for each observation and for each regional group for the property rights and freedom to trade components of the EFW index from 1995-2002.

**C. Regression and Scatter Plot Analysis**

1. OLS regressions on the average EFW score-to-spread data for each observation and each regional group for the “chain-linked” index.
2. Reiterate these regressions for the component indexes and their score-spread data.

Each one of these of these components is discussed in depth in the data section.

## VI. Data & Overview of Empirical Results

In the following analysis, the study uses data from two main sources; (1) the Fraser Institute's Economic Freedom of the World Index 2004 dataset and (2) the International Monetary Fund's International Financial Statistics (IFS) database for February 2005. As explained earlier, the Economic Freedom of the World Index ranks countries based on five different component indexes and then generates one "economic freedom" score based on these components<sup>1</sup>. Data were compiled from these two sources for 60 countries, both emerging and developed markets, which were then broken up by region (Table 1<sup>2</sup>). The chosen period of analysis was for 1995-2002. This period was chosen due to the constraints of data availability. For longer periods, the interest rate and CPI data for emerging market regions contain only a few of the countries being studied, thus not giving an accurate portrayal of the overall relationships being tested. From 1995-2002, each of the 60 observations has some data available, with the majority of the observations having complete data sets.

### *A. Real Interest Rate Spreads*

To calculate the real interest rate spreads, annual short-term interest rate and CPI data was collected for each of the 60 countries from 1990-2004. Annual real interest rates were then calculated according to the following equation:

$$R_t = I_t - [(\text{LN}(\text{CPI}_t - \text{CPI}_{(t-1)})) * 100]$$

where  $R_t$  = Annual Real Interest Rate  
 $I_t$  = Annual Short-term Interest Rate  
 $\text{CPI}_t$  = Current Year's Consumer Price Index

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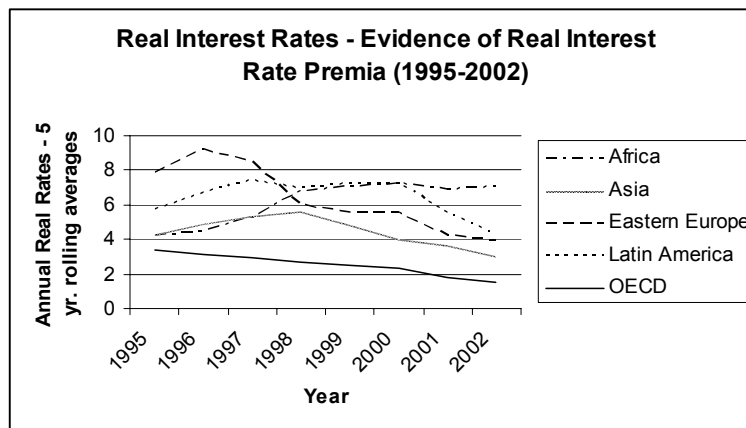
<sup>1</sup> For more information on the EFW Index, components, and scores, please refer to Appendix C

<sup>2</sup> A collection of all tables can be found in Appendix B

$$CPI_{(t-1)} = \text{Previous Year's Consumer Price Index}$$

Because the research uses *ex post* inflation data to approximate *ex ante* inflation, an error term between these two measurements was expected. To reduce this error term, a five-year rolling average technique was implemented. Five year rolling averages of the real rates were calculated for the period from 1995-2002. These real interest rates were then grouped by region and averaged yearly from 1995-2002. Each region's real interest rate averages were then compared versus OECD<sup>3</sup> averages for the same period to determine the existence of real interest rate premia. The results of this comparison agree with the assumption of real interest rate premia and are shown below<sup>4</sup> in Figure 1.

Figure 1



Real interest rate spreads for each country were calculated using the following equation:

$$C_{(95-02)} = R_{(95-02)} - OECD_{(95-02)}$$

where  $C_{(95-02)}$  = Average individual country real interest rate spread from 95-02

<sup>3</sup> Turkey was excluded from the OECD group due to its unrepresentative spread levels, as compared to its OECD peers.

<sup>4</sup> An expanded section containing all figures is available in Appendix A

$R_{(95-02)}$  = Average individual country real interest rate from 95-02

$OECD_{(95-02)}$  = Average OECD real interest rate from 95-02

In other words, an average of the individual OECD average real rates for the period 1995-2002 was taken as a base spread level. This base rate was then subtracted from each individual country's real interest rate average for 1995-2002 to determine its spread over the OECD average.

### ***B. Economic Freedom of the World Index Average Scores (1995-2002)***

From the EFW index, simple averages were taken of individual country "chain linked" scores for 1995-2002. Simple averages were also taken of the property rights component and freedom to trade component. These averages were then organized with the real interest rates spreads calculated earlier (Tables 2-6). Descriptive statistics such as mean, standard deviation, and range were then calculated for spread level, EFW score, political score, and freedom to trade score for each region. These statistics are shown along with Tables 2-6 and a regional comparison is shown in Table 7.

### ***C. Regression & Scatter Plot Analysis***

Based on the spread-score data discussed in Tables 2-6, scatter plots were developed for each region for EFW overall score, political score, and freedom to trade score; all versus average spread (Figures 2(a,b,c) – 6(a,b,c)). Then, scatter plots were developed for the entire 60 countries in regards to EFW overall score, political score, and freedom to trade score all versus average spread (Figures 7-9). The resulting scatter plots are shown below.

Figure 7

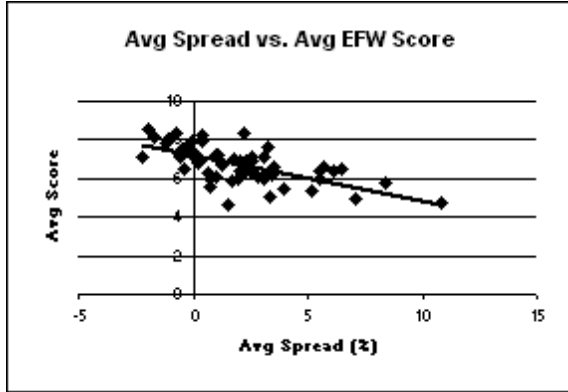


Figure 8

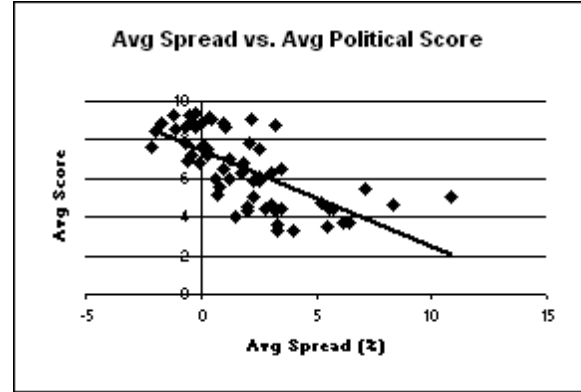
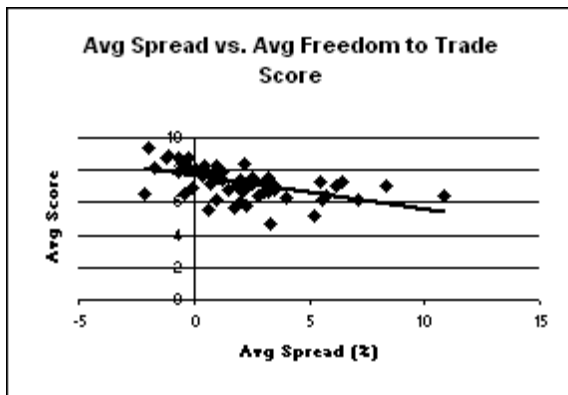


Figure 9



For the entire 60 countries, EFW score is a significant predictor of average spread ( $R^2=.428$ , Figure 7, Table 8a). The same regression using political score as the independent variable also yields very significant results ( $R^2=.466$ , Figure 8, Table 8b). The results for freedom to trade score are less powerful but still significant ( $R^2=.283$ , Figure 9, Table 8c)<sup>5</sup>. When the data were compiled by region into average spreads, regional EFW scores, regional political scores, and regional freedom to trade scores, all three variables prove to be extremely good predictors of the expected regional real interest rate spreads, as shown below (Figure 10, 11, 12; Table 10). These results provide strong support for the hypotheses developed earlier in the research.

<sup>5</sup> A comparison of these regression statistics is available in Table 9.

Figure 10

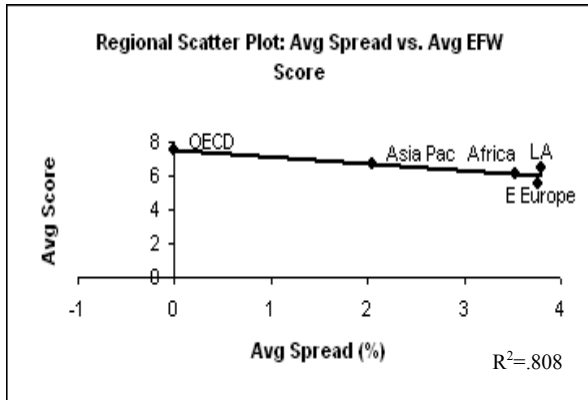


Figure 11

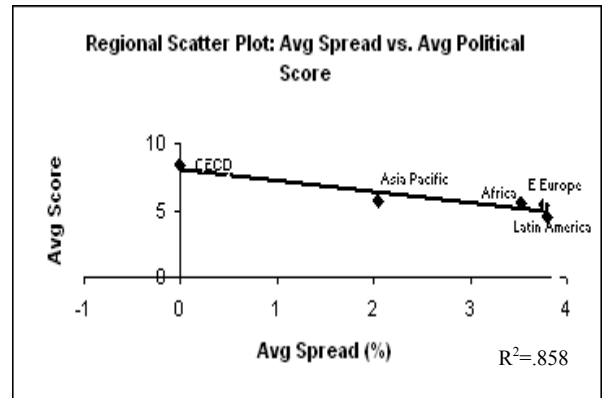
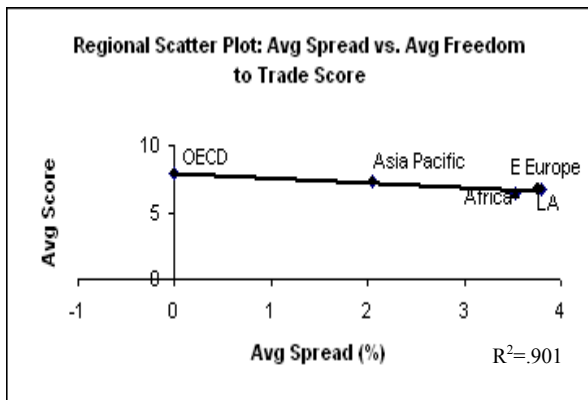


Figure 12



## VII. Conclusions

Political, economic, and financial factors all contribute to the complexity of deriving a risk-return relationship for emerging market sovereign debt. For over 30 years, academic research has tried to formalize and quantify this relationship with varying levels of success. However, despite these pursuits, there is still no clear method for determining real interest rate premia for LDC's. Following the pursuits of previous researchers and the results of using country credit ratings, financial integration, and other measures to determine real interest rate spreads for emerging markets, this research

offered up the EFW framework as an alternative method to explain this complicated relationship. Based on the empirical results of this study, the EFW framework for determining real interest rate spreads for LDC's is an appropriate and useful tool. The hypotheses that economic freedom and its component indices would be significant predictors of real interest rate premia have been supported by the empirical evidence shown in this study. Economic freedom and its political and freedom to trade components help explain the movement of real interest rate premia over time and therefore should be considered when investing in emerging markets sovereign debt.

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Appendix A – Figures

Figure 1 – Real Interest Rates Across Regions

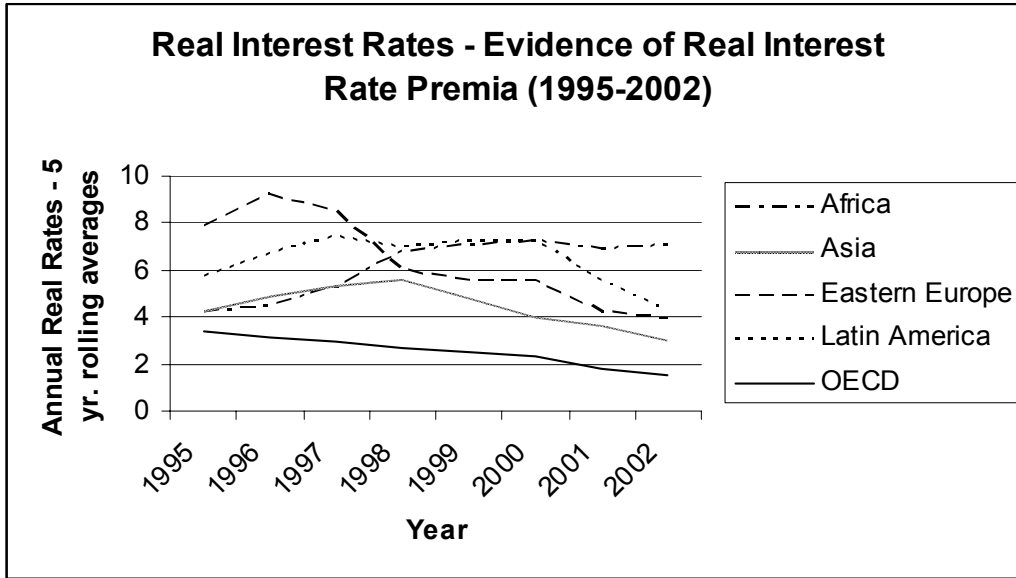


Figure 2 (a,b,c) – OECD Spread vs. Score Scatter Plots

Figure 2a

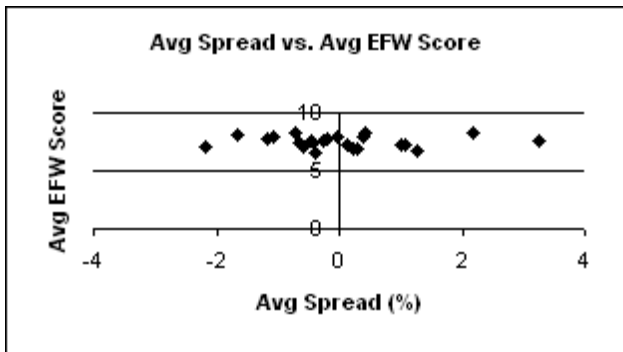


Figure 2b

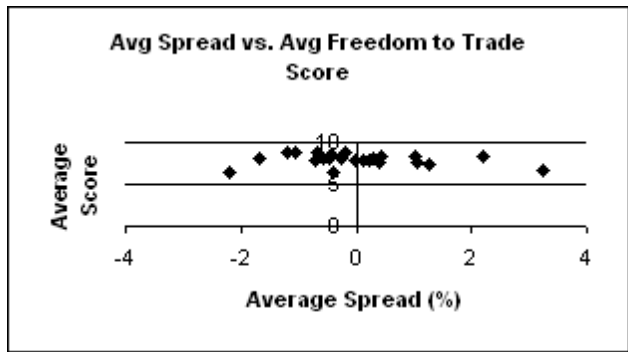


Figure 2c

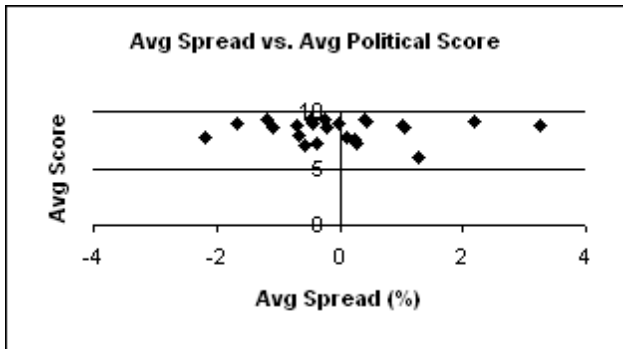


Figure 3 (a,b,c) – Africa Spread vs. Score Scatter Plots

Figure 3a

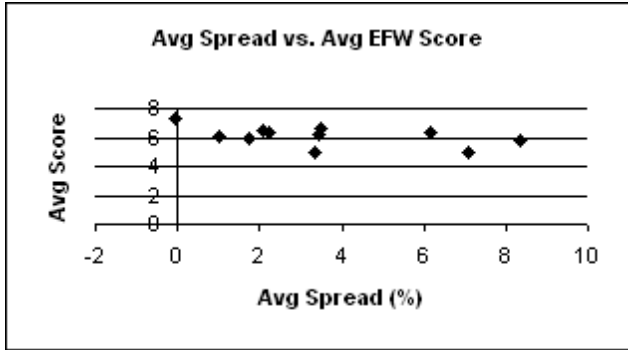


Figure 3b

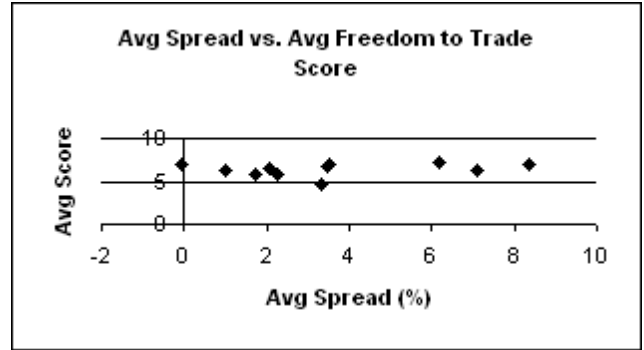


Figure 3c

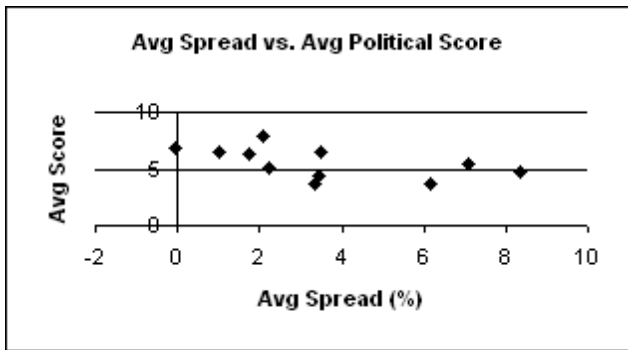


Figure 4 (a,b,c) – Asia Pacific Spread vs. Score Scatter Plots

Figure 4a

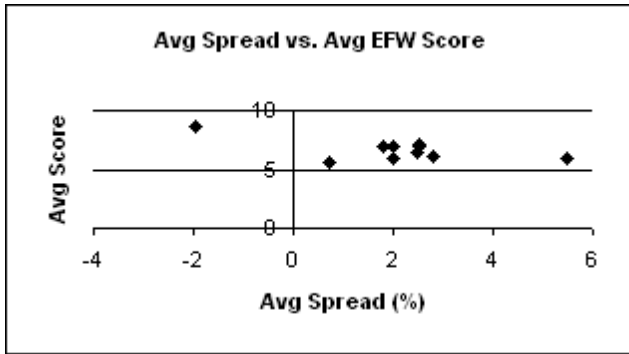


Figure 4b

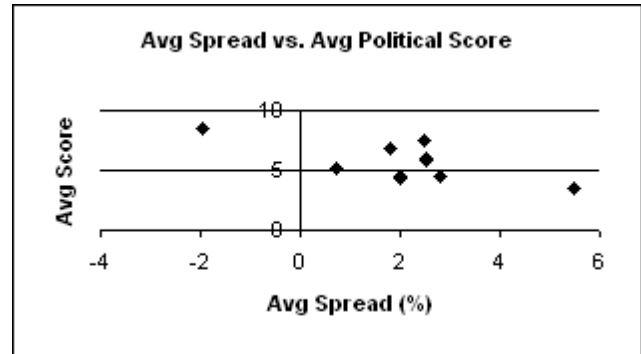


Figure 4c



Figure 5 (a,b,c) – Latin America Spread vs. Score Scatter Plots

Figure 5a

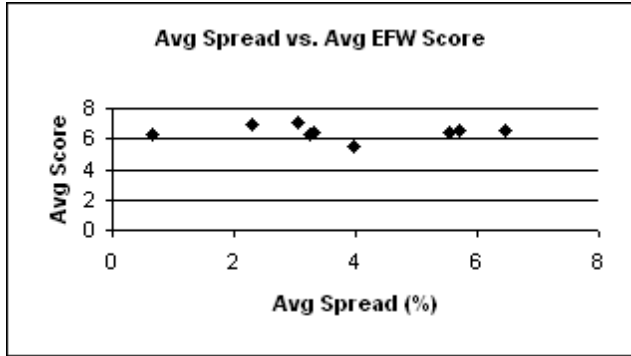


Figure 5b

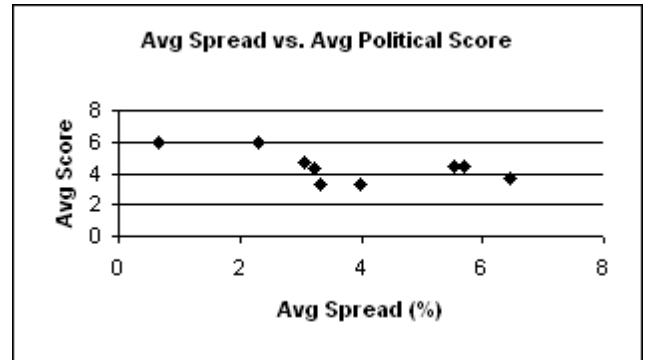


Figure 5c

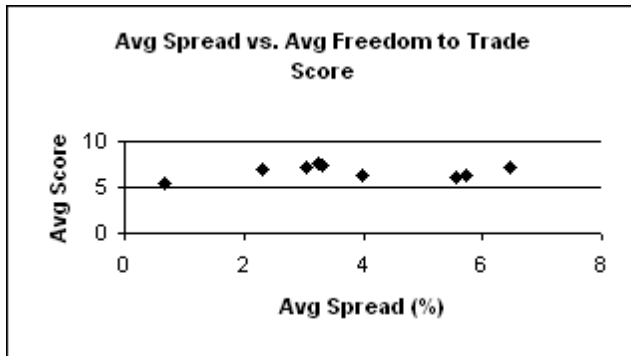


Figure 6 (a,b,c) – Eastern Europe Spread vs. Score Scatter Plots

Figure 6a



Figure 6b

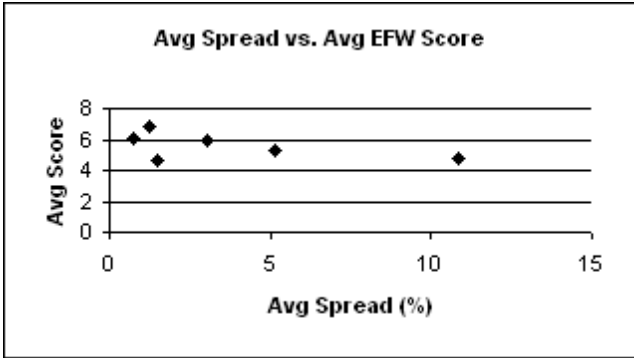


Figure 6c

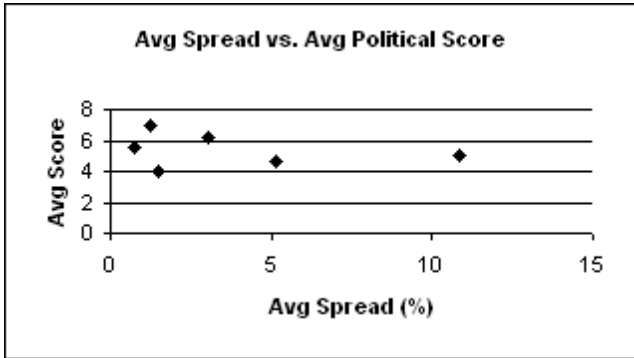


Figure 7 – Average Spread vs. Average EFW Score – All Countries

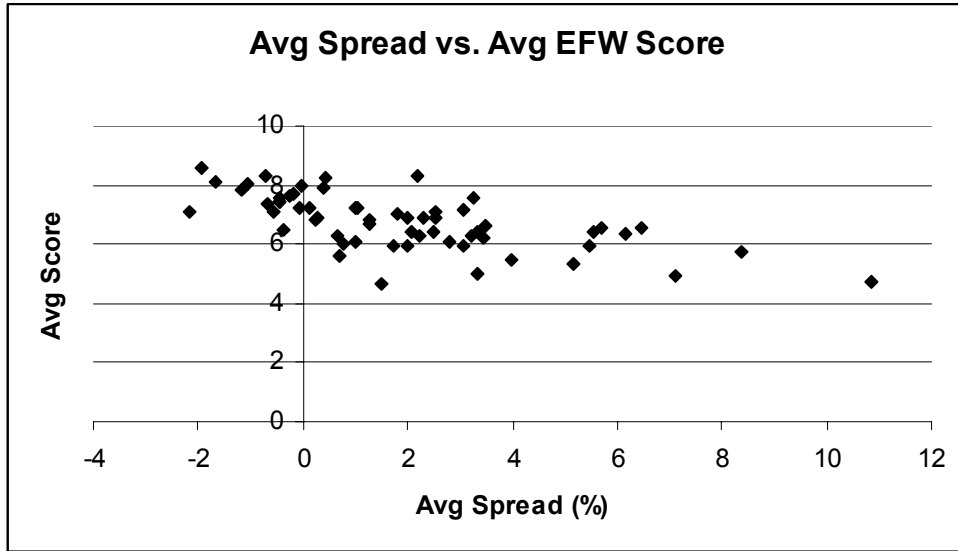


Figure 8 – Average Spread vs. Average Political Score – All Countries

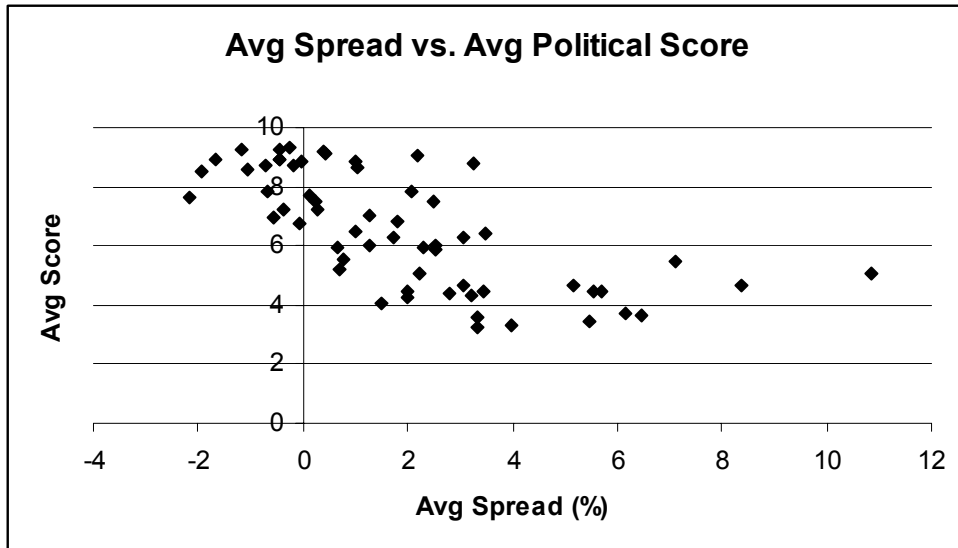


Figure 9 – Average Spread vs. Average Freedom to Trade Score – All Countries

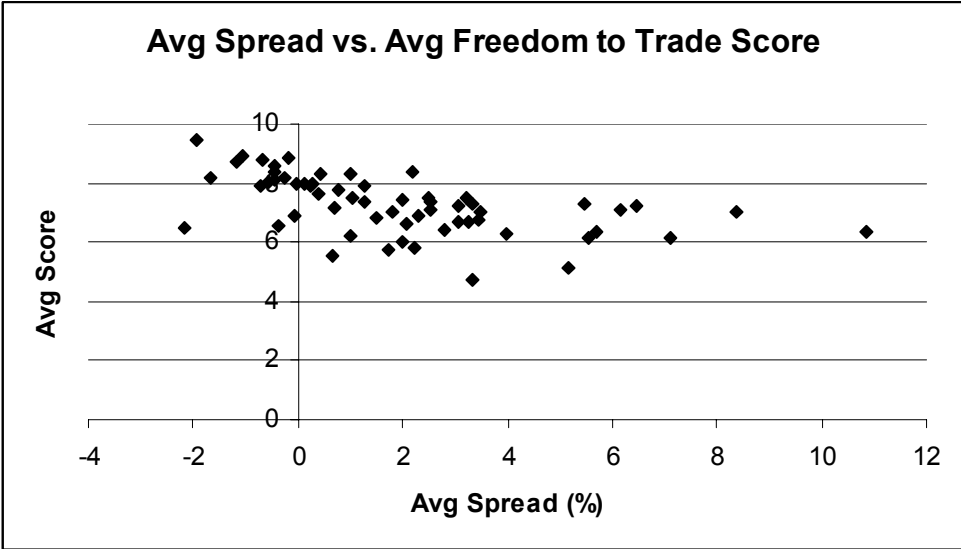


Figure 10 – Average Regional Spreads and EFW Scores

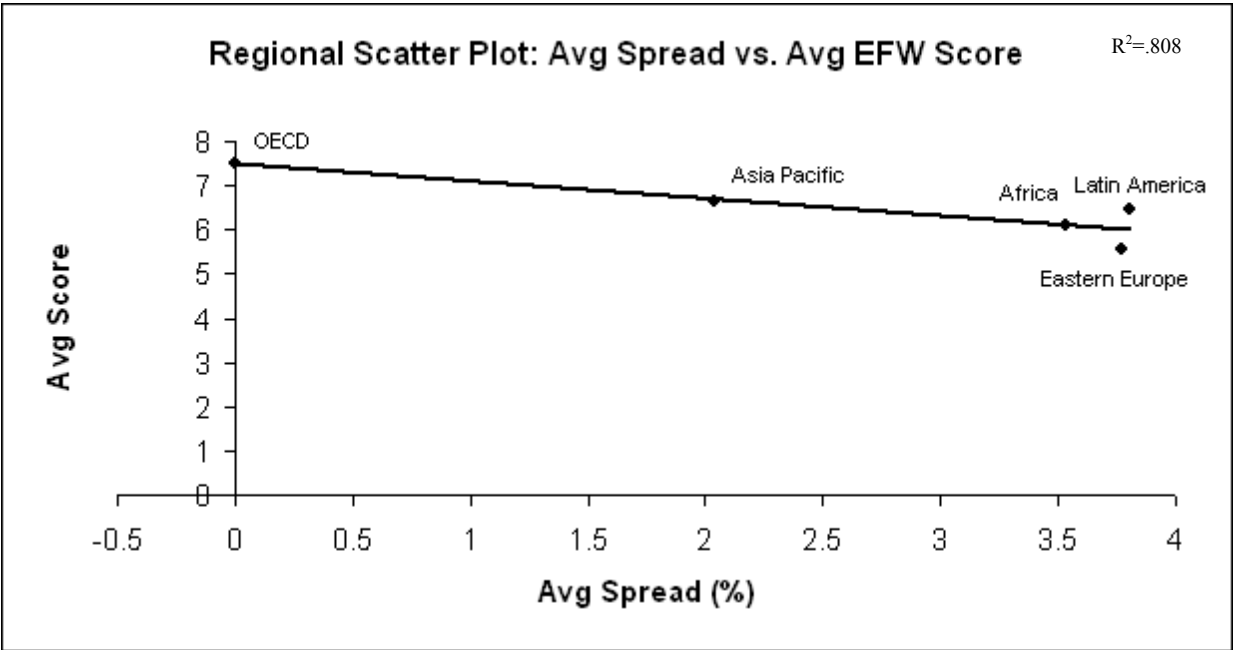


Figure 11 – Average Regional Spreads and Political Scores

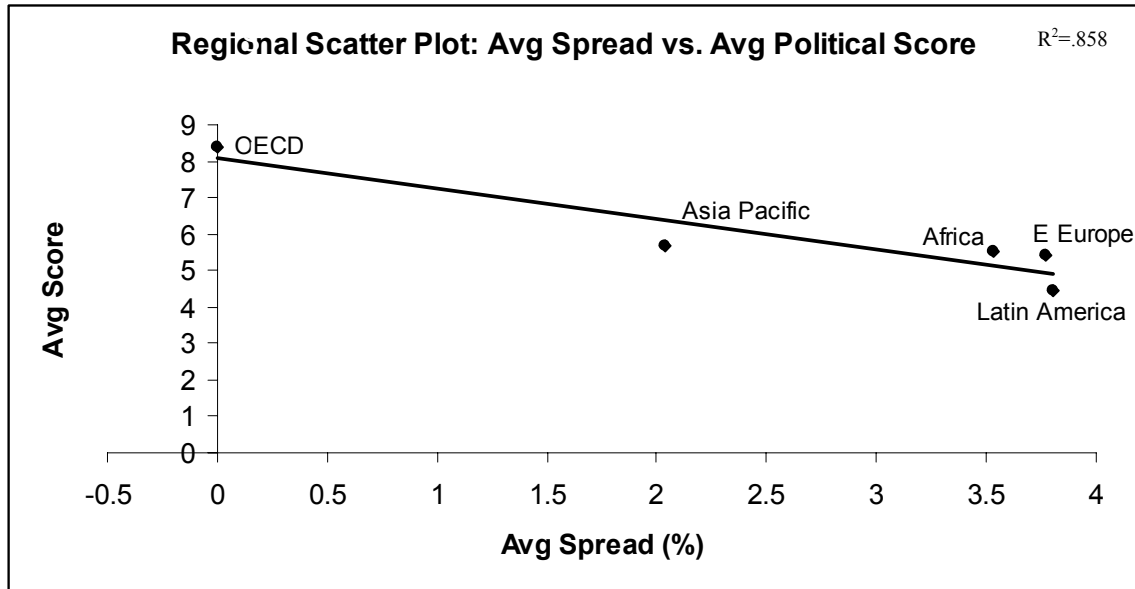
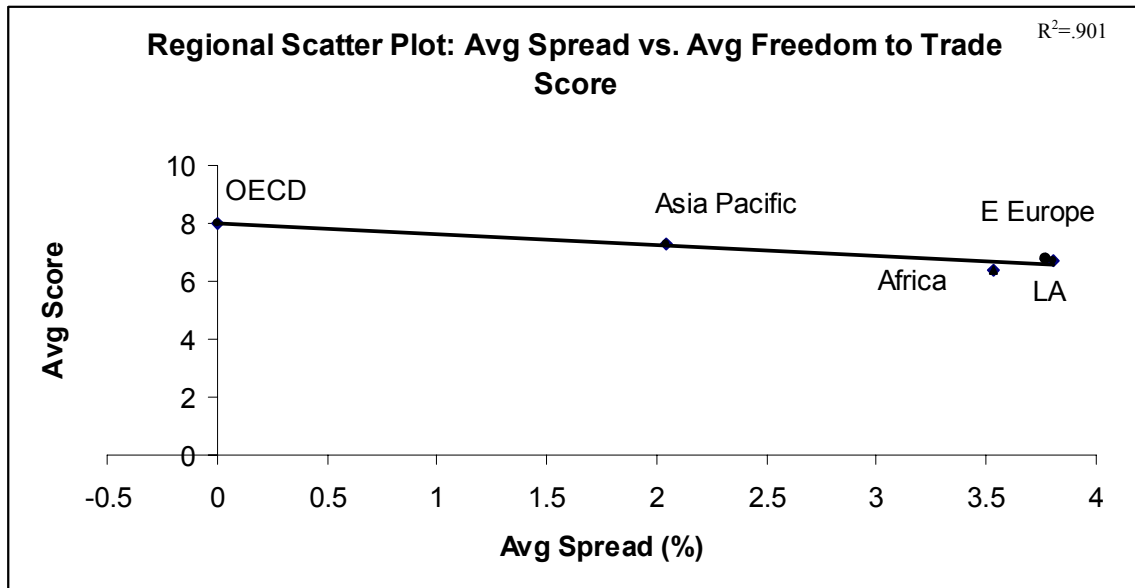


Figure 12 – Average Regional Spreads and Freedom to Trade Scores



Appendix B – Tables

Table 1 – Country & Region Breakdown

<b>OECD</b>	<b>Africa</b>	<b>Asia Pacific</b>	<b>Latin America</b>	<b>Eastern Europe</b>
Australia	Egypt	Bahrain, Kingdom of	Argentina	Albania
Austria	Ghana	China,P.R.:Hong Kong	Belize	Hungary
Belgium	Kenya	Indonesia	Bolivia	Lithuania
Canada	Malawi	Israel	Colombia	Poland
Denmark	Mauritius	Korea	Dominican Republic	Romania
Finland	Morocco	Kuwait	El Salvador	Russia
France	Namibia	Papua New Guinea	Mexico	
Germany	Sierra Leone	Philippines	Paraguay	
Greece	South Africa	Singapore	Trinidad and Tobago	
Iceland	Tunisia	Sri Lanka		
Ireland	Uganda			
Italy				
Japan				
Luxembourg				
Malta				
Netherlands				
New Zealand				
Norway				
Portugal				
Spain				
Sweden				
Switzerland				
United Kingdom				
United States				

**Observations by region:**

<b>24</b>	<b>11</b>	<b>10</b>	<b>9</b>	<b>6</b>
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**Total Observations**

<b>60</b>
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**OECD Countries      Others**

<b>24</b>	<b>36</b>
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Table 2 – Real Interest Rate Spreads, Average EFW “chained linked” Scores, Average Political Scores, Average Freedom to Trade Scores, and Descriptive Statistics - OECD Region

1995-2002	Avg spread	Avg EFW Score	Avg Political Score	Average Freedom to Trade Score
OECD				
Australia	0.3978	7.9117	9.2107	7.6548
Austria	-0.4360	7.4019	8.9198	8.3704
Belgium	-0.6627	7.3418	7.8120	8.7987
Canada	-0.0196	7.9672	8.8611	7.9514
Denmark	-0.4588	7.5552	9.2793	8.1083
Finland	-0.2530	7.6409	9.3388	8.2042
France	0.2416	6.8310	7.5169	7.8851
Germany	-0.4339	7.4388	8.9310	8.5485
Greece	1.2655	6.6906	5.9899	7.3693
Iceland	3.2421	7.5869	8.7929	6.7155
Ireland	-1.0694	8.0167	8.5961	8.8997
Italy	0.2819	6.8747	7.2227	7.9815
Japan	-2.1822	7.0708	7.6446	6.4952
Luxembourg	-0.1952	7.6813	8.6840	8.8241
Malta	-0.3837	6.5172	7.2451	6.5369
Netherlands	-1.1781	7.8103	9.2333	8.7284
New Zealand	2.1862	8.3206	9.0404	8.3548
Norway	1.0583	7.2121	8.6695	7.5128
Portugal	0.1172	7.2385	7.7164	7.9663
Spain	-0.5739	7.1165	6.9439	8.0210
Sweden	1.0077	7.2448	8.8476	8.3112
Switzerland	-1.6686	8.1291	8.9032	8.1602
United Kingdom	0.4253	8.2362	9.1006	8.3007
United States	-0.7086	8.3352	8.7040	7.9173

#### OECD Descriptive Statistics

Spreads		EFW Scores		Political Scores		Freedom to Trade Scores	
Mean	0.00	Mean	7.51	Mean	8.38	Mean	7.98
Standard Error	0.24	Standard Error	0.11	Standard Error	0.18	Standard Error	0.14
Median	-0.22	Median	7.50	Median	8.75	Median	8.06
Standard Deviation	1.17	Standard Deviation	0.52	Standard Deviation	0.89	Standard Deviation	0.67
Sample Variance	1.38	Sample Variance	0.27	Sample Variance	0.80	Sample Variance	0.45
Kurtosis	1.69	Kurtosis	-0.81	Kurtosis	0.56	Kurtosis	0.55
Skewness	0.88	Skewness	-0.08	Skewness	-1.13	Skewness	-0.96
Range	5.42	Range	1.82	Range	3.35	Range	2.40

Table 3 - Africa Region

<b>1995-2002</b>	<b>Avg spread</b>	<b>Avg EFW Score</b>	<b>Avg Political Score</b>	<b>Average FT Score</b>
<b>Africa</b>				
Egypt	2.2389	6.3019	5.0739	5.7802
Ghana	8.3683	5.7410	4.6899	7.0238
Kenya	6.1671	6.3724	3.7332	7.0981
Malawi	7.0986	4.9378	5.4625	6.1680
Mauritius	-0.0607	7.2582	6.7710	6.9178
Morocco	1.7256	5.9150	6.3047	5.7253
Namibia	2.0606	6.4142	7.8324	6.6064
Sierra Leone	3.3427	5.0322	3.6007	4.7296
South Africa	3.5027	6.6441	6.4481	7.0380
Tunisia	0.9969	6.1087	6.4791	6.2047
Uganda	3.4548	6.2328	4.4730	6.7408

Africa Descriptive Statistics

<b>Spreads</b>		<b>EFW Scores</b>		<b>Political Scores</b>		<b>Freedom to Trade Scores</b>	
Mean	3.54	Mean	6.09	Mean	5.53	Mean	6.37
Standard Error	0.80	Standard Error	0.20	Standard Error	0.41	Standard Error	0.22
Median	3.34	Median	6.23	Median	5.46	Median	6.61
Standard Deviation	2.64	Standard Deviation	0.67	Standard Deviation	1.35	Standard Deviation	0.74
Sample Variance	6.95	Sample Variance	0.45	Sample Variance	1.82	Sample Variance	0.54
Kurtosis	-0.44	Kurtosis	0.31	Kurtosis	-0.92	Kurtosis	0.99
Skewness	0.68	Skewness	-0.36	Skewness	0.06	Skewness	-1.12
Range	8.43	Range	2.32	Range	4.23	Range	2.37

Table 4 - Asia Pacific Region

<b>1995-2002</b>	<b>Avg spread</b>	<b>Avg EFW Score</b>	<b>Avg Political Score</b>	<b>Average Freedom to Trade Score</b>
<b>Asia Pacific</b>				
Bahrain, Kingdom of	2.5388	7.1035	5.8685	7.3833
China,P.R.:Hong Kong	0.7039	5.5892	5.2027	7.1401
Indonesia	5.4889	5.9674	3.4757	7.2918
Israel	2.4947	6.4070	7.4909	7.5322
Korea	2.5261	6.9091	6.0431	7.1191
Kuwait	1.7977	7.0020	6.8330	7.0361
Papua New Guinea	1.9873	5.9686	4.4909	6.0034
Philippines	2.0069	6.8906	4.2856	7.4308
Singapore	-1.9437	8.5937	8.4930	9.4267
Sri Lanka	2.8005	6.0654	4.4172	6.4475

Asia Descriptive Statistics

<b>Spreads</b>		<b>EFW Scores</b>		<b>Political Scores</b>		<b>Freedom to Trade Scores</b>	
Mean	2.04	Mean	6.65	Mean	5.66	Mean	7.28
Standard Error	0.59	Standard Error	0.27	Standard Error	0.50	Standard Error	0.28
Median	2.25	Median	6.65	Median	5.54	Median	7.22
Standard Deviation	1.85	Standard Deviation	0.86	Standard Deviation	1.59	Standard Deviation	0.89
Sample Variance	3.43	Sample Variance	0.74	Sample Variance	2.52	Sample Variance	0.79
Kurtosis	3.02	Kurtosis	2.05	Kurtosis	-0.64	Kurtosis	4.12
Skewness	-0.52	Skewness	1.19	Skewness	0.48	Skewness	1.42
Range	7.43	Range	3.00	Range	5.02	Range	3.42

Table 5 – Latin America Region

<b>1995-2002</b>	<b>Avg spread</b>	<b>Avg EFW Score</b>	<b>Avg Political Score</b>	<b>Average Freedom to Trade Score</b>
<b>Latin America</b>				
Argentina	5.7087	6.5536	4.4339	6.3658
Belize	0.6638	6.3072	5.9612	5.5285
Bolivia	6.4515	6.5432	3.6606	7.2254
Colombia	3.9678	5.4458	3.2884	6.3065
Dominican Republic	5.5438	6.4320	4.4338	6.1272
El Salvador	3.0586	7.1317	4.6501	7.2572
Mexico	3.2352	6.3102	4.3367	7.5236
Paraguay	3.3275	6.4014	3.2581	7.3192
Trinidad and Tobago	2.2954	6.9106	5.9225	6.8899

Latin America Descriptive Statistics

<b>Spreads</b>		<b>EFW Scores</b>		<b>Political Scores</b>		<b>Freedom to Trade Scores</b>	
Mean	3.81	Mean	6.45	Mean	4.44	Mean	6.73
Standard Error	0.61	Standard Error	0.16	Standard Error	0.33	Standard Error	0.22
Median	3.33	Median	6.43	Median	4.43	Median	6.89
Standard Deviation	1.83	Standard Deviation	0.47	Standard Deviation	0.99	Standard Deviation	0.67
Sample Variance	3.37	Sample Variance	0.22	Sample Variance	0.99	Sample Variance	0.46
Kurtosis	-	Kurtosis	2.59	Kurtosis	-	Kurtosis	-
Skewness	0.12	Skewness	0.93	Skewness	0.52	Skewness	0.56
Range	5.79	Range	1.69	Range	2.70	Range	2.00

Table 6 – Eastern Europe Region

<b>1995-2002</b>	<b>Avg spread</b>	<b>Avg EFW Score</b>	<b>Avg Political Score</b>	<b>Average Freedom to Trade Score</b>
<b>Eastern Europe</b>				
Albania	5.1742	5.3348	4.6953	5.1372
Hungary	1.2666	6.8272	7.0218	7.9158
Lithuania	0.7680	6.0248	5.5192	7.7717
Poland	3.0588	5.9421	6.2524	6.6964
Romania	10.8453	4.7199	5.0966	6.3754
Russia	1.4922	4.6292	4.0378	6.7957

Eastern Europe Descriptive Statistics

<b>Spreads</b>		<b>EFW Scores</b>		<b>Political Scores</b>		<b>Freedom to Trade Scores</b>	
Mean	3.77	Mean	5.58	Mean	5.44	Mean	6.78
Standard Error	1.56	Standard Error	0.35	Standard Error	0.44	Standard Error	0.41
Median	2.28	Median	5.64	Median	5.31	Median	6.75
Standard Deviation	3.82	Standard Deviation	0.85	Standard Deviation	1.08	Standard Deviation	1.01
Sample Variance	14.60	Sample Variance	0.72	Sample Variance	1.16	Sample Variance	1.03
Kurtosis	2.49	Kurtosis	-1.02	Kurtosis	-0.59	Kurtosis	0.34
Skewness	1.63	Skewness	0.28	Skewness	0.32	Skewness	-0.60
Range	10.08	Range	2.20	Range	2.98	Range	2.78

Table 7 – Descriptive Statistics Comparison Tables

<b>Spreads</b>	<b>Africa</b>	<b>Asia Pacific</b>	<b>Eastern Europe</b>	<b>Latin America</b>	<b>OECD</b>
Mean	3.54	2.04	3.77	3.81	0.00
Standard Error	0.80	0.59	1.56	0.61	0.24
Median	3.34	2.25	2.28	3.33	-0.22
Standard Deviation	2.64	1.85	3.82	1.83	1.17
Sample Variance	6.95	3.43	14.60	3.37	1.38
Kurtosis	-0.44	3.02	2.49	-0.45	1.69
Skewness	0.68	-0.52	1.63	-0.12	0.88
Range	8.43	7.43	10.08	5.79	5.42

<b>EFW Scores</b>	<b>Africa</b>	<b>Asia Pacific</b>	<b>Eastern Europe</b>	<b>Latin America</b>	<b>OECD</b>
Mean	6.09	6.65	5.58	6.45	7.51
Standard Error	0.20	0.27	0.35	0.16	0.11
Median	6.23	6.65	5.64	6.43	7.50
Standard Deviation	0.67	0.86	0.85	0.47	0.52
Sample Variance	0.45	0.74	0.72	0.22	0.27
Kurtosis	0.31	2.05	-1.02	2.59	-0.81
Skewness	-0.36	1.19	0.28	-0.93	-0.08
Range	2.32	3.00	2.20	1.69	1.82

<b>Political Scores</b>	<b>Africa</b>	<b>Asia Pacific</b>	<b>Eastern Europe</b>	<b>Latin America</b>	<b>OECD</b>
Mean	5.53	5.66	5.44	4.44	8.38
Standard Error	0.41	0.50	0.44	0.33	0.18
Median	5.46	5.54	5.31	4.43	8.75
Standard Deviation	1.35	1.59	1.08	0.99	0.89
Sample Variance	1.82	2.52	1.16	0.99	0.80
Kurtosis	-0.92	-0.64	-0.59	-0.64	0.56
Skewness	0.06	0.48	0.32	0.52	-1.13
Range	4.23	5.02	2.98	2.70	3.35

<b>Freedom to Trade Scores</b>	<b>Africa</b>	<b>Asia Pacific</b>	<b>Eastern Europe</b>	<b>Latin America</b>	<b>OECD</b>
Mean	6.37	7.28	6.78	6.73	7.98
Standard Error	0.22	0.28	0.41	0.22	0.14
Median	6.61	7.22	6.75	6.89	8.06
Standard Deviation	0.74	0.89	1.01	0.67	0.67
Sample Variance	0.54	0.79	1.03	0.46	0.45
Kurtosis	0.99	4.12	0.34	-0.82	0.55
Skewness	-1.12	1.42	-0.60	-0.56	-0.96
Range	2.37	3.42	2.78	2.00	2.40

Table 8a – Regression Statistics - EFW Score versus Average Spread  
All 60 Countries

Regression Statistics	
Multiple R	0.654
R Square	0.428
Adjusted R Square	0.418
Standard Error	1.991
Observations	60

ANOVA

	df	SS	MS	F	Significance F
Regression	1.000	171.935	171.935	43.369	0.000
Residual	58.000	229.937	3.964		
Total	59.000	401.872			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	14.403	1.910	7.539	0.000	10.578	18.227
EFW Score Var	-1.846	0.280	-6.586	0.000	-2.407	-1.285

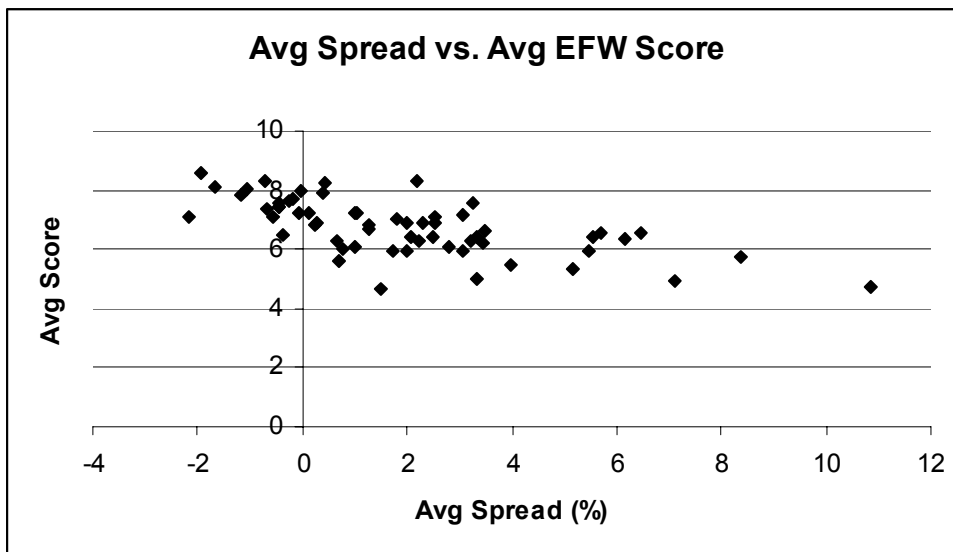


Table 8b – Regression Statistics - Political Score versus Average Spread  
All 60 Countries

Regression Statistics	
Multiple R	0.683
R Square	0.466
Adjusted R Square	0.457
Standard Error	1.923
Observations	60

ANOVA

	df	SS	MS	F	Significance F
Regression	1.000	187.445	187.445	50.702	0.000
Residual	58.000	214.427	3.697		
Total	59.000	401.872			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	7.949	0.880	9.031	0.000	6.187	9.711
Political Score Var	-0.922	0.130	-7.121	0.000	-1.181	-0.663

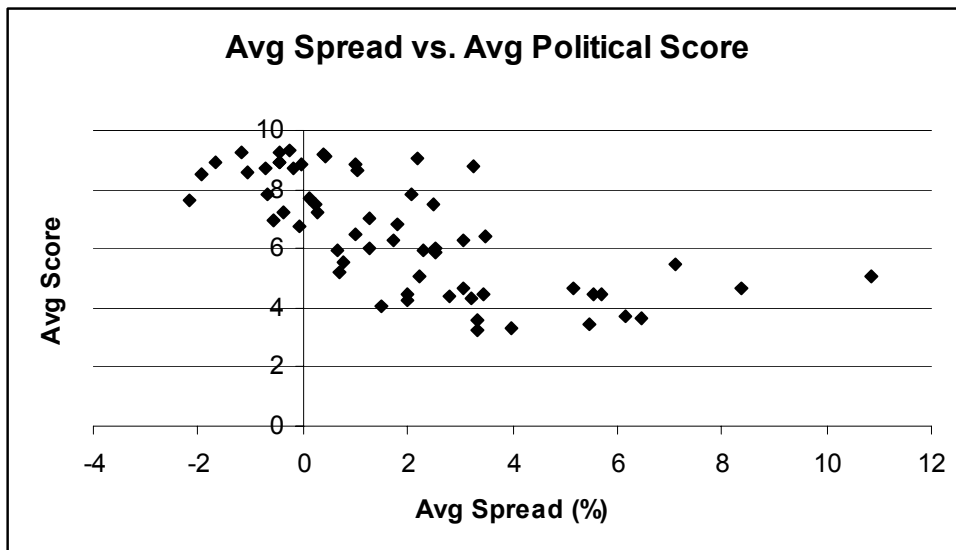


Table 8c – Regression Statistics – Freedom to Trade Score versus Average Spread  
All 60 Countries

Regression Statistics	
Multiple R	0.532
R Square	0.283
Adjusted R Square	0.271
Standard Error	2.228
Observations	60

ANOVA

	df	SS	MS	F	Significance F
Regression	1.000	113.904	113.904	22.942	0.000
Residual	58.000	287.967	4.965		
Total	59.000	401.872			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	12.206	2.163	5.642	0.000	7.875	16.536
Freedom to Trade Var	-1.414	0.295	-4.790	0.000	-2.005	-0.823

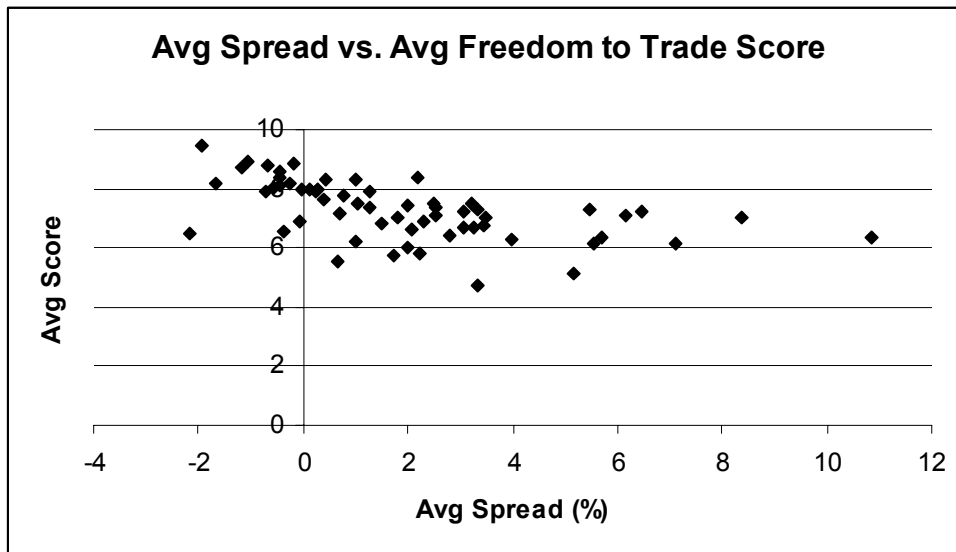


Table 9 – Regression Statistics – EFW, Political, and Freedom to Trade Scores versus Average Spread: All 60 Countries – Comparison Table

Regression Statistics	EFW vs. Avg Spread	Political vs. Avg Spread	Freedom to Trade vs. Avg Spread
Multiple R	0.654	0.683	0.532
R Square	0.428	0.466	0.283
Adjusted R Square	0.418	0.457	0.271
Standard Error	1.991	1.923	2.228
Observations	60	60	60

	Coefficients	Standard Error	t Stat
EFW Intercept	14.403	1.910	7.539
EFW Score Variable	-1.846	0.280	-6.586
Political Intercept	7.949	0.880	9.031
Political Score Variable	-0.922	0.130	-7.121
FT Intercept	12.206	2.163	5.642
FT Variable	-1.414	0.295	-4.790

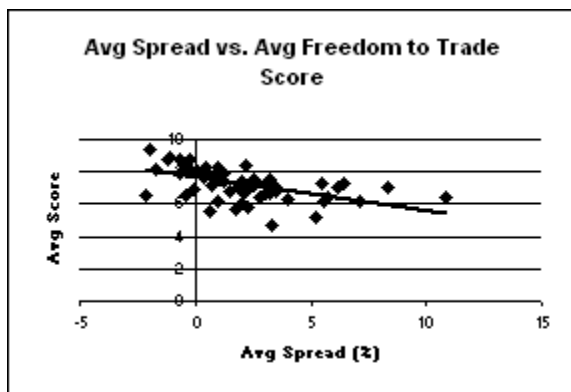
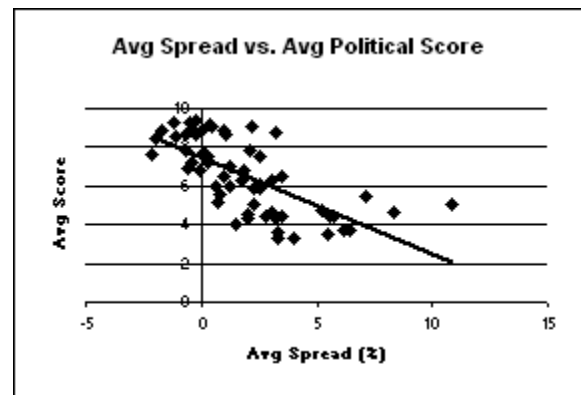
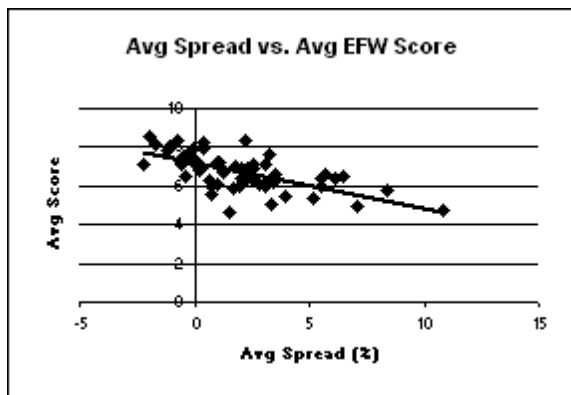
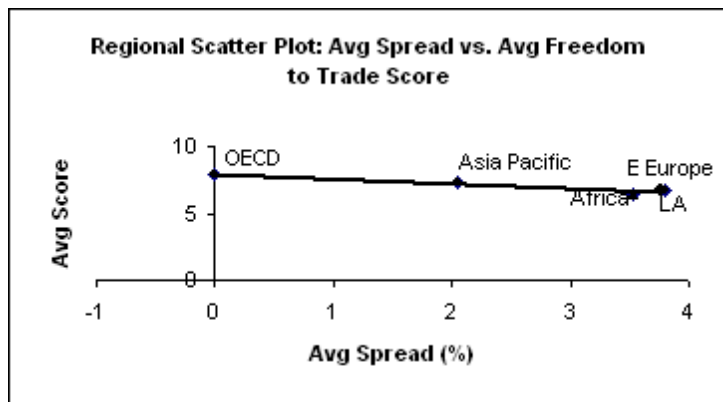
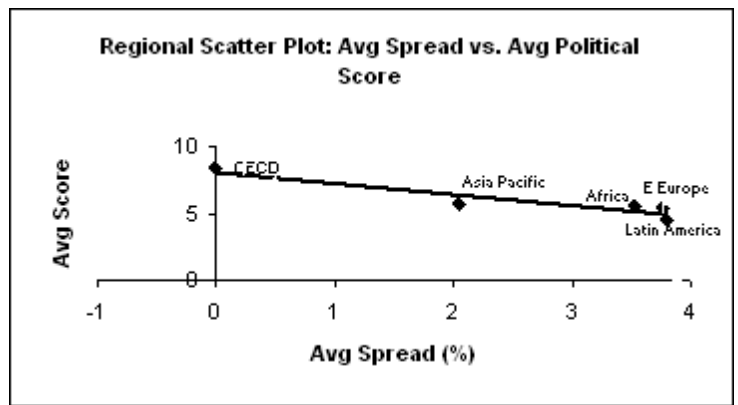
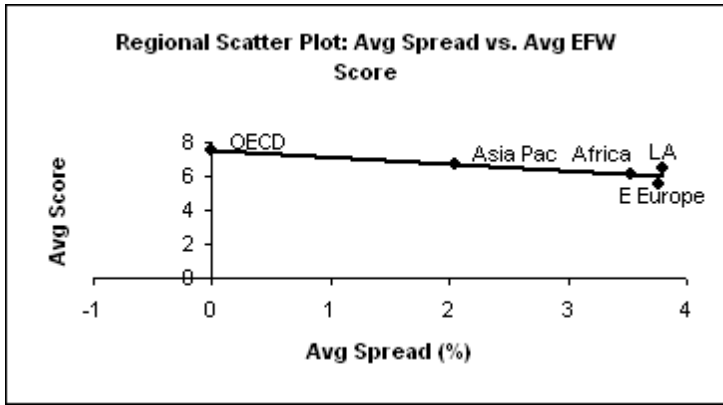


Table 10 – Regression Statistics – EFW, Political, and Freedom to Trade Regional Average Scores versus Average Regional Spread – Comparison Table

Regression Statistics	EFW vs. Avg Spread	Political vs. Avg Spread	Freedom to Trade vs. Avg Spread
Multiple R	0.899	0.926	0.949
R Square	0.808	0.858	0.901
Adjusted R Square	0.744	0.810	0.867
Standard Error	0.830	0.714	0.597
Observations	5.000	5.000	5.000

	Coefficients	Standard Error	t Stat
EFW Intercept	15.936	3.762	4.236
EFW Score Variable	-2.061	0.580	-3.554
Political Intercept	8.694	1.461	5.952
Political Score Variable	-1.030	0.242	-4.255
FT Intercept	20.111	3.365	5.977
FT Variable	-2.487	0.477	-5.212



## Appendix C – The Fraser Institute’s Economic Freedom of the World Index: 2004

### **The Areas and Components of the EFW Index**

#### **1: Size of Government: Expenditures, Taxes, and Enterprises**

- A. General government consumption spending as a percentage of total consumption.
- B. Transfers and subsidies as a percentage of GDP.
- C. Government enterprises and investment as a percentage of total investment.
- D. Top marginal tax rate (and income threshold to which it applies).
  - i. Top marginal income tax rate (and income threshold at which it applies)
  - ii. Top marginal income and payroll tax rate (and income threshold at which it applies)

#### **2: Legal Structure and Security of Property Rights**

- A. Judicial independence: the judiciary is independent and not subject to interference by the government or parties in disputes (GCR).
- B. Impartial courts: A trusted legal framework exists for private businesses to challenge the legality of government actions or regulation (GCR).
- C. Protection of intellectual property (GCR).
- D. Military interference in rule of law and the political process (ICRG).
- E. Integrity of the legal system (ICRG).

#### **3: Access to Sound Money**

- A. Average annual growth of the money supply in the last five years minus average annual growth of real GDP in the last ten years
- B. Standard inflation variability in the last five years.
- C. Recent inflation rate.
- D. Freedom to own foreign currency bank accounts domestically and abroad.

#### **4: Freedom to Trade Internationally**

- A. Taxes on international trade.
  - i. Revenue from taxes on international trade as a percentage of exports plus imports.
  - ii. Mean tariff rate.
  - iii. Standard deviation of tariff rates.
- B. Regulatory trade barriers.
  - i. Hidden import barriers: No barriers other than published tariffs and quotas (GCR).
  - ii. Costs of importing: the combined effect of import tariffs, licence fees, bank fees, and the time required for administrative red-tape raises costs of importing equipment by (GCR).
- C. Actual size of trade sector compared to expected size.
- D. Difference between official exchange rate and black market rate.
- E. International capital market controls
  - i. Access of citizens to foreign capital markets and foreign access to domestic capital markets. (GCR)
  - ii. Restrictions on the freedom of citizens to engage in capital market exchange with foreigners—index of capital controls among 13 IMF categories.

#### **5: Regulation of Credit, Labor, and Business**

- A. Credit Market Regulations
  - i. Ownership of banks: percentage of deposits held in privately owned banks.
  - ii. Competition: domestic banks face competition from foreign banks (GCR).
  - iii. Extension of credit: percentage of credit extended to private sector.
  - iv. Avoidance of interest rate controls and regulations that lead to negative real interest rates.

v. Interest rate controls: interest rate controls on bank deposits and/or loans are freely determined by the market (GCR).

#### B. Labor Market Regulations

i. Impact of minimum wage: the minimum wage, set by law, has little impact on wages because it is too low or not obeyed (GCR).

ii. Hiring and firing practices: hiring and firing practices of companies are determined by private contract (GCR).

iii. Share of labor force whose wages are set by centralized collective bargaining (GCR).

iv. Unemployment Benefits: the unemployment benefits system preserves the incentive to work (GCR).

v. Use of conscripts to obtain military personnel

#### C. Business Regulations

i. Price controls: extent to which businesses are free to set their own prices.

ii. Administrative conditions and new businesses: administrative procedures are an important obstacle to starting a new business (GCR).

iii. Time with government bureaucracy: senior management spends a substantial amount of time dealing with government bureaucracy (GCR).

iv. Starting a new business: starting a new business is generally easy (GCR).

v. Irregular payments: irregular, additional payments connected with import and export permits, business licenses, exchange controls, tax assessments, police protection, or loan applications are very rare (GCR).

GCR = Global Competitiveness Report

ICRG = International Country Risk Guide

The Fraser Institute's Economic Freedom of the World Index: 2004

Economic Freedom Scores: 1970-2002

Countries	1970	1975	1980	1985	1990	1995	2000	2001	2002
Albania					3.34	4.12	5.67	5.77	5.78
Argentina	4.42	2.84	3.93	3.46	4.40	6.68	7.20	6.50	5.84
Australia	6.62	5.76	6.44	6.77	7.33	7.77	8.02	7.92	7.94
Austria	6.01	5.70	6.21	6.21	6.87	6.96	7.50	7.60	7.54
Bahrain			6.99	6.52	6.81	6.89	7.23	7.14	7.15
Belgium	7.28	6.59	6.85	6.89	7.23	7.20	7.46	7.36	7.35
Belize			5.00	4.79	5.69	6.31	6.21	6.18	6.54
Bolivia			4.37	3.45	5.20	6.45	6.70	6.52	6.50
Canada	7.37	6.56	6.97	7.04	7.67	7.77	8.13	8.06	7.91
China			3.84	4.80	4.25	4.91	5.82	5.89	5.74
Colombia	5.38	5.01	4.80	5.21	5.03	5.59	5.39	5.47	5.33
Denmark	6.58	5.85	6.04	6.18	6.96	7.41	7.66	7.58	7.56
Dominican Rep.			4.83	4.56	4.39	6.18	6.48	6.49	6.58
Egypt		3.86	4.57	5.02	4.77	5.87	6.66	6.49	6.19
El Salvador			4.27	4.05	4.45	6.79	7.25	7.28	7.21
Finland	6.58	5.76	6.38	6.53	6.96	7.48	7.71	7.68	7.69
France	6.20	5.45	5.71	5.71	6.83	6.78	6.99	6.73	6.82
Germany	7.32	6.81	7.04	7.08	7.34	7.49	7.63	7.30	7.34
Ghana		3.01	2.31	2.49	4.30	5.05	5.90	5.61	6.41
Greece	6.08	5.60	5.59	5.08	5.71	6.18	6.93	6.78	6.87
Hungary			4.22	4.87	4.79	6.21	6.72	7.13	7.25
Iceland	6.12	4.24	4.92	5.12	6.61	7.33	7.71	7.66	7.64
Indonesia	4.82	5.35	5.25	6.18	6.62	6.65	5.90	5.52	5.80
Ireland	6.51	5.78	6.17	6.21	7.02	8.18	8.12	7.94	7.83
Israel	4.90	4.21	3.72	4.29	4.39	6.01	6.51	6.47	6.63
Italy	5.82	5.06	5.17	5.45	6.40	6.48	7.08	6.96	6.98
Japan	6.22	5.88	6.38	6.45	7.10	6.95	7.33	7.04	6.97
Kenya	4.72	4.51	4.67	5.01	5.32	5.72	6.52	6.60	6.66
Kuwait			5.76	7.95	5.11	6.60	6.71	7.26	7.43
Lithuania						4.70	6.29	6.32	6.79
Luxembourg	6.95	6.89	6.82	7.17	7.41	7.55	7.75	7.72	7.70
Malawi		4.76	4.27	4.44	4.68	4.38	4.66	5.36	5.36
Malta			5.02	4.85	5.18	6.44	6.49	6.54	6.61
Mauritius		4.57	4.69	5.88	6.07	7.27	7.27	7.29	7.20
Mexico	6.02	5.33	5.07	4.31	5.66	6.20	6.28	6.29	6.47
Morocco	5.51	4.93	4.29	4.85	4.81	5.81	6.02	5.96	5.88
Namibia					5.33	6.59	6.26	6.46	6.34
Netherlands	6.99	6.36	6.83	6.99	7.37	7.76	8.04	7.75	7.69
New Zealand	6.02	5.38	6.06	5.89	7.29	8.49	8.35	8.22	8.22
Norway	5.97	5.51	5.80	6.29	7.02	7.53	7.15	7.13	7.03
Pap. New Guinea				5.90	6.29	6.32	5.95	5.89	5.72

The Fraser Institute's Economic Freedom of the World Index: 2004

**Economic Freedom Scores: 1970-2002**

<b>Countries</b>	<b>1970</b>	<b>1975</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>
Paraguay			5.54	4.89	5.48	6.62	6.35	6.44	6.19
Philippines	5.19	4.84	4.94	4.76	5.42	7.17	7.12	6.65	6.62
Poland				3.41	3.26	4.82	6.34	6.23	6.37
Portugal	5.98	3.74	5.55	5.33	6.00	7.21	7.34	7.22	7.18
Romania				4.52	4.04	3.57	4.85	5.02	5.44
Russia						3.72	4.95	4.86	4.99
Sierra Leone		5.59	5.34	3.47	3.80	4.43	5.09	5.16	5.45
Singapore	7.45	7.25	7.53	7.88	8.52	8.85	8.51	8.46	8.56
South Africa	5.94	5.48	5.41	4.98	5.17	6.29	6.78	6.74	6.77
South Korea	5.28	5.28	5.57	5.62	6.23	6.73	6.74	7.09	7.08
Spain	6.12	5.48	5.69	5.81	6.24	6.98	7.36	7.04	7.08
Sri Lanka			4.87	4.97	4.90	6.13	6.08	6.04	6.01
Sweden	5.54	5.20	5.60	6.19	6.63	7.14	7.41	7.15	7.28
Switzerland	7.42	7.17	7.66	7.78	7.90	7.91	8.35	8.10	8.16
Trinidad & Tob.		4.32	4.55	4.42	5.46	6.67	6.96	6.95	7.07
Tunisia	4.51	4.57	4.94	4.70	5.33	5.95	6.08	6.18	6.22
Uganda			2.91	2.46	2.62	4.91	6.67	6.71	6.65
United Kingdom	5.95	5.76	6.14	7.00	7.70	8.21	8.27	8.27	8.19
United States	6.96	7.11	7.37	7.49	8.11	8.30	8.56	8.28	8.19