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Factors Influencing Foreign Direct Investment in Lesser Developed Countries

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Spring Semester 2000

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Abstract: Net private capital flows to developing countries have dramatically increased in the past 15 years with much of the investment coming in the form of long-term, foreign direct investment. Because of the unique characteristics of this type of growth - enhancing investment, developing countries desire to attract and retain foreign direct investment (FDI). As a result, the lesser-developed country (LDC) has an incentive to strengthen areas and aspects of the economy or government that are heavily scrutinized by the firm when considering a possible long-term investment. This study intends to measure the magnitude and the direction of suspected determinants that heavily influence a firm's decision to invest in FDI in a LDC. By utilizing the World Bank's World Development Data from 1997 and the IMF's Exchange Agreements and Restrictions Report from 1998 in an OLS regression model, this study demonstrates the nature of key determinants of FDI, thus providing LDCs with the necessary information to make policy changes in order to maximize FDI.

I. Introduction

The past 20 years have been both an exciting and frustrating age for lesser-developed countries (LDCs). In 1996, net private capital flows to LDCs had grown nearly 600% since 1990, reaching a total of $240 billion (World Bank 1997). Investors, who look for increased returns and aim to diversify risk, have fueled the investment interest in developing countries. Although investments in the economies' of LDCs have increased, much of this capital, namely portfolio capital and bank and trade related lending, have high degrees of volatility and are subject to massive inflows or outflows resulting from speculative attacks. As a result, foreign direct investment (FDI), which is thought to be more stable than portfolio capital and bank and trade related lending, is an integral aspect concerning the growth of a LDC's economy.

At first glance, the increase in net private capital flows seems entirely positive; however, it is largely up to the government to effectively deal with volatile "boom or bust" periods. Subject to large reversals in net private capital flows, many economies of LDCs have been severely crippled (See Table 1). Mexico (1981-83, 1993-95) Turkey (1993-94), Argentina (1982-83, 1993-94), Malaysia (1993-94) are just a few examples where large reversals in private capital flows have led to economic hardship (World Bank 1997). In addition, Malaysia, along with other Asian Tigers experienced another reversal during the recent Asian Crisis. Not only are large reversals negative, but also the level of dependence on these types of foreign investment for certain LDCs is also problematic. When a LDC depends on this type of investment and centers its economy on expected growth in these investment areas and reversals occur, economic and social turmoil results. In short, the governments of LDCs have to be extremely careful when structuring

an economy around suspected inflows of net private capital because it is just as likely that a large reversal will occur as well. This is one reason why governments of LDCs should focus on attracting FDI in contrast to other types of private investment.

Table 1. Major Reversals of Private Capital Flows *Source:* IMF, *International Financial Statistics* database; World Bank data.

Country	Billions of Dollars	Reversal as a % of GDP
Mexico, 1981-83	29	12
Mexico, 1993-95	22	6
Turkey, 1993-94	18	10
Argentina, 1982-83	17	20
Argentina, 1993-94	10	4
Malaysia, 1993-94	7	10
Venezuela, 1992-94	6	9
Venezuela, 1988-89	3	5
Chile, 1990-91	2.5	8
Chile, 1981-83	2.5	7

Unlike portfolio capital and bank and trade related lending, FDI is easier for the government to manage because it provides more stable growth and is less apt to suffer from herding and speculative attacks. As a form of long-term investment that flows from large, multinational corporations (MNCs) to LDCs, FDI is measured as a combination of (1) reinvested earnings and (2) equity and intercompany lending and flows (Billet 1993). In short, FDI is the purchase or investment in the domestic structures, equipment, organizations and physical assets of a LDC, *not* including foreign investment in stock markets (World Bank 1997). In addition, FDI " is thought to be more useful to a country than investment in the equity of its companies because equity investments are potentially 'hot money' which can leave at the first sign of trouble, whereas FDI is durable and generally useful when things go well or badly" (econterms.com 1999). Since FDI is usually in the form of a factory or some other fixed object, it is very illiquid and thus is a

long-term investment in a LDC. As a result, the MNC that uses FDI has a larger stake in the LDC and the MNC is less apt to pull out of the country during speculative periods. This is one reason why FDI is so important to a country.

Another reason why FDI is so important to a LDC is that it is a unique, safe type of investment that can raise the growth of a LDC. According to the World Bank, "there is empirical evidence to suggest that a dollar of FDI raises the sum of domestic and foreign investment by more than a dollar; thus FDI complements rather than substitutes for domestic investment" (World Bank 1997). In addition, especially in LDCs, FDI has been shown to be more efficient than domestic investment (World Bank 1997). Many times FDI comes from industrialized countries whose businesses are refined and technologically advanced, creating many positive externalities. Not only is FDI a more stable type of investment for a LDC, it is also a very efficient, worthwhile type of investment to try and attract.

FDI has also become an increasingly relevant form of investment over the past decade. As a result, the importance of FDI has become increasingly important for LDCs compared to other forms of foreign investment. For example, FDI accounted for only about 20% of net private capital flows to LDCs in 1980-82, while in 1995-96, FDI accounted for approximately 50% of incoming net private capital. In addition, more LDCs are receiving more of the world's FDI funding. For instance, developing countries' share of global FDI in 1990 was only 15%. However, now it is close to 50%! Since more money is being invested in LDCs and a greater percentage of incoming net private capital is in the form of FDI, it is obvious that the study of FDI is very important from the perspective of the LDC (World Bank 1997).

II. Theory: Motivations of Both MNCs and LDCs

Although a LDC can help to influence a firm's decision to invest in its country, the final decision is ultimately up to the management of the firm. Two major forces that cause firms to invest in LDCs are opportunities for diversification and more importantly, opportunities for higher returns (World Bank 1997).

Diversification can provide stability for a MNC's revenue over the long run, and is a major driving force for investing in LDCs. MNCs find it beneficial to diversify their interests much like a stockbroker might diversify a stock portfolio. Just as individual stocks increase and decrease, so does the economic fortune and political stability of an individual country (Caves 1996). Let us say, for example, that Coca-Cola only produced inside the US. If the economy went into a recession, US input costs rose, large amounts of citizens' tastes and preferences changed away from soda, etc., Coca Cola's profits would decrease dramatically. But, if the firm diversifies and produces or sells in other countries, misfortunes in one region or country would more than likely be offset by booms in other countries.

The main driving force behind the multinational's decision to invest in any venture is the opportunity to maximize profits and, if a long-term investment in a LDC will achieve this goal, then the MNC will seize the opportunity. Firms, in order to maximize earnings, must factor in the expected revenues and costs of its actions. The following equation illustrates this simple concept:

Present Value of Total Net earnings = (Present Value of Total Revenues) -- (Present Value of Total Costs)

Essentially, anything that a firm can do to either cut costs or increase revenues will satisfy a company's ultimate goal-- to maximize profits. By investing in a LDC, a MNC

may decrease total net costs by decreasing transaction costs (tariffs or transportation costs), lowering labor costs, decreasing input costs (raw materials), etc (Caves 1996, Ramasaran 1998). In addition, by investing in a LDC, the MNC may raise total net revenues by emerging into new markets, exerting their influence in arenas that were otherwise untapped (Caves 1996, Dunning 1997).

Secondly, a firm will make a long-term investment in a country if they predict that it will maximize *future* expected earnings. MNCs, in an attempt to maximize future earnings over the time period that they expect to invest in a foreign country, look to maximize earnings in each year of investment while minimizing costs and risks associated with the venture in the LDC. See Equation 1.

Equation 1.

$$\textbf{Present Value of Expected Profit} = \frac{\sum_{T=1}^{n} \textbf{(Net Earnings)}}{(1+i+r)^{\wedge}t}.$$

where the numerator is a summation of net earnings over a time period, t. The denominator is a discount factor that takes into account both the world interest rate and risk factors. With respect to the denominator, i is the world interest rate, r is a discount rate which takes into account the risk of investing in that country and again, t is the suspected amount of time that the investment will be in place. Firms will chose those FDIs that maximize the present value of expected profits. To do this, MNCs will try to:

A. maximize present value in net earnings in each LDC (the numerator of equation 1)

B. minimize the risk of the investment associated with each LDC (the denominator of equation 1).

It is important to note that while the world interest rate is constant for all MNCs, the rate of risk varies from LDC to LDC. By minimizing the rate of risk for an investment in a LDC, a MNC will better their chance to increase present value of expected profits. Factors that may affect the individual rate of risk for a LDC are country's political stability and economic stability (exchange rates, growth rates, basic macroeconomic indicators, etc.).

Now that we have explained the motivations for a MNC to invest in a LDC, we must now explain the possibilities of LDCs to persuade MNCs to invest in their countries. As explained before, FDI has become a more important part if the economic picture of LDCs *and* LDCs find it desirable to attract FDI; however, the question remains. Can LDCs take an active role in attracting FDI? The answer is mixed; many times, countries and MNCs (industrialized or not) have to accept world market trends (i.e. world interest rates, oil prices, global recession, etc.) and strategically react to them. On the other hand, countries can be active players, somewhat controlling their own destinies. LDCs, for example, can attract FDI by controlling certain economic and political variables, thus making their county a more attractive investment than other countries. Although LDCs are partially market takers, reacting to global trends, they also can create and provide a suitable environment for growth by making intelligent decisions related to economic policy. In short, market trends and the well being of industrialized countries "push" capital to LDCs, but LDCs can also create an environment that attracts investment. By publicizing their worthiness of investment, LDCs can "pull" investment, namely FDI, into their country (Calvo 1993, Fernandez-Arias 1994, Cheenan 1993). Since the individual LDC cannot single-handedly alter global trends or the economic

welfare of the world economy (or the "push" factors), it can only focus on strengthening certain sectors or aspects of its own economy (concentrating on its own "pull" factors).

There are numerous "pull" factors that can influence inflows of FDI to LDCs. Because FDI is a long term, often-costly investment for a MNC, the multinational firm usually considers numerous economic and country-specific criteria when weighing investment options. The following theoretical constructs play a large role in the MNC's decision regarding which country to invest in: current economic capacity, past economic performance and stability, quality of human capital, extent of economic trade restrictions, the stability of government, and other assorted factors. These six theoretical constructs are the driving forces behind the study of attracting FDI.

Current Economic Capacity

Present economic indicators play a role in a MNC's decision to invest in a LDC. Current economic performance represents the current governmental regime's ability to handle the country's economy as well as other societal factors. Investors will seek out countries that have had recent economic success, hoping that the trend will carry on in the long run.

Past Economic Performance and Stability

Along with the current economic performance and stability of a country of the economy, the past economic stability of a country is obviously an important factor. Investors will have more confidence that a country that has done well in the past will also likely to do well in the future. This "adaptive expectations" model of FDI flows simply states that if an economy has done well and has been stable in the past, then investors should have more confidence that it will have economic success in the future as well.

Human Capital

In addition, the human capital of a LDC is an important factor for a MNC when considering to invest in a LDC. Obviously, when investing for the long term in another country, a MNC will most likely have to utilize the labor in the host country. As a result, the MNC seeks a large, efficient, educated population to harbor its investment. In turn, the more educated a population is, the more likely its country will attract FDI.

Restrictions on Economic Freedom

Economic restrictions and the relative ease of conducting business is certainly a factor that is considered by MNCs. Legal and tariff restrictions on country entry, market entrance, and the repatriation of profits all affect a MNC's decision of investment. In short, the legal ease of conducting business within a LDC is an important factor that MNCs consider when investing.

Other Assorted Factors

Lastly, there are certain factors that do not fit directly into the previous categories that definitely are considered by MNCs when choosing where to invest. MNCs seek readily available labor situated in areas with good infrastructures. They also may look at the lending, borrowing, and real interest rates of a country when considering how to domestically finance the FDI.

Government Stability

The stability of the regime in power as well as the type of government in place inevitably affects a MNC's decision to invest in a LDC. Military takeovers and coup d'etats may be disruptive for the interests of the MNC primarily because laws and trade norms may be changed instantly by a new, unstable regime and the MNC may not be able

to react quickly enough to pull its investment out of the country. Not only are legal factors a concern when considering unstable regimes, but also the quality of labor may be affected by autocratic, authoritarian regimes.

Lastly, it is important to know not only what factors to concentrate on in order to attract FDI from MNCs, but also to determine the relative importance of these factors. This study begins to provide LDCs with that knowledge. In addition, because LDCs have limited resources, it is important to know what factors should be more of a priority compared to others. If variable X is ten times more important in attracting FDI than variable Y, then resources aimed at improving variable X will be more cost-efficient for the country in terms of attracting FDI. In short, poor countries will know what policy to concentrate on in order to best attract important FDI. Focusing on the factors that the government of a LDC would have control over, this study provides LDCs with the knowledge concerning the direction and the importance of major economic and societal factors that influence FDI.

III. Research Design

Data and Case Selection

The World Development Indicator Report serves as the major source of data in this study. While it provides economic, social, and political statistics on numerous subjects for every county, it also groups countries by economic performance. Also, the IMF's Exchange Agreements and Restrictions Report from 1998 provides us with the ability to determine a LDC's level of economic restriction. This study recognizes LDCs as countries that fall into the categories "low income," "middle-income" and "upper-middle income" countries of the 1997 World Development Indicators. 157

countries were selected with these characteristics, and all of these countries are classified and utilized as LDCs in this study (See Appendix I). Lastly, although theory points to the stability of a LDC's regime or government in explaining a country's level of FDI, exploring this topic was beyond the scope of this paper.

Dependent Variable

The dependent variable in this study is FDI as a percent of GDP. There are numerous ways that FDI can be measured depending on the purpose of the study. In this study, we find it beneficial to measure FDI as a percentage of GDP. As it was suggested before, FDI is a very efficient, desirable form of investment in many LDCs, and may positively contribute to other areas of the economy as well. Assuming that FDI is a) desired by LDCs and b) exhibits the aforementioned positive economic characteristics, it is also safe to assume that a LDC would want FDI to play a large role in its economy in order to stimulate growth. It is for this reason that FDI is measured as a percentage of GDP. FDI is essentially measured as the role FDI plays in the economy of a LDC. If a LDC is a good long-term investment for MNCs, it will have a large FDI to GDP ratio. However, if a LDC is a bad investment, FDI will play a lesser role in the economy, and thus a smaller FDI to GDP ratio should exist. For the remainder of this study, we will call the ratio of FDI to GDP simply the " % FDI."

Independent Variables and Hypotheses

Based on the five theoretical constructs explained above, twenty-two possibly important factors emerge as being possible strong influences on the percent of FDI in LDCs. All of these variables are reported in Appendix 2 along with their corresponding descriptive statistics in Appendix 3. By testing different variables from each of the five

theoretical constructs, a final regression model with at least one variable representing each of the five theoretical constructs is produced and explained. The following three considerations were used in making informed judgments on which variables to exclude from the final regression model: 1) Small sample size because of large amounts of missing data 2) Variables that proved to be statistically insignificant and 3)Importance to the overarching theoretical construct. Below is the regression equation including the specific variables that were chosen to be included in the final regression model:

> %FDI= Constant+ α1(Average % GDP Growth, 88-97)+ α2(Exchange Rate Variability)+ α3(Current GDP '97)+ α4(% Literate '97)+ α5(Liquidation of FDI)+ α6(Restrictions on FDI entrance '96) + α7(Restrictions on repatriation of profits '96) + α8(% Urban Population '97).

Included in Table 2 below are the expected signs of the select variables used in the study. Also in Table 3 included are the descriptive statistics of the select variables used in the study, including the independent variable, % FDI.

Table 2. Independent Variables-Expected Relationship

Theoretical Constructs	Variables (Proxies)	Expected Sign	Quick Explanation
Past Economic Performance and Stability	Average % GDP Growth, 88-97	+	If an LDC has shown ↑ growth potential in past, MNCs can expect ↑ in the future
	Exchange Rate Variability	-	MNCs may want to repatriate profits back to the Home country; thus consistent ex. rates are needed In order to retain value of currency exchanged
Current Economic Capacity	Current GDP '97	+	Measures overall economic capacity
Human Capital	% Literate '97	+	↑ education leads to ↑ productivity
Restrictions on Economic Freedom	Liquidation of FDI Assets '96	+	If the MNC knows the existing laws protect foreig Investment, the will more likely invest in the LDC
0= Restriction 1= No Restriction	Restrictions on FDI entrance '96	+	If there is no restrictions on the entrance of foreign Factories and long-term capital, MNCs will invest
0= Restriction 1= No Restriction	Restrictions on repatriation of profits '96	+	If a MNC can easily repatriate their profits back to The host country, MNCs will more likely invest in The LDC
Logistics	% Urban Population '97	+	↑ people in an easily accessible, well infrastructured location,↑ ease of investment

Table 3. Descriptive Statistics-Mean, Median, Minimum, Maximum, and # of Cases

Variables (Proxies)	No. of Cases	Mean	Median	Minimum	Maximum
% FDI	121	2.53	1.81	-2.44	14.78
Average % GDP Growth, 88-97	112	2.53	3.25	-10.37	14.51
Exchange Rate Variability	142	53.10	34.20	0.00	505.9
Current GDP '97	126	4.59x10^10	5.39x10^9	43639536	9.02x10^11
% Literate '97	100	72.86	79.56	14.32	99.70
% Urban Population '97	151	47.67	45.11	5.9	99.52
Liquidation of FDI Assets '96	138	.6304	1.00	.00	1.00
Restrictions on FDI entrance '96	146	.2055	.00	.00	1.00
Restrictions on repatriation of profits '96	146	.2740	.00	.00	1.00

We now intend to describe each independent variable in the context of the theoretical grouping that it represents.

Past Economic Performance and Stability

The first category to be considered is the past economic performance and stability of a LDC. Under this category, average %GDP growth (88-97) and the exchange rate variability were used as proxies of the past economic performance and stability of a particular country. As the average %GDP growth of a country increases, the %FDI in that country should increase. High GDP growth rates signal a productive, strong economy run by a competent government. Also, the adaptive expectations model predicts that if a country has shown high growth rates in the past, MNCs can increasingly expect growth to continue in the future.

Secondly, the exchange rate variability serves as a proxy of past economic stability. It is measured by the coefficient of deviation The coefficient of deviation is computed by dividing standard deviation of the exchange rate (local currency to dollar) by the mean exchange rate from 88-97. Because many MNCs investing in FDI abroad will be aggregating money of the LDC's currency, the MNC wants to make sure that the money holds its value in the international currency markets. As a result, the lower the coefficient of variation, the more attractive a country should be to long-term investors.

Current Economic Capacity

The current GDP (1997) of the LDC serves as the proxy for the current economic capacity of the country. The higher the current GDP of a LDC, the greater % FDI the country should have. This should signal to investors that the LDC's economy may be more powerful and diverse than the domestic economies of smaller countries. Lastly, if the MNC is considering selling its goods inside the LDC's boarders, the size of the LDC's domestic market is important.

Human Capital

The percentage of literate people in a country is used as the proxy for the human capital of a country. The higher the literacy rate of a country, the greater %FDI the country should have. MNCs need educated people to work for their foreign enterprises, and a highly literate population provides an MNC with an extensive amount of capable employees.

Restrictions on Economic Freedom

Ability to liquidate a MNC's assets, restrictions on FDI entry, and restrictions on the repatriation of a MNC's profits are all proxies for legal restrictions on a MNC's

economic freedom. The more restrictions a MNC has, whether it's when it tries to enter a LDC's domestic market or after the MNC actually has begun doing business in the LDC, the smaller %FDI the LDC should have.

Logistics

Lastly, the percent of the country that is urbanized represents the proxy for logistics theoretical construct. The better the infrastructure and the more accessible labor is, higher levels of %FDI should exist. Highly urbanized areas provide MNCs with large pool of labor to select from in an area that has a much better infrastructure than a rural area would provide. An urbanized area should increase the ease of making routine business transactions, thus increasing %FDI.

Results

The regression test provides one with the opportunity to compare the direction of influence as well as the magnitude of influence of all the independent variables in relation to the dependent variable. Included below in Table 4 are the results of the OLS regression test.

In the regression tests, % urban population (97) and literacy rate (97) were both significant. However, the three economic restriction variables as well as the country's current GDP (97), the average GDP growth (88-97), and the exchange rate variability were all found to be insignificant.

As predicted, the human capital of a LDC, measured by its literacy rate, proves to be important when an MNC is considering foreign investment. Based on the results, a LDC's emphasis on the human capital and the educational levels of the country should tend to attract the investment of the MNC. As seen in Table 4, the coefficient column

shows that a one- percent increase in literacy rates corresponds with a .03% increase in %FDI. Considering that the mean of %FDI is only 2.53%, a one percent increase in a LDC's literacy rate makes quite a difference in the country's level of %FDI. By focusing governmental programs and funds towards educational programs, FDI from MNCs can increasingly be attracted.

Table 4. Multivariate Results[1]

Variable	Coefficient	Beta Value	Significance	Expected Sign
%Literacy Rate, 1997	**3.213x10^-2**	**.342**	**.015**	Yes
% Urban Population '97	**2.725x10^-2**	**.268**	**.045**	Yes
Restrictions on Repatriation 0=restriction	.103	.022	**.865**	Yes
Restrictions on Liquidation 0=restriction	.418	.098	**.435**	Yes
Restrictions on FDI entrance 0=restriction	-.646	-.117	**-.340**	No
GDP, 1997	2.93x10-13	.021	**.845**	Yes
Exchange Rate Variability	-4.748x10^-3	-.094	**.397**	Yes
Average % GDP Growth, 88-97	2.583x10-2	.040	**.724**	Yes

Adjusted R^2=.280 Dependent Variable=FDI Degrees of Freedom=65

Also, the percent of a LDC's urban population appears to be important when explaining the levels of %FDI. Readily available labor assembled in an urban area with a sufficient infrastructure seems important to an MNC when choosing a LDC to invest in. For a one- percent increase in urbanity, the LDC's %FDI should increase by .027%. As a result, programs to increase the country's infrastructure while attempting to centralize commerce and labor in the cities should increase %FDI. The MNC, seeking a readily

[1] In this study, we also tested for multicollinearity and heteroscedasticity and found that the variables were significant within normal limits.

available pool of educated labor in an area with a sufficient infrastructure, looks for LDCs with these characteristics.

As shown in Table 4, no clear trend exists between the economic restriction variables and the dependent variable. One assumption explaining why no relationship existed may be explained by other explanatory variables that are included in the model and study. Perhaps economic restriction means very little to some MNCs, who may tend to focus on the country's current and past and current economic, educational, or social statistics and demographics.

A country's current GDP also exhibited no clear explanatory relationship with respect to %FDI. While some MNCs may actually look to a country's current GDP to determine overall extensiveness of an economy, perhaps many care about how the LDC's government manages the money that is makes, deciding not to focus on simply how much the country generates in revenue. It is important to note that while no relationship exists between current GDP and the *%FDI*, there is a relationship between a LDC's current GDP and the country's *nominal level of GDP*. Generally, countries with higher GDPs have larger nominal amounts of FDI compared to countries with lower levels of GDP.

Finally, the macroeconomic indicators that measured past economic performance and stability were also insignificant. Average GDP growth (88-97) and exchange rate variability are also not statistically significant. Apparently, the macroeconomic indicators of a country have little significance in my study, a topic for future research.

IV. Conclusions and Policy Implications

According to the results, MNCs prefer highly educated, literate populations to illiterate populations and urbanized countries over rural countries. The LDC's educational attainment should also be a priority when attempting to lure FDI from MNCs. Policy implications include focusing funds toward the educational system and providing adequate schooling at the primary, secondary, and tertiary educational levels. Providing incentives for teachers and students alike should improve LDC's educational systems. Also, providing adequate education at a low cost for those not planning to obtain advanced degrees is important. By providing the citizens with the tools needed to complete basic job related tasks, the LDC will be sending the MNCs a signal that the labor force can be highly productive, thus increasing the LDC's ability to attract FDI.

Secondly, LDCs can focus on creating dense areas of commerce equipped with a sufficient infrastructure to sustain the MNCs investment. Perhaps creating incentives for the population to move to the urban areas or possible urban areas will produce the urbanity needed to uphold the needs of the MNC. Additionally, by giving the population a reason to move to urban areas, like domestically created jobs, reasonable housing, entertainment, and in general, a higher standard of living, LDCs can begin to create the urbanity, infrastructure, and available labor necessary to attract FDI.

It is important to note, however, that a good industrial mix should be present when attempting to urbanize. Some countries major cities are *too* urbanized, creating heavy traffic and unfit living conditions. In short, discretion should be used when determining what is "good" urbanization and what types of urbanization would be bad. Perhaps there

is a better way to measure "good" urbanization instead of measuring urbanization in general. This aspect would be an interesting topic for future research.

Although literacy and urbanization of a country are the number one and two predictors of a country's %FDI, LDCs need to look at their own individual characteristics when choosing how to maximize their potential %FDI. When determining what areas to prioritize in to attract FDI, LDCs should look at their current literacy and urbanization rates. If literacy rates are high, the LDC may want to focus on urbanizing the country, and visa versa.

The implications of the regression results are very interesting. Basic macroeconomic indicators, contrary to economic theory, do not explain the variance in %FDI. Past economic performance, past economic stability, current economic capacity, and the economic restrictions of the LDC do not prove significant when explaining variance in a country's %FDI. This result should be encouraging to many LDCs who have trouble managing the basic macroeconomic indicators of the country. Governments of LDCs that cannot successfully manage their economy can focus their efforts toward more manageable goals of increasing education and urbanization.

While basic macroeconomic indicators and economic restrictions were found to be insignificant in this study, perhaps a more detailed look into these areas will uncover tangible results. There may be better methods to measure the legal restrictions of a country and its effects on future FDI. In addition, there may be a better variable that would measure a LDC's current economic capacity or past economic stability besides the ones chosen in our study (Seen in Appendix 2). Also, a further look into the effects of unstable governmental regimes would prove interesting and should be a consideration in

future research. If political stability indices could be created, their inclusion in a model measuring %FDI would be beneficial.

A LDC's level of literacy is most important when explaining the variance in %FDI of LDCs, followed by the LDC's level of urbanization. In short, programs focused toward a LDC's human capital and urbanization should increase a country's %FDI. Lastly, economic theory points toward the importance of past and present economic indicators as well as the economic restrictions of a LDC. However, our results did not substantiate this claim. For future research, perhaps better proxies representing the larger theoretical groupings can be used.

Appendix I

LDCs used in regression and statistical tests (157 total cases):

Afghanistan, Albania, Algeria, American Samoa, Angola, Antigua and Barbuda, Argentina, Armenia, Azerbaijan, Bahrain, Bangladesh, Barbados, Belarus, Belize, Benin, Bhutan, Bolivia, Bosnia, Botswana, Brazil, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Cape Verde, Central African Republic, Chad, Chile, China, Colombia, Congo (Dem. Rep.), Congo (Rep.), Costa Rica, Cote d'Ivoire, Croatia, Cuba, Czech Rep., Djibouti, Dominican Republic, Ecuador, Egypt (Arab Rep.), El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Fiji, Gabon, Gambia, Georgia, Ghana, Grenada, Guadeloupe, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hungary, India, Indonesia, Iran (Islamic Rep.), Iraq, Isle of Man, Jamaica, Jordan, Kazakhstan, Kenya, Kiribati, Korea (Dem.), Kyrgyz Republic, Lao PDR, Latvia, Lebanon, Lesotho, Liberia, Libya, Lithuania, Macedonia (FYR), Madagascar, Malawi, Malaysia, Maldives, Mali, Marshall Is, Malta, Mauritania, Mauritius, Mayotte, Mexico, Micronesia, Moldova, Mongolia, Morocco, Mozambique, Myanmar, Namibia, Nepal, Nicaragua, Niger, Nigeria, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Puerto Rico, Romania, Russian Federation, Rwanda, Samoa, Sao Tome and Principe, Saudi Arabia, Senegal, Seychelles, Sierra Leone, Slovak Republic, Solomon Islands, Somalia, South Africa, Sri Lanka, St. Kitts and the Nevis, St. Lucia, St. Vincent and the Grenade, Sudan, Suriname, Swaziland, Syrian Arab Republic, Tajikistan, Tanzania, Thailand, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Uganda, Ukraine, Uruguay, Uzbekistan, Vanuatu, Venezuela, Vietnam, West Bank, Yemen Rep., Yugoslavia, Zambia, Zimbabwe.

Appendix 2. Independent Variables-Expected Relationship with %FDI

Theoretical Constructs	Variables (Proxies)	Expected Sign	Quick Explanation
Past Economic Performance and Stability	Average % GDP Growth, 88-97	+	If an LDC has shown ↑ growth potential in past, MNCs can expect ↑ in the future
	Average % Inflation, 88-97	-	Low inflation represents a country's ability to mana Its macroeconomic and monetary policy
	Standard Deviation of % GDP Growth, 88-97	-	If a country produces steady, stable, positive growt The past, MNCs can more easily expect steady Growth in the future
	Exchange Rate Variability	-	MNCs may want to repatriate profits back to the Home country; thus consistent ex. rates are needed In order to retain value of currency exchanged
Current Economic Capacity	Current GDP '97	+	Measures overall economic capacity
	% Unemployment '97	-	High unemployment represents an economy in turmoil; MNCs want to enter in virile economies
	GDP per capita '97	+	incomes disposable incomes
	% Private Consumption of GDP '97	+	MNCs may look to break into emerging markets. If the population of a country does not spend much its income the MNC's product may not fare well
	% Gross Domestic Savings of GDP	+	
Human Capital	% Literate '97	+	↑ education leads to ↑ productivity
	# of technicians per 1 mil people '97	+	More technical, highly educated individuals more Acutely measures the education of the country
Restrictions on Economic Freedom	Liquidation of FDI Assets '96	+	If the MNC knows the existing laws protect foreign Investment, the will more likely invest in the LDC
0= Restriction 1= No Restriction	Restrictions on FDI entrance '96	+	If there is no restrictions on the entrance of foreign Factories and long-term capital, MNCs will invest
0= Restriction 1= No Restriction	Restrictions on repatriation of profits '96	+	If a MNC can easily repatriate their profits back to The host country, MNCs will more likely invest in The LDC
	% Import Duties '97	-	↓ extra money expected to pay for import of raw materials and inputs, ↑ investment in the LDC
	% Export Duties '97	-	↓ extra money expected to pay for the export of a product manufactured, ↑ investment in the LDC
Logistics	% Urban Population '97	+	↑ people in an easily accessible, well infrastructure location,↑ ease of investment
	% Lending Rate '97	-	More interest expected on local loans, less FDI by MNCs
	% Deposit Rate '97	+	↑ return on savings ↑ in FDI
	% Real I Rate '97	+	
	Roads Index '97	+	Better an ample transport systems ↑ ease of Investment
	%Trade of GDP	+	Better established trade routes, more FDI
	Population '97	+	↑population ↑pool of labor ↑possible consumers

Appendix 3. Descriptive Statistics-Mean, Median, Minimum, Maximum, and # of Cases

Variables (Proxies)	No. of Cases	Mean	Median	Minimum	Maximum
%FDI	121	2.53	1.81	-2.44	14.78
Average % GDP Growth, 88-97	112	2.53	3.25	-10.37	14.51
Average % Inflation, 88-97	91	91.15	11.69	.96	3367.63
Standard Deviation of % GDP Growth, 88-97	112	4.73	3.64	.59	22.21
Exchange Rate Variability	142	53.10	34.20	0.00	505.9
Current GDP '97	126	4.59x10^10	5.39x10^9	43639536	9.02x10^11
% Unemployment '97	18	8.84	7.80	.90	26.40
GDP per capita '97	113	3594.96	2990.00	410.00	13180.00
% PrivateConsumption of GDP '97	96	4.26	4.04	-24.90	48.38
% Gross Domestic Savings of GDP	117	14.99	14.92	-28.81	67.60
% Literate '97	100	72.86	79.56	14.32	99.70
# of technicians per 1 mil people '97	53	255.91	154.00	2.00	1117.00
Liquidation of FDI Assets '96	138	.6304	1.00	.00	1.00
Restrictions on FDI entrance '96	146	.2055	.00	.00	1.00
Restrictions on repatriation of profits '96	146	.2740	.00	.00	1.00
% Import Duties '97	29	7.41	5.97	.00	28.18
% Export Duties '97	29	.18	.00	.00	2.28
% Urban Population '97	151	47.67	45.11	5.9	99.52
% Lending Rate '97	90	22.51	18.22	7.99	83.96
% Deposit Rate '97	95	13.35	10.19	2.42	79.49
% Real I Rate '97	77	9.16	9.29	-82.50	45.73
Roads Index '97	64	151.20	126.00	25.00	752.00
%Trade of GDP	108	26.57	20.71	3.37	108.46

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