

FOREIGN DIRECT INVESTMENT IN THE UNITED STATES: COUNTRY ANALYSIS

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ABSTRACT

Multinational corporations (MNCs) throughout the world must make critical business decisions in determining when and where to expand internationally. Foreign Direct Investment (FDI) refers to the investment in an asset(s) in a foreign country or market. The United States experienced a drastic increase in FDI throughout the 1980's and continues to expand in numerous industries and states. Firms must make several important decisions when undertaking a FDI including location, mode of entry, objectives of the FDI, and the degree of risk involved. The United States offers several positive characteristics for MNCs that will be explored throughout this paper. The purpose of this paper is to explore the factors that may lead a foreign firm to pursue FDI in the United States. Specific factors will be analyzed including the process firms undertake in choosing a location in the US, role of technology for a variety of industries, industry specific characteristics and risks involved.

INTRODUCTION

Since the beginning of the 1980's, the United States has remained attractive to foreign investors and foreign firms interested in expanding their operations. Over the last two decades, the number of foreign firms conducting business within the US has nearly tripled (Grosse and Trevino, 1996). This attractiveness is motivated by factors such as the large market size of the US, potential lower wages (depending on the home market of the firm), avoidance of import trade barriers and others. FDI serves as a foundation for continuous improvements in economic development both globally and domestically in the United States. The underlying goal of any FDI is to produce a profit utilizing efficient and effective resources. FDI is normally conducted when a firm has developed a product of differentiation enabling the firm

to establish a sustainable competitive advantage (Chung and Alcacer, 2002). The United States experienced dramatic growth in foreign direct investments (FDI) during the 1980's and continues to provide a substantial percentage of capital into the US market. There are several areas of interest in regards to FDI in the US.

Foreign firms that are wholly or majority owned US subsidiaries comprise the vast majority of FDI in the US (Graham, 1991). Those countries that are heavily industrialized provide the largest percentage of FDI in the US throughout the past several decades (Grosse and Trevino, 1996). In 2002, the United Kingdom and France had the largest number of total outlays in the US, with \$12.9 billion and \$15.6 billion, respectively (Anderson, 2001).

When it comes to foreign direct investment in the US, firms are faced with several critical decisions, which will ultimately determine the success or failure of the investment. Firms may undertake foreign investment for several reasons, including the low cost factors of production, technological advancements or advantages, economies of scale in the production processes, and many others. The United States has experienced fluctuations in the amount of FDI expanding into the country. The attractiveness of the US market in terms of size and stability are potentially the two leading indicators of foreign investments. As export barriers evolve in the US, foreign firms recognize the benefits of investing in the US.

What factors do foreign corporations analyze when determining a location for the US affiliate? There are a wide range of variables that comprise the decision in determining the state location of the US operation. These factors will be explored throughout this paper and will assist in developing a location decision methodology. The location decision often varies by the type of industry in which the corporation will be involved.

Domestic firms operating in the US are faced with increased competition from foreign corporations and must identify competencies that establish competitive advantages. These firms are demanding stricter regulations that could potentially restrict foreign firms from entering the US market. As corporations expand into the global market, the level of risk will increase; however increased risk is generally positively correlated with a higher return. This paper will discuss numerous risks that must be analyzed when executing FDI in the US.

The basis of this paper is to determine what motivates foreign firms' decisions to locate their assets in a particular location within the US. Factors that lead to foreign firms undertaking FDI in the US are evaluated. The risks faced by foreign firms' are explored in the next section and finally, an analysis of the trends and future of FDI in the US are documented.

LITERATURE REVIEW

Coughlin, Terza, and Arromdee (1991) illustrate the location decisions of foreign corporations utilizing a Conditional Logit Model (CLM) during the early 1980's when an increased flow of FDI began to take place. The model was based on the firm's ability to maximize profits within a given location. The study involved identifying potential factors that impact the decision of a foreign firm to enter into the United States. More specifically, the authors analyzed the determinants of manufacturing firm's entry into the individual states. During the period of 1981 to 1983, 736 manufacturing firms entered the US. An examination of numerous characteristics assists in determining the location decision of a foreign manufacturing firm as well as those factors that affect profit. The characteristics explored include: 1.) Quantity of available site locations; 2.) State per capita income; 3.) Manufacturing density; 4.) Wage rates; 5.) Availability of labor; 6.) Union activity; 7.) Unemployment rate; 8.) Transportation infrastructure; 9.) State taxation. Based on the combination of these factors, the authors conclude that the importance each characteristic when undertaking an FDI in the US varies. The number of sites available within a state is a significant factor, higher wages were a negative factor; however high unemployment drove FDI into the state, and taxes have a direct impact on location decision. Finally the authors conclude that foreign manufacturing firms are attracted to states with highly developed transportation infrastructures.

Chung and Alcacer (2002) discuss the extent to which firms locate to another country to utilize new or existing technology. The authors coin the term "knowledge seeking" as a description of the expansion of firms abroad to capitalize on technology or capabilities that do not exist within their home market. This is often facilitated by the exploration of R&D facilities located throughout the US and more importantly within specific industries. Within the technological context, the paper discusses the state location decision for manufacturing firms from 1987-1993. Technological advancements provide a positive level of attractiveness to the country in which the technology is located. The paper illustrates the outcome of the author's study of whether firms that are lagging in technology or those firms with leading technical centers have a higher probability of exploring investment opportunities in the United States. Not only do firms lagging in technology locate to areas that are technological centers, but firms that operate in leading technological centers will locate to the US in search of continued technological information. An examination of a multiple variables is conducted to determine the causation of FDI inflows into

the US. Knowledge seeking is most prevalent in R&D intensive industries where obtaining information in the way of technology or personnel is critical to the firm's success.

Ulgado (1996) conducted a study comparing the location traits of American and foreign manufacturing firms. The report discusses the importance of location attributes and how they are different between the domestic manufacturer and the foreign firm undertaking FDI. Not only do location decisions vary by industry, but they also vary between domestic firms and foreign firms. This may come as a surprise, since one would conclude that foreign firms would locate in an area in close proximity to domestic firms that are successful in that particular industry. Ulgado's study found that foreign firms are influenced by a variety of factors that are not parallel with those of domestic firms; however the trend is gradually decreasing and foreign firms are showing signs of reflecting similar patterns of domestic firms. The study concluded finding that foreign firms considered factors such as trade issues, the environment of the community, and transportation when determining a location decision; whereas domestic firms concentrated more on the financial implications such as taxes and availability of capital.

Grosse and Trevino (1996) utilize macroeconomic approaches in explaining the flow of FDI into the US during the years 1980-1991. The study conducted by the authors included a comprehensive analysis of economical, political and geographical variables. From the economic standpoint, the authors concluded that the greater amount of exports into the US, the increased probability that the firm would undertake FDI. On the other side of the coin, the authors found that those countries that import a large quantity of products from the US into the country are less likely to undertake FDI. Countries with a greater amount of distance from the US were found to have a smaller percentage of FDI than those countries in closer proximity to the US. The results of the study also indicated that firms operating in a risky home market are more likely to undertake FDI in the US in order to reduce the amount inflicted.

The influence of FDI into the US due to home country risk is evaluated in a study conducted by Tallman (1988). While factors such as market size and expected return are factors in attracting foreign investments into the US, Tallman expresses that home country variables might exert a level of force leading firms to invest abroad. The study analyzed the relationship between two countries from a political and economical perspective and found that the tighter the relationship from these two perspectives, the higher the level of FDI between the two countries. The opposite holds true. When two countries are in conflict with one another, it would

be expected that the result would be a negative impact on the flows of FDI. Domestic conflict leads to an unstable and fractured business environment. Upon conclusion of the study, Tallman found that economically developed countries are more apt to consider and engage in US FDI. As the political and economical infrastructures develop for a given country, the US should expect to witness increased flows of FDI.

THE FDI DECISION PROCESS AND DECISION FACTORS

Formulating a decision regarding FDI is often tedious and costly. Extensive research accompanied with international barriers leads to an exhaustive decision process. However, once the initial development phase of the FDI is completed, and assuming it was the appropriate decision, the firm can experience the fruits of success. The size of the US market and economic opportunities provide a majority of the rationale regarding the undertaking of FDI in the US (Ulgado, 1996). Along with attractive size of the US market, foreign firms explore additional motives when investing abroad. The opposite impact lies true as well. As the attractiveness of the US economy declines, the level of FDI is expected to decline as well.

In 2002 FDI in the US, measured by total outlays, was \$52.6 billion, while just a year earlier total outlays measured \$147.1 billion. This is a 64% decrease in FDI outlays in just one year (Anderson, 2003). The underlying factor: the economy. With the US market in a downturn throughout the latter part of 2001 and into 2002 (mainly due to the events that took place on September 11th, 2001), foreign investors and firms are apt to reduce the level of investment due to the uncertainty of market conditions. During this same time period, corporate scandals began to surface with the implosion of Enron. With falling stock market prices on top of the volatility of the stock market as a whole, foreign investors continued to reduce the level of firm acquisitions within the US (Anderson, 2003). The weak economy during this time period, as experienced by FDI, can be analyzed by examining net income. In 2002, the net income was a negative \$2.5 billion as compared to a positive \$1.0 billion in 2001. With sales highly correlated to income, newly established foreign firms experienced poor performance within the market (Anderson, 2003).

The decrease in FDI in the US can also be explained from the standpoint of foreign country development. Overtime, countries become more developed thereby increasing the resources the economy has available. With the development and technological advancements of foreign countries, the effect can have multiple

dimensions (Tallman, 1988). The US market is competitive, leading firms to differentiate their products, thus firms located in highly developed countries have an increased probability of succeeding in the US market. Foreign economic development can be illustrated by analyzing a few statistics. When compared to the 25 largest firms in the US in 1969, there were only 6 foreign firms equal in size. As foreign markets developed this number continued to increase. In 1974, the 25 largest firms in the US had been surpassed by 26 foreign firms when evaluating sales (Tallman, 1988).

In addition to market size, foreign firms are attracted to the US by a higher expected rate of return. Firms and investors operating in countries with low return rates recognize the potential to increase profits by acquiring or developing businesses in countries offering higher returns, all else constant. Factors such as risk must be evaluated when analyzing the expected rate of return (Grosse and Trevino, 1996). Higher rates of return are generally represented by a positive correlation to increased risk. A firm operating in their home market maintaining a low expected return is likely to be in a low risk category. While the profits and expected return may increase with the FDI in the US, the firm must be prepared to take on additional risks.

The ultimate goal of any FDI whether it is facilitated in the US or any other country is to maximize profits. As stated earlier, industrialized countries have been the leading sources of FDI flow into the US. During the years 1980 to 1992, Japan's annual growth rate was 31.3 percent. Beginning in 1980, Japan had invested 4.2 billion dollars in FDI stock in the US and by year-end 1992, Japan's FDI stock in the US was a staggering 96.7 billion dollars. While substantially lower, in terms of dollars, Australia experienced the largest annual growth rate percentage during this time period with 36.9 percent. Australia's FDI stock in 1980 was a mere 3 billion while in 1992, the FDI stock had jumped to 7.1 billion dollars (Grosse and Trevino, 1991).

Throughout much of the 1980's and 90's, the manufacturing and information industries lead the way in terms of FDI outlay in the US. In 2002 manufacturing outlays totaled \$17.3 billion, while information investment totaled \$14.2 billion (Anderson, 2003). In the proceeding section (Location Decisions), an emphasis will be placed on the manufacturing industry.

Factors of production are a leading variable in developing or acquiring a business in the US. Lower wages, availability of workers and availability of land are a few that will be explored throughout this paper. In 2002, FDI employed

182,000 people with manufacturing accounting for 74,000 of the workers (Anderson, 2003).

Trade & Distance as Factors

The common type of trade between countries continues to be direct exports. Country A demands a product from Country B thereby creating a simplistic direct trade model. The level of trade between two countries is often dictated by the products produced within a given country and the degree of production taking place within the home country. Countries exporting large quantities of products into the US are generally identified as having a high percentage of FDI within the US. Firms are posed with a three-decision model. 1.) Continue to produce a product in the home market and export to the US; 2.) Transfer production to the US via FDI, thereby eliminating exports into the US; or 3.) Produce a percentage of a product in the home market, exporting it to the US and produce a percentage of the product in the US (Grosse and Trevino, 1996). With this in mind, a positive correlation exists between exports into the US from a given firm or country and the level of FDI undertaken in the US. Those countries with large amounts of exports to the US are expected to have increased levels of FDI in the US.

While higher percentages of exports lead to increases in FDI, the distance between the home country and the US is a factor in evaluating the FDI decision. The costs involved in transferring or developing an international business can be astronomical. Firms spend millions of dollars on research and development (R&D) in an effort to determine the impact of an international expansion decision. The cost of obtaining information related to the US market is expected to increase the farther the researching firm is located from the US (Grosse and Trevino, 1996). For example, when analyzing the “big picture,” the costs of obtaining information and conducting market research would be minimal for Canada when compared to the costs for a country such as Australia. When seeking out new technologies or knowledge firms must be able to rapidly transfer information from the host country to the home market. In order to achieve the rapid transfer, the two countries must be in close proximity to one another. The further the two countries are from one another the longer the time lag resulting in dated information (Chung and Alcacer, 2002). Therefore the conclusion can be drawn that distance is a factor when evaluating entrance criteria of foreign firms into the US.

Similarly, the size of the home market is correlated to the amount of FDI undertaken in the US. A country with large, healthy economies is a direct result of

the firms existing within that economy. Let's look at an example. Japan is a large economy with numerous large-scale firms, while on the other hand the Middle East, taken in the general context, has a small unstable economy comprised of a few small scale-manufacturing firms. As the research indicates, the firms located in Japan are poised to invest or expand their operations abroad. Small firms in weak economies simply do not have the investment power to engage in an international market setting (Grosse and Trevino, 1996).

INFLUENCE OF RISK IN PURSUING FDI IN THE US

Conflict and instability within a home market leads a firm to seek investment opportunities abroad in an effort to avoid the negative consequences imposed on the home economy. The opposite holds true as well. When a home country is stable and experiencing economical growth, domestic investment within the home market is likely to improve reducing the probability of investment abroad (Tallman, 1988). While economic factors produce risk, other factors such as domestic labor instability and strict governmental policies impact firms in pursuing international expansion. A high degree of political risk is correlated with greater FDI into the United States. Government instability or the policies created and enforced by the governmental body directly impact business activity within the home market (Grosse and Trevino, 1996). Policies aimed at strict regulation of the business environment leads to dispersion of foreign firms into the international market. Foreign firms must weigh the costs of undertaking FDI in the US with the risks and conflicts that exist within the home market. In the event the risks existing within the home country outweigh the costs of undertaking the FDI, the firm should pursue the FDI, *ceteris paribus* (Tallman, 1988).

WHAT FACTORS AFFECT THE LOCATION DECISION OF FDI IN THE US?

Foreign firms expanding into the global market must first determine a host country to establish their enterprise. In this study, we will assume the host country chosen is the US. The location decision does not stop with the determination of the host country. The firm must identify a site within the US to develop the new firm infrastructure. There are numerous variables that assist in evaluating and finalizing a state in which to locate the firm. States continue to battle each other for foreign firms to position their business in their state (Grosse and Trevino, 1996). Foreign

firms evaluate variables such as market size, access to surrounding markets, and cost of production. States must market themselves against one another by offering attractive features of the state to the foreign firm. States offering increased and more attractive incentives will win the location battle. Therefore what we see overtime is a continued trend to increase the visibility and attractiveness of state incentives (Ulgado, 1996).

During the period of 1987-1992, the distribution of employment for foreign owned manufacturing firms was concentrated in the Southeast region of the United States. Newly established FDI were generally located in parts of New England and Southeast. With Texas, Louisiana, Missouri and Illinois have high concentrations of manufacturing establishments (Shannon, Zeile, and Johnson, 1999).

The identification of site locations will vary depending on the type of firm undertaking the FDI and the industry in which the firm is involved. Firms may be seeking locations that are flourishing with technological incentives, locations with a greater amount of labor availability, or locations with tax advantages (Chung and Alcacer, 2002). If a firm is lagging in technology improvements or knowledge, the firm will commonly seek a location that offers a greater availability to advancements. The country from which the foreign firm is from also has an influence on the location decision. Both cultural and economic factors play a role in determining where a foreign firm will locate. The importance of state incentives also differ between countries (Ulgado, 1996).

“Japanese firms put factors such as attitudes of local government, attitudes of local citizens, transportation services availability, and employee training incentives at the top of their list, while German firms focus on level of unionization, labor turnover rate, attitudes of local government and transportation services availability when compared to domestic US firms” (Ulgado, 1996).

Foreign firms analyze factors associated with the costs of production when determining site location. The following seven components comprise the cost of production for each state (Chung and Alcacer, 2002):

Land Availability	Percent of population employed
Unemployment Rate	Presence of right to work laws
Average Weekly Wage	Percent of unionized workers
Tax as a percent of income	

A few of these will be explored in greater detail throughout the remainder of this section. In several industries, including that of manufacturing, the firm must have access to labor (workers). Firms that require an abundant amount of labor will locate in states where labor is readily accessible. In addition to labor availability, the firm must pay the employees. Again, firms will locate in states with lower wage rates (Coughlin, Terza, and Arromdee, 1991). This may vary by the level of quality the company desires. More educated and experienced workers require higher wage rates. However, in the manufacturing industry, lower wages are acceptable due to the type of work performed, generally factory workers that tend to be less skilled. Foreign firms are likely to pay higher wages in industries where higher degrees of technology are required or significant levels of R&D are to be conducted (Chung and Alcacer, 2002).

As would be expected, states with a large number of potential site locations have an increased likelihood that the state would be selected when compared to those that have a smaller number of potential site locations, all things equal. This is often referred to as the “dartboard theory.” (Coughlin, Terza, and Arromdee, 1991). In other words if you took a dart and threw it on a map of the United States, the probability of the dart hitting a state with a large land mass, such as Texas is higher than hitting a state with a small land mass, such as Rhode Island. The state with the larger land area for site location offers FDI the ability to expand in the future.

Sophisticated transportation systems within a state attracts FDI. Manufacturers must be able to ship products quickly and effectively, whether it is by ground, air, or water. Availability of these types of transportation systems is critical in competing in the US. States with more highways and airports have a higher probability of attracting more FDI (Coughlin, Terza, and Arromdee, 1991).

INFLUENCE OF TAXATION

Taxation on both foreign and domestic firms involves a hierarchy of levels. Local and state taxes are found at the bottom preceded by corporate income taxes and federal income taxes. Foreign firms are faced with the additional tax burden posed by the firm’s home country (Coughlin, Terza, and Arromdee, 1991). Firms undertaking FDI examine the various taxes and tax incentives offered by states within the US. Again, the degree of emphasis placed on taxes will vary by industry. When comparing the amount of state taxes paid between foreign firms and domestic firms it is generally the same (Hines, 1996).

A number of states have implemented unitary taxation in which, the firm is taxed on a worldwide taxation system. The use of unitary taxation has been found to have a negative impact on employment growth within foreign firms as well as a negative impact on FDI into the US as a whole. Firms are against the implementation of unitary taxation as they argue that they are the victims of double taxation. Firms operating under a unitary taxation system are faced with complex accounting practices, as they must separate regional profits from the worldwide organization (Coughlin, Terza, and Arromdee, 1991). In addition to a unitary taxation system, several countries offer tax credits to firms operating in the US. This is beneficial to states with high tax rates, because firms recognize that taxes applied in the US can be used against taxes from the home country (Hines, 1996).

Taxes are often increased in a given state due to government spending on state infrastructure, such as educational and highway systems. States anticipate that increasing the attractiveness of the state's infrastructure will attract FDI. Government spending is positively correlated to attracting FDI (Coughlin, Terza, and Arromdee, 1991).

As taxes increase in a given state, the FDI in that state will decrease, *ceteris paribus*. The same applies for those states utilizing a unitary taxation system. Firms will deter from locating in a location utilizing this type of tax system. When all else is constant, foreign firms will locate their operations in states with low tax rates (Hines, 1996).

COMPETITION AND CONCERNS OF FDI IN THE US

Economically, FDI generally tends to have a positive impact in the US. As the level of FDI increases, the economic effects increase thus leading to a positive correlation. However, accompanied with increases in FDI, comes an increased level of competition. (Graham, 1991). While competition is a key factor in establishing a healthy market, market saturation can occur causing domestic firms to lose market share. Domestic firms are threatened by FDI as the competition level is increased. While FDI leads to increased competition, domestic firms must enable the proper safeguards to avoid losing their unique capabilities. This can be enacted on a country basis as well. The US maintains certain unique advantages over other countries, such as technology advancements. If the level of FDI is unregulated, foreign firms enter the US seeking these advancements resulting in the loss of the unique advantages due to foreign duplication (Chung and Alcacer, 2002).

Considerations involving national security have been researched by US government policymakers to determine the level of restrictions placed on FDI. The US has implemented laws and policies governing the establishment of foreign firms engaging in sensitive business activities, namely the defense industry. The problem arises when US control over who enters the country becomes too involved and they begin restricting foreign firms from entering the country that should be allowed in (Graham, 2001). A foreign firm restricted from entering the US due to national security reasons, results in animosity towards the US and could potentially have a negative impact on trade and other economic conditions between the US and the home country. The President of the US has the executive power to block foreign entrance into the US in the event national security is threatened. As of 1991, only one foreign investment into the US has been blocked (Graham, 1991). FDI creates positive impacts on the US economy by establishing new jobs and technologies that may not be utilized in the US. "This assists in improving the global competitiveness of domestic industries" (Graham, 1991).

CONCLUSION

The United States experienced dramatic increases in FDI during the 1980's and continues to witness FDI inflows today, although China is becoming their biggest competitive for foreign funds. In fact, in 2003, China received more FDI than the US for the first time in its history. Many believe that this trend will continue in the near future as China opens up their economy and relaxes their rules and regulations concerning foreign ownership of assets in China.

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