

**IMPACTS OF FOREIGN DIRECT INVESTMENT ON
FIRM VALUES: TEST OF A VALUE
CREATING HYPOTHESIS WITH
ACQUISITIONS AND
JOINT VENTURES
CASES**

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PREFACE

The basic purpose of this study was conducted to directly test the market value fluctuations and their impact on multinational expansion through foreign acquisitions and joint ventures, determining whether foreign direct investment is a value-creating investment. The empirical results of this study show evidence that foreign direct investment is a value creating investment decision. Shareholders of direct foreign investing U.S. firms experience significant positive abnormal returns at the announcement of the investment. For the three-year long-term period, shareholders of direct foreign investing U.S. firms also experience significant positive compounded abnormal returns.

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CHAPTER I

INTRODUCTION

Presently, more and more American firms are seeking business opportunities in foreign markets. This increased interest is due in large part to the simple fact that as a business grows it becomes more aware of potential markets. Foreign markets offer growing firms several irresistible benefits: exportation of a firm's product provides the firm with potential consumers, and similarly opens up the opportunity to tap into foreign supplies. Many American companies, such as American Brands, Dow Chemical, Exxon, and Colgate Palmolive, generate more than half their sales in foreign countries. Some companies, such as Westinghouse Electric, Honeywell, and Eastman Kodak, specifically operate in foreign markets by using subsidiaries and joint ventures. All of these companies enjoy substantial growth as a result of their efforts to capitalize on international business opportunities.

If and when a firm recognizes its international opportunities, it then has the possibility of evolving into a multinational corporation (MNC). MNCs are specific companies committed to seeking out and undertaking investment, marketing, and financing opportunities on a global basis. This means that MNCs must be internationally mobile so that they can effectively manage all the varying levels of global production. Global management is not achieved with ease as MNCs constantly attempt to efficiently allocate scarce resources. Yet, before entering into any in-depth discussions about specifics of MNCs, it is first essential to look at their history.

The growth of multinational corporations and foreign direct investment since World War II has become a major economic phenomenon. The rapid expansion in the international business activity has been especially strong since the creation of the European Economic Community (EEC) in 1958. For example, since that time, portfolio and foreign direct investments have grown simultaneously, both in developed and in less-developed countries. Likewise, growth has been recorded in the number of subsidiaries of multinational corporations, in the number of countries in which MNCs operate, and in the increasing diversity in the products manufactured and sold internationally.

Foreign direct investment (FDI) is defined by the U.S. International Trade Administration as the direct or indirect ownership by a foreign entity of 10 percent or more of the voting securities of an incorporated business enterprise. It may also entail an equivalent interest in an unincorporated business enterprise, and a 10 percent or more interest in real property. FDI involves the acquisition of physical assets such as plants or facilities, joint ventures, newly constructed plants, or other types of real estate. Thus, foreign direct investment increases international business through either establishing a new subsidiary or purchasing an existing company in the foreign country.

The amount of U.S. direct investment abroad increased from \$ 208 billion in 1983 to \$ 350 billion in 1992, a 5.34 % annual compound growth rate. During this same period foreign direct investments in the U.S. itself increased from \$ 138 billion to \$ 270 billion, a 6.94 % annual compound growth rate. Thus, it becomes obvious that there has been a recent dramatic increase in the amount of FDI, both in the U.S. and abroad.

With statistics reflecting the large quantity of investments being made, it becomes essential to examine the cause behind the actions. Many explanations of the motives for, and the determinants of, foreign direct investment have been developed. The commonly used explanations for making foreign direct investments are summarized as follows:

a) imperfections and costs in product and factor markets; b) biases in taxation, in government, and in regulatory policies; and c) imperfections in the international financial markets. These global differences stimulate a firm to expand its business internationally. On the other hand, there are restrictions such as higher production costs and political and financial risks that may hinder a firm from expanding internationally. Therefore, when a firm considers a foreign direct investment decision, it must evaluate both the resultant costs and benefits.

A potential benefit to a MNC is the probability of international diversification that reduces risks. Risk reduction can easily be discussed through the examination of portfolio theory. Grubel (1968) provides an early application of portfolio theory in an international context. He suggests that for the individual portfolio investor, risk reduction is promoted by holding a diversified portfolio of international securities. However, there are many restrictions on international investment, such as higher information processing and transaction costs, the fear of expropriation, and political risks, that may prevent investors from achieving an efficient internationally diversified portfolio. To cope with these restrictions on international portfolio diversification, it has been suggested that investments be made with domestically traded multinational corporations. This will thus provide the advantages of international diversification. As an alternative to international

portfolio diversification, multinational corporations can provide asset-based diversification to investors. Investment in a multinational corporation may be a good substitute for international portfolio diversification because multinationals can exploit the benefits derived from the imperfections in product and factor markets and international financial markets.

There are additional benefits of risk reduction from multinational corporations. Kogut (1983) explains that foreign direct investment decisions by multinational corporations are beneficial because they can take advantage of a multinational network system. He argues that the primary advantage of the multinational firm, as differentiated from an unational corporation, lies in the flexibility to transfer resources across borders through a globally maximizing network. Therefore, the announcement of foreign direct investment by an MNC could be associated with unanticipated increase in the market value of the common stock. In this case, investors expect the future operations of the firm to benefit from the multinational network system.

Much of the discussion up to this point suggests that foreign direct investment by multinational corporations benefits shareholders. However, these benefits to shareholders must be weighed against the costs and risks involved, including the nominal expenses of establishing FDIs, the indirect costs, political risks, and other varying financial risks. These costs and risks may significantly affect the performances of an MNC. Research studies of the performance differences between multinational firms and unational firms have yielded results which are inconclusive and contradictory. Agmon and Lessard (1977) argue that multinationals gain higher returns than unationals; however, other studies

such as Fatemi (1984) and Michel and Shaked (1986) provide results contradictory to that of Agmond and Lessard (1977). Research on risk reduction from international diversification also provides conflicting results. Grubel (1968), Levy and Sarnat (1970), Lessard (1976), and Solnik (1974) show risk reduction from international portfolio diversification. Agmon and Lessard (1977) and Fatemi (1984) show that multinationals have lower risks than uninationals. But, Jacquilat and Solnik (1978) show little risk reduction for MNCs and argue that investing in MNCs is a poor substitute for international portfolio diversification. Most research focuses on risk reduction and financial performance aspects of international diversification; however, such research fails in providing direct evidence regarding the impact on shareholders' wealth from international diversification.

Foreign direct investment (FDI) can perhaps be explained more precisely through corporate finance theory. Modern corporate finance theory assumes that a firm undertakes investment projects to increase the value of the investing firm to maximize shareholder wealth. This assumption implies that a multinational firm undertakes investment in the form of an FDI only when that FDI provides a positive net present value, thus increasing the value of the firm. As many businesses apply this theory, their foreign direct investments may quickly expand as seen in recent years. It is assumed that the firm's expected net present value will have a positive impact on shareholder wealth if the firm chooses to invest in an FDI. Shapiro (1986, p. 408) generally reinforces this idea by stating that "becoming multinational is not a matter of choice but, rather, one of survival." He explains that FDI is a means of survival because it preserves normal profits (it does

not enter into to earn abnormal profits). Consequently, there is a need to investigate the economic impact of foreign direct investment, determining whether it is a matter of growth or one of survival.

There are several studies which directly test the impact of international expansion on a firm's market value. Recording fluctuations in market value is essential in determining whether or not international corporate expansion will benefit shareholders. Fatemi (1984) examines the behavior of cumulative average residuals for a portfolio of 18 firms. Interestingly, Fatemi reports an increase in abnormal positive returns. Doukas and Travlos (1988) similarly investigate the reaction of stock prices to announcements of foreign acquisitions by U.S. firms. Their research indicates that significant positive abnormal returns are obtained when MNCs have not previously been operating in the target firm's country. Ahn (1988), Conn and Connel (1990), Harris and Ravenscraft (1991), Shaked, Michel and McClain (1991), and Cebennoyan, Papaioannou and Travlos (1992) all form a consensus which details that U.S. target firms gain wealth from cross-border acquisitions. McConnell and Nantell (1985), Lummer and McConnell (1990), and Gupta, et al. (1991) additionally recognize FDI via joint ventures as being able to create value. These studies support the hypothesis that joint ventures provide positive impacts on firm value. To the contrary, Lee and Wyatt (1990) show negative responses for international joint ventures. Thus, the existing literature gives inconsistent and inconclusive evidence as to the degree that wealth impacts FDIs. Therefore, a more comprehensive study in this area is clearly needed to provide more definitive evidence.

All of the empirical research previously mentioned on cross-border acquisitions and joint ventures classified as FDI focuses on daily stock returns surrounding the FDI announcement dates. Thus, it is critical to note that no study has investigated the long-run performance of multinational firms after a foreign direct investment. In fact, only a few studies [Langetieg (1978), Asquith (1983), Magenheim and Mueller (1988), Agrawal, Jaffe and Mandelker (1992), and Loderer and Martin (1992)] have been done which investigate the long-run performance of *domestic* mergers and acquisitions. These studies consistently find significantly negative abnormal returns over one, three and five years. It is thus essential that FDI also be analysed from a long-term viewpoint. That is, there is a need for a study of long-run performance of firms following a foreign direct investment as is proposed in the current research.

Most of the previous research in cross-border acquisitions and joint ventures has utilized the asset pricing model of Sharpe (1964), Lintner(1965), and Black (1972), which uses beta as the measure of systematic risk. This model, no matter how frequently used, has come under some criticism. One of the most prominent criticisms of the Sharpe-Lintner-Black model is the size effect demonstrated by Banz (1981). He shows that firm size provides another explanation of the cross-section of average returns provided by market beta. He finds a negative relation between average return and firm size. Fama and French (1992) find that the positive relation between average return and market beta disappears over the period 1963 to 1990. Thus, their study does not support a simple positive relation between average stock returns and market beta. However, when they include a firm size variable, the positive relation between average stock returns and market

beta holds for that period. Furthermore, Dimson and Marsh (1986) suggest that firm size plays an important role in studies of long-term stock price performance. Thus, the need to study the long-run performance of firms investing in FDI can be better accomplished by taking size-based risk measures.

The basic purpose of this study is to directly test the impact of multinational expansion through foreign acquisitions and joint ventures on market value fluctuations to determine whether foreign direct investment is a value-creating investment. A second purpose of this study is to investigate the long-run performance of multinationals who invest in foreign direct investment. This study employs international acquisitions and joint ventures by U.S. firms as measures of foreign direct investment, and is designed to test the impact of direct foreign investment on stock price. Announcement impacts of surrounding-event-date and long-run performance are investigated to provide evidence on whether foreign direct investment is a value-creating corporate decision.

The empirical results of this study show evidence that FDI is a value creating investment decision. Shareholders of U.S. firms engaging in direct foreign investment experience significant positive abnormal returns at the announcement of the investment. For the three-year long-term period, shareholders of U.S. firms engaged in direct foreign investment also experience significant positive compound abnormal returns. When FDI acquisitions and FDI joint ventures are analyzed, separately, significant positive impacts on firm value in terms of short-term and long-term performance evaluation were found from the both samples.

Research in this study is organized as follows. Chapter II reviews the existing literature concerned with theories of the multinational corporation, and also with related empirical works of value-creating investment decisions. Chapter III describes the data, the hypotheses, and the specific methodology. Chapter IV reports and interprets the results, and the final section provides a brief summary and conclusions.

CHAPTER II

REVIEW OF THE LITERATURE

In studying the impact of foreign direct investment (FDI) on firm value, we need to examine each foreign direct investment (FDI) as a means of international expansion for multinational corporations. This chapter briefly describes the existing literature which forms the foundation for this examination. This chapter is divided into three major segments. Initially, the theories posited for the existence of multinational corporations are described to provide a general understanding of foreign direct investment (FDI). Secondly, an explanation about the motivating factors for foreign direct investment (FDI) is posed. And lastly, a review of previous empirical works concerned with the effects of foreign direct investment (FDI) on firm value is presented.

A. THEORIES RELATED TO FOREIGN DIRECT INVESTMENT

The most commonly used explanations for why firms become motivated to expand their business internationally ranges between two main theories; the product life cycle theory and the eclectic theory. This section reviews the product life cycle theory, the oligopolistic theory, the internalization theory, and the eclectic theory. These four theories overlap to some degree and often complement each other in their explanation

concerning the multinational expansion of a firm. However, no one theory has been developed which explains foreign direct investment for all types of firms and/or countries.

A.1. Product Life Cycle Theory

The product life cycle theory is based upon Vernon's (1967) explanation of foreign direct investment. His theory originated from the idea of product differentiation with a time lag. Present theory postulates the existence of imperfections in both the market for products and the market for factors of production. According to the product life cycle concept, innovation (the stimulus for a new product or process) is typically provided by some perceived opportunity (or threat) in the major, usually home, market. Vernon confirms this by suggesting that innovations tend to reflect the characteristics of the home market. The home market is not only a stimulus for innovation, but it also is the preferred location for product development. U.S. firms keep these facts in mind and thus tend to develop and to manufacture products that are labor-saving. European firms, in contrast, tend to develop and to manufacture products that are material-saving and capital-saving.

The theory suggests that FDI is a natural phase in the life cycle of a new product. In its original version the life cycle of a product was conceived as having three phases but, later this cycle was expanded to four phases. In the first stage, technologically advanced or differentiable products are discovered by intensive research and development efforts. Here the innovating firm produces and markets solely in the home market; however, it does typically benefit from monopolistic advantages.

In the second stage, as market becomes saturated with competition, bigger markets and greater economies of scale can be gained by exporting. Assuming that there is an imperfect market for knowledge and technology, the original advantage held by the innovator in his home market may be duplicated abroad. The increased demand in overseas markets eventually leads to foreign direct investment for local production of the product.

The third stage is characterized by a standardization of the product as well its production process. The original advantages held by the innovator are dispossessed, and foreign producers are able to gain a substantial advantage by refining their production techniques. Likewise, these same producers can gain economies of scale at least sufficient enough to cause price and market competition. During this third stage foreign manufacturing locations are sought in developing countries where market imperfections in the cost of factors create a chance for lower unit production costs, particularly labor costs.

And in the fourth stage, the original innovating firm ceases all production in the typically high labor cost domestic market for labor-intensive products. Thus, the home market is served through imports from foreign subsidiaries located in low-wage areas abroad.

The product life cycle theory has been expanded several times so that now it incorporates labor costs and other factor costs (land and material). Hirsch (1976) generalizes about the product cycle model, stating that the rigid sequential relation between product innovation, export and FDI is no longer essential for its validity. Contrastingly, Buckley and Casson (1976) argue that this theory is only applicable to

highly innovative industries because it oversimplifies the firm's decision-making process.

The product life cycle theory does not pretend to explain all kinds of FDI but, rather offers an useful explanation of the interaction between production, export and FDI at the firm level during the fifties and sixties. Vernon (1971) himself has called it a deliberate simplification of reality without the complex sociological, political and idiosyncratic factors influencing investment behavior.

The predictive powers of the product life cycle model have waned in recent years, essentially for two reasons. First, there has been an increase in the geographical reach of many firms because they already have subsidiaries abroad. Second, there have been changes in the national markets of the advanced industrialized countries that has reduced many of the differences that had previously existed among them. Because of these reasons, the interval of time between the introduction of any new product and its first production in an overseas market has substantially decreased. There has grown a considerable reverse flow of technology through innovations by the subsidiaries abroad. The technology gap has narrowed significantly over the years. The product life cycle theory has now fewer predictive powers than before. It might be relevant for small firms that have not yet established substantial foreign operations.

In this study, we will not test this theory directly. This product life cycle model explains partially the motive that an innovative firm expands its business into overseas.

A.2. Oligopolistic Theory

Theories based on concepts of industrial organization and the existence of market imperfections postulate that foreign investment is undertaken only by those firms which enjoy some monopolistic or oligopolistic competitive advantage. The reason is that under perfectly competitive market conditions foreign firms would have no advantage due to the cost of operations from a different environment, both geographically and culturally. Thus, the firm that invests abroad is presumed to have some countervailing advantages over the cost of operations, whether in product differentiation, marketing or other managerial skills, proprietary technology, or favorable access to finance, and other critical inputs.

Oligopolistic theory further suggests that firms do FDI in nationally concentrated industries to prevent competitors from gaining or enlarging special advantages which could then be exploited globally. Scherer (1967) explains that innovative activities of firms are positively correlated to industrial concentration as long as this concentration is moderate. At higher levels of concentration, research and development (R&D) expenditures of firms decline. Knickerbocker (1973) hypothesizes that FDI is a result of oligopolistic reaction. He constructs an entry concentration index (ECI) which demonstrates the strength of FDI entry into U.S. and uses it to compare with the U.S. industrial concentration index. He shows a significant positive correlation between the two indices from which he concludes that high industrial concentration is related to high strength of FDI, except at very high levels where the oligopolistic structure is extremely stable and the firms are able to avoid competition in a host country market. He also shows

that the profitability of FDI is positively correlated to entry concentration. His findings support Scherer's (1969) finding that the relation between the entry concentration index (ECI) and the industrial concentration index (ICI) becomes negative at a very high level suggesting the existence of collusion between firms. Flowers (1975) tests Knickerbocker's hypothesis on FDI from Canada and from Europe in the U.S. He shows a significant positive correlation between the entering concentration of foreign direct investment in the U.S. and the concentration of the industry in the investing countries. In industries with high seller concentration the firms tend to match quickly the FDI of the leading firm in order to maintain their market shares.

In brief, oligopolistic theory seems to explain FDI as a function of the oligopolistic reaction of firms to the initial FDI to maintain a competitive equilibrium and maintain their market shares. This theory coincides in Shapiro's (1986) conjecture that "becoming multinational is not matter of choice but, rather, one of survival." This study will not test this theory directly. Considering the Shapiro's aspect, primary motive in FDI may be sustenance of normal profits rather than the hunt for abnormal profits. This indicates that FDI is not a value creating investment decision, but a matter of survival. Thus, we do test the oligopolistic theory indirectly as a defensive investment strategy.

A.3. Internalization Theory

The existence of firm specific advantages based on market imperfections cannot explain why a MNC prefers FDI as an exploitation of its advantage rather than other forms such

as exporting, licensing and managerial contract. Buckley and Casson (1976) postulate imperfect markets for intermediate products such as human capital, proprietary information, expertise in research, management, marketing and technology. It takes significant time lags and transaction costs for the investing firm to organize and utilize these intermediate products through imperfect markets. As a result firms are encouraged to create their own internal markets by common ownership and control in order to replace the failures of external markets for intermediate products. They point out that FDI is a result of internalization of imperfect markets for intermediate products across national boundaries.

Buckley and Casson stress the need for a systematic general theory of FDI and multinational firms. The theory of internalization is appealing as a high level synthesis of the market imperfection theories. Its empirical verification is, however, very difficult, if not impossible because no observable market exists external to the firm. This theory postulates that FDI is a means of reducing time lags and transaction costs to organize and utilize intermediate products. Thus, we can assume that FDI can reduce costs and exploit intermediate products and, thereby, a value creating investment decision.

The internalization theory tries to explain the motive for a firm to become a multinational firm. In this study, we cannot test this theory directly. However, we can indirectly test this theory based on the assumption that by reducing costs and exploiting intermediate products markets, FDI then boosts the value of the firm.

A.4. Eclectic Theory

The eclectic approach to explain FDI is proposed by Dunning (1977, 1979, 1981, 1988). He distinguishes three groups of advantages that determine the propensity of a firm, industry or country to be involved in FDI. Ownership advantages are factors that enable a specific firm to expand, for example, to achieve specific technologies or supplies of factors. Internalization advantages contemplate whether expansion is best accomplished within the firm, or by selling the rights to the means of expansion to other firms. Locational advantages explain whether expansion is best achieved at home or abroad. This is a question of comparative advantage. Obvious contributors are relative transportation costs, locations of materials and markets, cultural similarities, government intervention and risks of expropriation. Locational advantages explain why a specific investment should be located in a specific country, ownership advantages explain why FDI is possible, and internalization advantages explain why FDI is preferred instead of licensing and managerial contracts. Therefore, eclectic theory explains FDI by combining the ownership-specific and internalization advantages with the location-specific advantages. Assuming that the firm can utilize those firm-specific advantages (ownership and internalization) in order for FDI to take place, it should be profitable to combine firm-specific advantages with the location-specific advantages in the host country. Dunning's explanation indicates that FDI should be a value enhancing activity for firms. Thus, it supports the hypothesis that foreign direct investment should have a positive impact on firm value.

In this study, we do not test the eclectic theory directly. Indirectly, we can test the assumption that the eclectic theory supports FDI as a value creating investment.

Up to this point the prominent four theories of FDI have been reviewed briefly to provide a general understanding of FDI as a means of internationally expanding activity. Product life cycle theory accounts for FDI by using the life cycle of a new product from its introduction to its maturity and eventual decline. Oligopolistic theory explains FDI as a defensive investment abroad to maintain oligopolistic competitive advantages and to keep the market share. Internalization theory explains FDI as a result of internalization of imperfect markets for intermediate products across national boundaries. As the most advanced theory, eclectic theory explains FDI by synthesizing ownership advantages, internalization advantages and location-specific advantages. However, there is no single theory to explain all the diversity and multi-dimension of FDI activities. In this study, we consider above four theories as an explanatory model of FDI activities. However, we do not test these theories directly. We will directly investigate the impacts of FDI on firm value.

B. FACTORS IN FOREIGN DIRECT INVESTMENT

In the previous section, theories of foreign direct investment (FDI) have been reviewed. In order to fully understand foreign direct investment (FDI), a review of factors which stimulate foreign direct investment (FDI) is required. Many studies [Agarwal (1980), Black (1972), Errunza and Senbet (1981), Ragazzi (1973), and Stulz (1981), etc.] have

tried to find the determinants of international investment. In view of these studies, we can find factors to motivate foreign direct investment (FDI), such as the following: (1) imperfections in the product and factor market; (2) imperfections in the international financial market; and (3) biases in taxation, government, and regulatory policies. In this section, we will review these three motivating factors.

B.1. Product and Factor Market Imperfections

Hymer's seminal paper (1960) identifies imperfections in national and international markets for products and/or for factors of production as preconditions for most direct foreign investment. Hymer (1960,1976) presumes that local firms have better information about the economic environment in their country than do foreign companies, and then he explains two conditions as rationales of FDI: (1) foreign firms must possess a countervailing advantage over the local firms to make such investment viable, and (2) the market for the sale of this advantage must be imperfect. Following Hymer's study, Kindleberger(1969) extends Hymer's work and provides the first comprehensive survey of the various theories of foreign direct investment (FDI) along the lines expressed by Hymer. Kindleberger (1969) states that market imperfections are the reason for the existence of FDI. Specifically, he comes up with the following taxonomy: imperfections in goods' markets, imperfections in factor markets, economies of scale and government-imposed disruptions. Calvet (1981, pp. 44-48) refines the market imperfection paradigm into four classes: (1) market disequilibrium hypotheses, (2) government-imposed

distortions, (3) market structure imperfections, and (4) market failure imperfections.

These market imperfection classes are described as follows:

(1) Market disequilibrium hypotheses: In a disequilibrium context, flows of FDI would take place until markets return to stability. Instances of disequilibrium can be found in factor markets and foreign exchange markets.

(2) Government-imposed distortions: The distortions imposed by government have no equilibrating forces to nullify the incentive for direct investment. Governments create distortions such as tariffs, nontariff trade barriers, preferential purchasing policies, tax incentives, capital market controls and similar policies.

(3) Market structure imperfections: These imperfections refer to departures from purely market-determined prices brought about by the existence of monopolistic or oligopolistic market characteristics. The oligopolistic firm is large enough to recognize the mutual interdependence of the firms in the oligopolistic market, its decisions will affect the other firms which in turn will react in a way that affects the initial firm. The other oligopolistic characteristics are barriers to entry which prevent a surge of competition. Both of these oligopolistic features have been used extensively to explain FDI.

(4) Market failure imperfections: Production techniques and commodity properties prevent a market mechanism from allocating resources efficiently.

B.2. Financial Market Imperfections

An important financial motivation for foreign investment is the desire to reduce risk through international diversification. If international financial markets are integrated and perfectly competitive, the diversification benefits from being a multinational corporation may be equal to the benefits achieved by an individual investor. That is, there may be no difference between investment into overseas stocks and investment in a multinational firm's stock with regard to gains from international diversification. And, thus, the pure financial incentive for corporate international diversification through FDI is eliminated in an efficient international capital market.

On the other hand, if some investors face barriers to international investment such as information gaps, relative inefficiency in foreign capital markets, exchange rate changes, currency controls, different taxation, expropriation, and other forms of government intervention, then an international capital market equilibrium cannot exist. At an investor level these imperfections in the international capital markets reduce the ability of investors to hold optimally diversified international portfolios. Thus, there exists an argument that the multinational firm can serve as a substitute means for international portfolio diversification. In the presence of barriers to international capital flows, investors may be able to achieve low-cost international diversification only by purchasing the shares of multinational firms. For example, the U.S. investor can diversify by simply purchasing shares of U.S.-based multinational firms. Thus, imperfections in the international capital markets motivate firms to diversify internationally. However, Jacquillat and Solnik (1978), Brewer (1981), Fatemi (1984), and Michel and Shaked (1986) show contradictory

results to the argument that the MNC provides an international portfolio diversification service to domestic investors. Therefore, investing in MNC cannot be regarded as a substitute for international portfolio diversification.

As a firm's international involvement grows larger, its operational risk increases because of risks rarely encountered by purely domestic firms such as exchange rate changes, currency controls, expropriation risk. There is, however, a good reason to believe that being multinational may actually reduce the riskiness of a firm. Investments in countries whose economic cycles are not perfectly correlated with the company's home country should reduce the variability of a multinational company's earnings. A number of studies indicate that becoming a multinational firm reduces the riskiness of a firm (Levy and Sarnat 1970, Cohen 1975, and Rugman 1976). To the extent that asset returns of foreign investments are not perfectly correlated with those of domestic investments, the overall risk associated with variations in cash flows should be reduced. Thus, the greater riskiness of individual overseas projects can well be offset by beneficial portfolio effects. For developed countries, the economic cycles are more closely correlated with each other than less-developed countries. For the less-developed countries, the economies are less likely to be closely correlated with U.S. or with other developed countries. Thus, the diversification into the less-developed countries should provide the maximum diversification benefits. Errunza and Rosenberg (1982) and Errunza (1983) test the benefits of investing in less developed countries and show greater country diversification benefits from FDI in less-developed countries.

In brief, international diversification can reduce risks greater than national diversification. Imperfections in international financial markets prompt the multinational firm to serve as a substitute means for partially or completely impeded international portfolio diversification. In the consolidation of the multinational firm's operations in multiple countries, there is less variation in sales and profits than in firms confined to a single country market. Thus, FDI of a multinational firm can be explained as a means of risk reduction through country diversification.

B.3. Biases in Taxation, Government, and Regulatory Policies

Taxes, tariff, and trade policies may impact both real and financial decisions for overseas investments. If a host country establishes prohibitive tariffs or import restrictions, an exporting firm may build or purchase manufacturing facilities in the host country to circumvent the costs. Furthermore, differences in accounting regulations and taxes can have effects on incentives for overseas investments. Scholes and Wolfson (1990) show that changes in U.S. tax laws give incentives for the purchase of U.S. firms by foreign investors. As an example, the 1981 Economic Recovery Tax increased the incentives for domestic takeovers such as accelerated depreciation schedules. However, the 1986 Tax Reform Act almost washed out the incentives for domestic takeover so it attracted foreign investors to acquire U.S. firms. Therefore, a multinational firm can exploit the opportunities of biases in taxation and government regulations through FDI.

C. REVIEW OF PREVIOUS EMPIRICAL WORKS OF FOREIGN DIRECT INVESTMENT (FDI) AS A VALUE CREATING INVESTMENT DECISION

In this part, we review previous empirical studies of foreign direct investment (FDI) as a value creating investment decision. The first section summarizes empirical works of foreign direct investment (FDI) as a value creation investment. The second and third sections, respectively, briefly review the empirical works relating cross-country diversification effects and the empirical works relating cross-industry diversification effects. The fourth section reviews empirical works relating host country experience effects. The final section summarizes empirical works related control level effects

C.1. Foreign Direct Investment (FDI) as a Value Creating Investment

As mentioned early, a firm undertakes investment projects to increase the value of the firm. This presumption infers a multinational firm undertakes investment in the form of FDI only when that FDI provides a positive net present value and increases the value of the firm. The value creation stems from exploitation of imperfections in product and factor markets, imperfections in international financial markets, and biases in taxation and regulatory policies. There are various sources of value creation in FDI (for example: market power, economies of scale or scope, technology, or diversification of risk, etc.). Kogut(1983) suggests that the valuation effects of multinationality stem from the following collection of valuable options: a) the firm's ability to arbitrage institutional

restrictions (tax codes, antitrust provisions, and financial limitations); b) the informational externalities captured by the firm in the conduct of international business (learning cost externalities); and c) the cost savings gained by joint production in marketing and in manufacturing. These value additive options should increase the value of the multinational firm to the extent that these options can be exploited.

However, these increased values through FDI can be deteriorated by agency costs and risks involved in FDI. The agency problem occurs when there is a conflict of goals between managers and shareholders. Agency costs of assuring that managers attempt to maximize shareholder wealth and free cash flow hypothesis of Jensen (1986) (cash flow in excess of the amount needed) can destroy the increased values through FDI. The risks associated with FDI are as follows: exchange rate changes, currency controls, expropriation risk, or government intervention. Value deteriorating factors such as agency problems and risks associated with FDI impact negatively on the investing firm's value.

Previous empirical studies emphasize risk diversification and examine performances of multinational firms. With regard to risk diversification, Grubel (1968) shows that for the individual portfolio investor risk reduction is facilitated by holding a diversified portfolio of international securities. These results have been subsequently supported and extended by Levy and Sarnat (1970), Lessard (1973), Solnik (1974), Rugman (1976), and Agmon and Lessard (1977). These empirical studies show that the benefits from international diversification at the shareholder level in the form of risk-adjusted returns are superior to those achievable in an unational market.

Most empirical evidence regarding performance differences between multinational firms and uninational firms is either inconclusive or contradictory. Hughes, Logue, and Sweeney (1975) compare security performance of 46 multinational corporations (MNC) and 50 purely domestic firms (DMC) for the period 1970-1973, based on a GNP-weighted world index and a domestic market index. The results show that MNCs have lower systematic and unsystematic risk than DMCs. Thus, they support the hypothesis that MNCs provide substantial diversification benefits. In addition to assessing their risks, Hughes et. al. (1975) also compare the performance of the two groups. The results show that the average returns of MNCs are lower than those of DMCs, and the MNC risk-adjusted performance exceeds that of the DMC when a domestic market index is used. Agmond and Lessard (1977) examine investor recognition of the diversification opportunities provided by MNC through regressing the returns of 217 U.S. multinationals on the U.S. stock index and an international factor for the period 1959 - 1972. They show that the higher the degree of international involvement, the higher the firm's return and the lower its systematic risk. Agmon and Lessard (1977) support the view that the MNC provides diversification benefits of risk reduction and higher returns. In support of Agmon and Lessard (1977), Mikhail and Shawky (1979) investigate the performance of a group of 30 randomly selected MNC common stocks for the period 1968 - 1975. The results show that on average, MNC common stock earns a slight (0.6 %) risk-adjusted excess return over comparable domestic firms. Errunza and Senbet (1981) examine the relationship between excess value and international involvement for the period 1968 - 1977. They show a systematic positive relationship between the current degree of

international involvement and excess market value. Yang, Wansley, and Lane (1985) examine whether the U.S. stock market considers the multinationality of a firm and international events which are expected to affect the MNC stock prices using a two-factor international market model and a residual analysis. From the sample of 135 MNCs and 135 DMCs, the results indicate that the greater the foreign involvement of a firm, the more its rate of return depends on international factors and the less they rely on purely domestic factors. The results support the hypothesis that the U.S. stock market does recognize the multinationality of a firm and international events. Up to this point, we have reviewed briefly the empirical works supporting the view that MNC provides diversification benefits.

On the contrary, the argument that the MNC provides an international portfolio diversification service to domestic investors is not corroborated by the results of several studies such as those by Jacquillat and Solnik (1978). Therefore, investing in MNC cannot be regarded as a substitute for international portfolio diversification. Jacquillat and Solnik (1978), using a sample of forty European and twenty-three U.S. firms find that the effect of foreign influence on the systematic risk of multinationals is unexpectedly small relative to the degree of their foreign involvement. In support of Jacquillat and Solnik (1978), Brewer (1981) shows no significant difference in the risk-adjusted performance between multinationals and uninationals comparing the monthly percentage returns for the period 1963 -1975 for a sample of 151 MNCs and a sample of 137 DMCs. He concludes that the MNC provides no observable advantages over the DMC with regard to risk and return benefits from international diversification. Also, in support of Jacquillat and Solnik

(1978), Fatemi (1984), Michel and Shaked (1986), and Collins (1990) also provide evidence on the rates of return realized by the shareholders of MNC relative to those of DMC. Fatemi (1984) compares the monthly performances for the period 1976 - 1980 between a portfolio of 84 MNCs and a portfolio of 52 DMCs. The results indicate that the monthly rates of returns on the two portfolios are not statistically different. He concludes that MNC does not provide its shareholders higher risk-adjusted returns than DMC. Michel and Shaked (1986) compare standard portfolio performance measures for a portfolio of 58 MNCs and a portfolio of 43 DMCs. They find that the risk-adjusted market based return is superior for a DMC; while the portfolio of MNCs has lower total risk, as well as lower average returns, and the returns are sufficiently low to result in lower overall risk-adjusted performance. Finally, Collins (1990) examines risk-return performances for a group of 51 DMCs and a group of 44 MNCs operating in developed countries and a group of 38 MNCs operating in developing countries. He reports that the performance of multinationals operating in developed countries is equal to that of domestic firms, but in developing countries it is inferior.

Thus far, we have reviewed the empirical works about international diversification benefits of the MNC. There seems to be mixed results with regard to the market performance of MNCs relative to DMCs. However, as Yang, Wansley, and Lane (1985) propose that the announcement of multinationality of a firm and international events are expected to affect the prices of MNC stock, thus, a direct test of impact on current market valuation is required to examine the effects of international diversification. There are few studies which directly test the impact of international expansion on firm value. Without a

direct test of the impact on current market valuation, it is hard to demonstrate whether or not international corporate expansion is of benefit to shareholders.

Doukas and Travlos (1988) investigate the stock price reaction to announcements of 301 foreign acquisitions by U.S. firms for the period 1975 - 1983. The results show that there is no significant positive average abnormal return on the unanticipated announcement day. This result suggests that unanticipated corporate expansion announcements do not affect common stock prices of U.S. firms expanding internationally. This evidence does not support the view of international diversification benefits leading to increases in firm values.

Thus, we need more work which directly tests of the impact of international expansion through FDI on current market valuation. This paper attempts to provide further empirical evidence regarding the stock market reaction to announcements of FDI using a longer sample period and more recent data than Doukas and Travlos (1988). In addition to the direct test of impacts surrounding the announcement date, this study also examines three-year long-run impacts on firm value.

Foreign direct investment can be accomplished by direct acquisition or by joint ventures. In the next part, we review empirical works on international acquisitions and joint ventures as a means of FDI for the multinational firm.

C.1.1. FDI Acquisitions as a Value Creating Investment Decision: Value creation by acquisition comes from synergy effects. That is, synergy effects exist in an acquisition when the value of the combined entity exceeds the sum of the values of the two individual

firms. The sources of value creation may be increased market power, economies of scale and scope, coinsurance, or diversification of risk.

There are many empirical studies on the wealth impacts of domestic acquisitions. The results of the wealth effects are mixed and inconclusive. Despite the extensive number of studies on domestic acquisitions, there is scant evidence on the wealth impacts from cross-border takeovers. Ahn (1988), Conn and Connel (1990), Harris and Ravenscraft (1991), Shaked, Michel and McClain (1991), and Cebennoyan, Papaioannou and Travlos (1992) examine the impacts on market value of U.S. target firms of cross-border acquisition. The results show that the U.S. target firms gain wealth from cross-border acquisitions. For example, Ahn (1988) provides significant abnormal gains for U.S. target firms from the sample of 960 U.S. firms acquired by foreign firms for the period 1974 - 1983. Harris and Ravenscraft (1991) examine the shareholder wealth gains of U.S. target firms acquired by foreign investors compared to those acquisitions by domestic investors. They show that target firms of foreign investors have significantly higher wealth gains than do target firms of domestic acquirers. Cebennoyan, Papaioannou and Travlos (1992) demonstrate wealth gains in U.S. target firms using a sample of 73 U.S. firms acquired by foreign firms for the period 1978 - 1987. These results support the view that the target firm's shareholders receive almost all the gains. These works mentioned above investigate the impacts of FDI from foreign firms on U.S. target firm's value.

However, Doukas and Travlos (1988) investigate the impacts of FDI on the U.S. firm value from acquiring a foreign company. They show direct evidence on the impact of cross-border takeovers on stock prices of U.S. acquiring firms. They find that

unanticipated international corporate acquisitions do not give statistically significant abnormal returns to U.S. acquiring firms.

To summarize the impacts of international acquisitions, previous studies demonstrate significant wealth gains in U.S. target firms and no significant wealth gains in U.S. acquiring firms. Thus, there seems to be some conflict regarding the value creation investment of international acquisitions. This paper provides further empirical evidence regarding the value creation from FDI acquisitions.

C.1.2. FDI Joint Ventures as a Value Creating Investment Decision: A firm can use joint ventures with foreign firms to access markets that might not otherwise be accessible to exploit factors of imperfections mentioned previously. As a value increasing investment, a joint venture entails the pooling of resources by two or more firms to accomplish some specific objective under the combined management of the parent firms. In contrast to a merger/acquisition where the original management of the target firm is replaced after the merger, the original management of the participating firms remains unchanged under a joint venture. In some cases, due to government restrictions, joint ventures are the only legal means of FDI.

There are few empirical studies on the wealth impacts from joint ventures. McConnell and Nantell (1985) support the argument that domestic joint ventures are a value creating investment. They examine the stock returns of 210 U.S. firms that announced 136 domestic joint ventures for the period 1972 - 1979 and conclude that domestic joint ventures provide significant wealth gains for all parties. Lummer and McConnell (1990)

ventures provide significant wealth gains for all parties. Lummer and McConnell (1990) test a hypothesis that international joint ventures are value creating investments for shareholders from the perspective of investing U.S. firms. They investigate the stock returns of 416 joint venture announcements of U.S. firms. The results support the value-creating hypothesis. Also in support of the value creating hypothesis, Gupta, McGowan, Misra, and Missirian (1991) find that market responses to joint venture investments into China are positive and statistically significant.

To the contrary, Lee and Wyatt (1990) find that overall investor responses to international joint ventures are negative and only joint ventures with firms from less-developed countries have nonnegative impacts on U.S. firms' shareholders using a sample of 109 U.S. firms for the period of 1974 - 1986.

Thus, there seems to be some controversy regarding value creating investment of joint ventures. This paper attempts to provide further empirical evidence that FDI joint ventures are a value creating investment.

C.2. Country Diversification Effects

To the extent that asset returns of foreign investments are not perfectly correlated with those of domestic investments, overall risk may be reduced. For developed countries, economic cycles are closely correlated with each other. However, for less developed countries, economic cycles are less closely correlated with U.S. or other developed countries. Thus, as Levy and Sarnat (1970), Rugman (1976), and Errunza (1983)

demonstrate, diversification into less developed countries is likely to provide greater diversification benefits.

From the explanation of FDI by Kogut (1983) and Shapiro (1986), investment in a less developed country may be a value increasing investment because of diversification benefits as well as the fact that there may be a lack of competition, relatively untapped consumer markets, first mover advantages, the potential for erecting preemptive strategic barriers to prevent subsequent entry by competitors, low input costs, and access to raw materials, among others. However, country risks such as political risk, expropriation and intervention risk, operations risk, and transfer risk may be substantial and restrict the investment in a less developed country.

Empirically, Errunza and Rosenberg (1982) test the benefits of investing in less developed countries by comparing investment risk (which is the variance of returns to investment) in developed countries with that in less-developed countries. The results show that investment risk is lower in less-developed countries than developed countries which supports greater country diversification benefits from FDI in less-developed countries. In support of Errunza and Rosenberg (1982), Errunza (1983) compares a sample of 15 less-developed countries and a sample of 14 developed countries over the period 1976 - 1980. The results show that returns on less-developed countries are relatively high and exhibit low correlation with returns on developed countries. Doukas and Travlos (1988) support those findings by showing that abnormal returns are larger when firms invest in less-developed countries. Gupta, McGowan, Misra, and Missirian (1991) show a positive and statistically significant abnormal returns

from joint ventures with China. They support the finding that expansion into less-developed countries provides more benefits than the risks involved. However, contrary to the above studies, Collins (1990) finds, using 133 U.S. firms for the period 1976 - 1985, that U.S. multinationals do not realize shareholder benefits by investing in less-developed countries. Thus, there seems to be some inconclusive results regarding country diversification effects between developed and less-developed countries. This paper attempts to provide further empirical evidence regarding this matter.

C.3. Industry Diversification Effects

Diversification into related businesses and diversification into unrelated businesses may have different motives. Related diversification may be undertaken in an attempt to exploit operating synergy such as economies of scale and scope in manufacturing, marketing, resource purchases, and research and development (R&D). Related diversification produces intangible assets, such as technical innovations and goodwill. Related diversification may increase the market power of the consolidated firm. Firms pursuing related diversification benefit from the fact that management already has significant knowledge of the products and marketing of the target firm, contributing to lower levels of uncertainty in such international diversification. These hypotheses are supported by empirical studies of Singh and Montgomery (1987) and Shelton (1988). However, studies by Lubatkin (1987) and Seth (1990) do not support the existence of the benefits from related domestic acquisitions.

Unrelated diversification expands the investing firm into a new product market from the parent firm's base. Unrelated diversification attempts to gain financial benefits, such as stable cash flows and total risk reductions. International expansion into a new line of business is expected to increase the firm's multinational network and result in positive valuation effects. Hisey and Caves (1985) provide support for unrelated international diversification as a risk aversion motivation. Doukas and Travlos (1988) also provide the supporting result that abnormal returns are larger when firms expand via cross-border acquisition into a new line of business.

Thus, there seems to be some competing results regarding industry diversification effects between related and unrelated expansions. This paper provides further empirical evidence regarding this matter.

C.4. Host Country Experience Effects

The investing firm's previous experience in the target country plays an important role in influencing the wealth effects for the shareholders of the investing firm. When a firm expands its activity overseas, it faces barriers such as host country risks (political risk, expropriation intervention, transfer risk), cultural differences (custom, language, tradition), and operational differences (marketing, labor relations). These restrictions may deter firms from expanding geographically. Previous experiences in a host country may reduce those barriers and contribute to lower levels of uncertainty in such international expansions.

Empirically, Hisey and Caves (1988) provide evidence from a sample of 99 U.S. acquiring firms that an investing firm's previous experience in the host country should influence its choice between related and unrelated acquisition. Doukas and Travlos (1988) speculate about the impact of the expanding firm's degree of previous international exposure on stock values. They propose a positive multinational network hypothesis that expanding into a new geographic area creates more benefits than expanding the firm's operations in the same country. Their results show that abnormal returns are larger when firms expand into new geographic markets. Datta and Puia (1992) show that cultural differences have a negative relationship with performance in cross-border acquisitions using a sample of 112 U.S. acquiring firms for the period 1978 - 1990. Their results can be interpreted that if experience in host country can reduce the cultural differences then the country experience factor may influence positively on performances of cross-border acquiring firm.

Considering the studies of Doukas and Travlos (1988) and Datta and Puia (1992), there is an ambiguous explanation about the impact of experience in the host country. This paper attempts to provide further empirical evidence regarding this matter.

C.5. Control Level Effects

When a firm makes an FDI it has to consider its ownership level of the target firm. It is expected that different levels of control in the target firm give different impacts on the investing firm's stock value. Majority ownership may provide a majority control in the

concerning firm. Majority control provide the investing firm better information, more administrative power. Thus, the investing firm with majority control can exploit the opportunities of the target firm.

Ahn (1988) tests a control effect hypothesis which is that value creation is positively correlated with the extent that the target firm is controlled by the investing firm. His empirical results, derived from FDI in the U.S., support this hypothesis and show that the cumulative abnormal return of the target firm has a positive relation with the extent of the investing firm's control of the target firm. Thus, we can assume that the more control the investing firm has in the target firm the higher return it has. This assumption will be tested in this study.

To summarize, in this chapter, we briefly reviewed theories for explaining the occurrence of foreign direct investment (FDI) and described three motivating factors for FDI. We reviewed previous FDI related empirical studies. The empirical results provide mixed and conflicting results about the impact on shareholders' wealth from FDI. This fact leaves room for us to examine further whether FDI is a value creating investment decision. We reviewed the impacts from cross-border acquisitions and joint ventures as means of FDI. Both empirical results provide mixed and conflicting results about the value impacts from FDI. This fact leaves room for us to examine further whether cross-border acquisitions and joint ventures of FDI are a value creating investment decision.

Empirical works about country diversification effects were reviewed. They investigated the impact of FDI depending on the degree of economic development of the host country. The results are inconclusive. We need to examine whether foreign direct

investment is a value creating investment decision depending upon economic development levels. Industry diversification effects were investigated examine the impact of related and unrelated expansion of FDI. There are ambiguous and inconclusive results. This fact also gives room for us to examine how industry diversification influences firm value. Host country experience effects were reviewed to examine how experience in the host country influences firm value. This experience effect is not clear and requires further study. Lastly, control level effects were considered. The assumption of positive relationship between abnormal returns and control level will be tested. In this paper we investigate further to answer these questions.

CHAPTER III

METHODOLOGY

The purpose of this paper is to investigate the impacts of foreign direct investment (via acquisition or joint venture) on firm value. Previous work raises several interesting questions: 1) Is foreign direct investment (FDI) a value creating investment decision? 2) Does the level of a country's economic development effect the value of a firm undertaking foreign direct investment? 3) Does industry diversification via foreign direct investment influence firm value? 4) Does experience in the host country influence the value of a firm engaged in foreign direct investment? and 5) Does the level of control influence the value of a firm engaged in foreign direct investment? These questions are the bases of the hypotheses tested in this thesis.

This chapter is broken down into three sections. Initially, an explanation of the hypotheses to be tested is offered. Secondly, the sample for this study is described. And finally, in the last section, a description of the methods to be used in this study are presented.

A. HYPOTHESES

In this section, we develop the hypotheses to be tested in this research. The hypotheses test whether the market views foreign direct investment as a value creating activity. In addition, we will investigate whether the announcement effects associated with foreign direct investment are influenced by the level of economic development in a country, the relatedness of the transacting parties, the international business experience of the firm, and the level of managerial control associated with an international investment.

A.1. Foreign Direct Investment as a Value Creating Activity

In a modern corporation shareholders delegate the authority to make capital budgeting decisions to the managers of the firm. In an environment with a well functioning competitive labor market, see Fama (1976), managers make investment decisions which are consistent with the goal of maximizing the wealth of the existing shareholders of the firm. Consequently the announcement of an investment decision by a firm's managers will induce the market to reevaluate their expectations regarding the future cash flows of the firm, given this new information. In this environment, the announcement of any capital expenditure by informed managers should result in an increase in the value of the firm's shares, increasing existing shareholder's wealth.

Previous literature, McConnell and Muscarella (1985) for example, documents that announcements of capital budgeting decisions results in a positive return to shareholders in

excess of expected returns. An acquisition, or corporate control event, can be viewed as the decision to invest in existing assets controlled by another corporation. There exists a large literature documenting the short term returns to shareholders surrounding announcements of a merger or acquisition, see summary of Jensen and Ruback (1983). In general, this literature documents that there are no excess short-term returns to a bidding firm in a merger.

Studies of long-run performance for domestic mergers have been done by Langetieg (1978), Asquith (1983), Magenheim and Mueller (1988), Bradley and Jarrell (1988) and Franks, Harris, and Titman (1991). Some studies [Langetieg (1978), Asquith (1983), and Magenheim and Mueller (1988)] report significantly negative abnormal returns to the acquiring firm over periods ranging from one to three years following the merger. In contrast, Bradley and Jarrell (1988) and Franks, Harris, and Titman (1991) do not find significant underperformance by the acquiring firm over a three year period following an acquisition. In addition, several recent studies of domestic mergers have utilized a size based methodology which has not previously been seen in this literature. Loderer and Martin (1992) find that stockholders of acquiring firms do not experience underperformance during the first five years following an acquisition. Agrawal, et al (1992) find that acquiring firms experience significant underperformance over the five-year post merger period. However, Loderer and Martin (1992) and Agrawal, et al (1992) use cumulative abnormal returns in their studies. Conrad and Kaul (1993) find upward biases in cumulative returns when used in long-run performance studies. They argue that the cumulating process not only cumulates raw returns but also the upward bias induced by

measurement errors. They suggest that holding period returns calculated by compounding the return over time should be used instead of cumulative returns to minimize the bias in measurement returns.

An alternative to undertaking a domestic investment project is engaging in an international investment. The decision to undertake foreign investment should be based on the same value maximization principles used in making a domestic investment decision. Thus we can view international investment projects as competitors of domestic investment projects. International investments may offer advantages to a firm not available through a domestic investment. These advantages may include, but are not limited to, the exploitation of imperfections in product and factor markets, the exploitation of imperfections in international financial markets, the exploitation of biases in taxation and regulatory policies, the exploitation of increased market power, risk management through coinsurance, the exploitation of operating synergies such as economies of scale and scope in manufacturing, marketing, resource purchases, and research and development (R&D), the reduction of risk through international diversification, the exploitation of the lack of competition, the exploitation of relatively untapped consumer markets, the development of first mover advantages, the potential for erecting preemptive strategic barriers to prevent subsequent entry by competitors, the exploitation of low input costs, and the exploitation of access to raw materials. Kogut (1983) explains that foreign direct investment decisions by multinational corporations are beneficial because managers of the firm can take advantage of a multinational network system. He argues that the primary advantage of the

multinational firm, as differentiated from an uninationaI corporation, lies in the flexibility to transfer resources across borders through a globally maximizing network.

There are several studies which do exist that directly test the impact of international expansion on a firm's market value. Fatemi (1984) examines the behavior of cumulative average residuals for a portfolio of 18 firms. Interestingly, Fatemi reports significant in positive abnormal returns. Doukas and Travlos (1988) similarly investigate the reaction of stock prices to announcements of foreign acquisitions by U.S. firms. Their research indicates that significant positive abnormal returns are obtained when multinational corporations have not been previously operating in the target firm's country. Ahn (1988), Conn and Connel (1990), Harris and Ravenscraft (1991), Shaked, Michel and McClain (1991), and Cebennoyan, Papaioannou and Travlos (1992) report that U.S. target firms gain wealth from cross-border acquisitions.

If the competitive labor market is not well functioning, then the current shareholders of a firm must be concerned about the possibility of a conflict of interest between themselves and the firm's managers. Jensen (1986) argues that managers of firms with free cash flows have an incentive to undertake investments which increase the size of the firm, and the manager's perceived power, but do not increase the wealth of existing shareholders. It is very likely that the management of a firm has considerably more information about the international marketplace in general, and the political and economic environment of particular country, than shareholders. This information disparity between managers and shareholders creates an ideal environment for an informed manager to exploit an uninformed shareholder. Thus it may be the case that the market perceives the

announcement of an international investment decision as a signal that managers are exploiting this "superior" information at the expense of the shareholders. That is, managers are not acting to increase the wealth of shareholders but to increase the utility and power of managers by increasing the size of the firm through international investment. The market may perceive the announcement of an international investment as a negative signal concerning the future prospects of a firm due to the potentially large asymmetries of information associated with international investments.

We have two competing theories, one posits positive wealth effects associated with announcements of international investments, the other posits negative wealth effects associated with these announcements. The existing empirical literature has generated conflicting results associated with both short and long term announcement effects associated with both domestic and international investments. This leads to our first hypothesis that announcements of international investments have no effect on firm value.

H_{0,1.1} : There is no impact on firm value associated with announcements of foreign direct investment.

H_{A,1.1} : There is a positive impact on firm value associated with announcements of foreign direct investment.

Given the firm has decided to undertake an international investment the managers of the firm are faced with the choice of the method of investment. The firm may expand internationally by committing resources to build facilities, and employ personnel in the foreign market, they may acquire existing resources through acquisition, or they may expand operations in a foreign market through a joint venture. This research investigates the decision to expand either through acquisition or a joint venture. McConnell and Nantell (1985) explain a corporate merger as a combination of all the resources of two

companies under a single management to accomplish some set of objectives. In contrast to a merger, a joint venture is a corporate combination of a subset of the resources of two (or more) companies to accomplish objectives under the combined management of two (or more) parent companies. Thus, the primary distinction between a corporate merger and a corporate joint venture is that the original management of the parent firms remains intact under joint ventures. Joint ventures are formed to undertake a new project whereas mergers involve the joining together of existing projects.

Synergy effects exist in an acquisition when the value of the combined entity exceeds the sum of the values of the two combining firms. The sources of value creation may be increased market power, economies of scale and scope, coinsurance, and diversification of risk. Acquisition also facilitates the replacement of the acquired firm's inefficient, ineffective, or purposely misleading management.

A firm can use joint ventures with foreign firms to access markets that might not otherwise be accessible to exploit market imperfections. In some cases, international joint ventures are the most efficient means of undertaking foreign direct investment due to government restrictions. For example, Japan, China, and South Korea permit foreign direct investment only in the form of joint ventures. As McConnell and Nantell (1985) explained, a joint venture is a combination of two (or more) companies to accomplish objectives under the combined management of two (or more) parent companies. Thus, the primary distinction between an acquisition and a joint venture is that the original management of the concerned parties remains intact under joint ventures. Joint ventures

are formed to undertake a new project whereas acquisitions involve the joining together of existing projects.

Harrigan (1985) and Hennart (1988) argue that joint ventures can provide investing firms with benefits of internal strength, improvement of competitive position in the industry, or minimization of transaction costs. These benefits associated with joint ventures lead to increases in the common stock prices of the partner firms.

When a company forms an international joint venture with a foreign partner in the foreign partner's country the local partner (foreign partner) offers a number of benefits to the other investing firm. These benefits include general knowledge of the local culture and business practices, managerial personnel, marketing personnel, and access to distribution systems. Potential conflicts in joint venture management may occur in the areas of pricing, dividends, sourcing, and royalties.

Is the market's reaction to the announcement of an international investment in the form of an acquisition different from the market's reaction to an announcement of an international investment in the form of a joint venture? Is there a positive reaction by the market to the announcement of an international acquisition? Is there a positive reaction by the market to the announcement of an international joint venture? We hypothesize that there is no difference in the market's reaction to announcements of an international joint venture and an announcement of an international acquisition. In addition, we hypothesize that announcements of international acquisitions have no effect on firm value, and that announcements of international joint ventures have no effect on firm value.

H_{0,1.2} : There is no impact on firm value associated with announcements of foreign direct investment via acquisitions.

H_{A,1.2} : There is a positive impact on firm value associated with announcements of foreign direct investment via acquisitions.

H_{0,1.3} : There is no impact on firm value associated with announcements of foreign direct investment via joint ventures.

H_{A,1.3} : There is a positive impact on firm value associated with announcements of foreign direct investment via joint ventures.

H_{0,1.4} : There is no difference between the announcement effects of an international acquisition and an international joint venture.

H_{A,1.4} : There are differences between the announcement effects of an international acquisition and an international joint venture.

In addition to the basic issue of whether the market views the announcement of an international investment, regardless of the form of the investment, as an unexpected signal of increased future cash flows we are also interested in investigating whether the announcement effects associated with foreign direct investment are influenced by the level of economic development in a country, the relatedness of the transacting parties, the international business experience of the firm, and the level of managerial control associated with an international investment. Each one of these issues (hypotheses) will be tested with regards to the overall question of whether announcements of foreign direct investment increases shareholder wealth, and whether the form of an international investment, acquisition or joint venture, effects shareholder wealth.

A.2. Country Diversification Effects

When a firm expands its operations internationally it can choose to invest in a highly developed country, a developed country, or a less-developed country. Country diversification may provide the investing firm with the benefit of risk reduction if the firm

can achieve diversification more efficiently than an individual investor. To the extent that asset returns of foreign investments are not perfectly correlated with those of domestic investments the firm's overall business risk may be reduced.

Since the economies of less-developed countries are less likely to be closely correlated with U.S. or with other developed countries, diversification into less-developed countries may provide the most marginal benefits of diversification. In addition to the benefits of diversification international expansion into a less-developed country may lead to increased future cash flows due to a prevailing lack of competition, relatively untapped consumer markets, first mover advantages, the potential for erecting preemptive strategic barriers of entry to prevent subsequent entry by competitors, low input costs, and access to raw materials. Firms located in less-developed countries may not have securities traded in well functioning capital markets therefore these investments would not be available to an individual investor. Consequently a firm expanding into a less-developed country can provide an investor with an investment opportunity which is not available in the capital market.

Conversely, diversification via investment in companies in developed countries which are highly economically integrated may provide fewer marginal benefits from diversification. However, country risks such as political risk, expropriation and intervention risk, operational risk, and transfer risk may be substantial and may reduce the return on investment in a less-developed country. Investments in highly developed countries and developed countries may provide less diversification benefits, but provide more safety from these risks than investments in less-developed countries do. To the

extent that an investor has access to a firm's securities in developed and highly developed countries then the benefits of expansion to these countries for the purposes of diversification will be reduced. Thus, investments in the less-developed country may satisfy the investor's international diversification objectives better and increase the systematic advantages inherent in a multinational network more than investments in a developed country.

Is the market's reaction to the announcement of an international investment in less developed country different from the market's reaction to an announcement of an international investment in a developed or highly developed country? We hypothesize that there is no difference in the market's reaction to announcements of an international investment in less developed country different from the market's reaction to an announcement of an international investment in a developed or highly developed country.

H_{0,2.1} : There is no difference between the announcement effects of an international investment in a developed, a highly developed or a less developed country.

H_{A,2.1} : There are differences between the announcement effects of an international investment in a developed, a highly developed or a less developed country.

H_{0,2.2} : There is no impact on firm value associated with announcements of foreign direct investment in less-developed countries.

H_{A,2.2} : There is a positive impact on firm value associated with announcements of foreign direct investment in less-developed countries.

H_{0,2.3} : There is no impact on firm value associated with announcements of foreign direct investment in developed countries.

H_{A,2.3} : There is a positive impact on firm value associated with announcements of foreign direct investment in developed countries.

H_{0,2.4} : There is no impact on firm value associated with announcements of foreign direct investment in highly developed countries.

H_{A,2.4} : There is a positive impact on firm value associated with announcements of foreign direct investment in highly developed countries.

Acquisitions

H_{0,2.1.a} : There is no difference between the announcement effects of an international investment via acquisition in a developed, a highly developed or a less developed country.

H_{A,2.1.a} : There are differences between the announcement effects of an international investment via acquisition in a developed, a highly developed or a less developed country.

H_{0,2.2.a} : There is no impact on firm value associated with announcements of foreign direct investment via acquisition in less-developed countries.

H_{A,2.2.a} : There is a positive impact on firm value associated with announcements of foreign direct investment via acquisition in less-developed countries.

H_{0,2.3.a} : There is no impact on firm value associated with announcements of foreign direct investment via acquisition in developed countries.

H_{A,2.3.a} : There is a positive impact on firm value associated with announcements of foreign direct investment via acquisition in developed countries.

H_{0,2.4.a} : There is no impact on firm value associated with announcements of foreign direct investment via acquisition in highly developed countries.

H_{A,2.4.a} : There is a positive impact on firm value associated with announcements of foreign direct investment via acquisition in highly developed countries.

Joint Ventures

H_{0,2.1.j} : There is no difference between the announcement effects of an international investment via joint venture in a developed, a highly developed or a less developed country.

H_{A,2.1.j} : There are differences between the announcement effects of an international investment via joint venture in a developed, a highly developed or a less developed country.

H_{0,2.2.j} : There is no impact on firm value associated with announcements of foreign direct investment via joint venture in less-developed countries.

H_{A,2.2.j} : There is a positive impact on firm value associated with announcements of foreign direct investment via joint venture in less-developed countries.

H_{0,2.3.j} : There is no impact on firm value associated with announcements of foreign direct investment via joint venture in developed countries.

H_{A,2.3.j} : There is a positive impact on firm value associated with announcements of foreign direct investment via joint venture in developed countries.

H_{0,2.4.j} : There is no impact on firm value associated with announcements of foreign direct investment via joint venture in highly developed countries.

H_{A,2.4.j} : There is a positive impact on firm value associated with announcements of foreign direct investment via joint venture in highly developed countries.

A.3. Industry Diversification Effects

When a company engages in an international investment it must choose between investing in a firm in a related or an unrelated industry. Investment in a firm in a related industry may be undertaken in an attempt to exploit operating synergies such as economies of scale and scope in manufacturing, marketing, resource purchases, and research and development. Firms pursuing related investment also benefit from the fact that management already has significant knowledge of the products and the marketing strategies of the target firm contributing to lower levels of uncertainty in such international diversification. International investment should increase the firm's multinational network and result in positive valuation effects (Doukas Travlos, 1988).

A risk spreading motivation induces investments in an unrelated industry. Investment in a firm in an unrelated industry expands the operations of the investing firm into a new product market. Unrelated investment attempts to gain the financial benefits of stable cash flows, coinsurance, and risk reduction through a reduced correlation among the cash flows of the combining firms. International expansion incorporating new lines of business is expected to increase the firm's multinational network and result in positive valuation effects.

Is the market's reaction to the announcement of an international investment in a related industry different from the market's reaction to an announcement of an international investment in an unrelated industry? We hypothesize that there is no difference in the market's reaction to announcements of an international investment in a related industry and

the market's reaction to an announcement of an international investment in an unrelated industry.

H_{0,3.1} : There is no difference between the announcement effects of an international investment in a related and unrelated industry.

H_{A,3.1} : There are differences between the announcement effects of an international investment in a related and unrelated industry.

H_{0,3.2} : There is no impact on firm value associated with announcements of foreign direct investment in an unrelated industry.

H_{A,3.2} : There is a positive impact on firm value associated with announcements of foreign direct investment in an unrelated industry.

H_{0,3.3} : There is no impact on firm value associated with announcements of foreign direct investment in a related industry.

H_{A,3.3} : There is a positive impact on firm value associated with announcements of foreign direct investment in a related industry.

Acquisitions

H_{0,3.1.a} : There is no difference between the announcement effects of an international investment via acquisition in a related and unrelated industry.

H_{A,3.1.a} : There are differences between the announcement effects of an international investment via acquisition in a related and unrelated industry.

H_{0,3.2.a} : There is no impact on firm value associated with announcements of foreign direct investment via acquisition in an unrelated industry.

H_{A,3.2.a} : There is a positive impact on firm value associated with announcements of foreign direct investment via acquisition in an unrelated industry.

H_{0,3.3.a} : There is no impact on firm value associated with announcements of foreign direct investment via acquisition in a related industry.

H_{A,3.3.a} : There is a positive impact on firm value associated with announcements of foreign direct investment via acquisition in a related industry.

Joint Ventures

H_{0,3.1.j} : There is no difference between the announcement effects of an international investment via joint venture in a related and unrelated industry.

H_{A,3.1.j} : There are differences between the announcement effects of an international investment via joint venture in a related and unrelated industry.

H_{0,3.2.j} : There is no impact on firm value associated with announcements of foreign direct investment via joint venture in an unrelated industry.

H_{A,3.2,j} : There is a positive impact on firm value associated with announcements of foreign direct investment via joint venture an unrelated industry.

H_{0,3.3,j} : There is no impact on firm value associated with announcements of foreign direct investment via joint venture a related industry.

H_{A,3.3,j} : There is a positive impact on firm value associated with announcements of foreign direct investment via joint venture a related industry.

A.4. Host Country Experience Effects

The investing firm's previous experience in the target country may play an important role in influencing the wealth effects of investing firms. When a firm expands its activity overseas it faces many potential barriers including cultural differences, operational differences, and risks unique to the host country. These barriers may inhibit geographical expansion by firms. Experience in the host country may reduce these barriers contributing to lower levels of uncertainty and risk in international expansions. Doukas and Travlos (1988), based on the positive multinational network theory, argue that by expanding into new geographic areas firms create more benefits than expanding the firm's international operations in the same country.

The investing firm's previous experience in international operations may play an important role in influencing the wealth effects of investing firms. When a firm does not have experience in the host country, but operates in other countries besides the host country, a firm exploits the experience in international operation to reduce operating risks in international business. In addition, the investing firm may benefit from international diversification by investing in a firm located in another country.

When a firm goes abroad for the first time the investing firm has no experience in international business. The investing firm may get the benefits of international diversification, although it may face new and unexpected difficulties in the international operation.

Is the market's reaction to the announcement of an international investment different if the firm has no previous international experience? Is the market's reaction to the announcement of an international investment different if the firm currently has operations in the host country? We hypothesize that there is no difference in the market's reaction to announcements of an international investment by firms with international experience and firms without international experience. In addition, we hypothesize that the market's reaction to announcements of an international investment by firms with international experience in a country is the same as the market's reaction to announcements of an international investment by firms with no international experience in a country.

H_{0,4.1} : There is no difference between the announcement effects of an international investment regardless of the degree of experience in the host country.

H_{A,4.1} : There are differences between the announcement effects of an international investment regardless of the degree of experience in the host country.

H_{0,4.2} : There is no impact on firm value associated with announcements of foreign direct investment by a company already operating in the country.

H_{A,4.2} : There is a positive impact on firm value associated with announcements of foreign direct investment by a company already operating in the country.

H_{0,4.3} : There is no impact on firm value associated with announcements of foreign direct investment by a company not operating in the country.

H_{A,4.3} : There is a positive impact on firm value associated with announcements of foreign direct investment by a company not operating in the country.

H_{0,4.4} : There is no impact on firm value associated with announcements of foreign direct investment by a company with no international experience.

H_{A,4.4} : There is a positive impact on firm value associated with announcements of foreign direct investment by a company with no international experience.

Acquisitions

H_{0,4.1.a} : There is no difference between the announcement effects of an international investment via acquisition regardless of the degree of experience in the host country.

H_{A,4.1.a} : There are differences between the announcement effects of an international investment via acquisition regardless of the degree of experience in the host country.

H_{0,4.2.a} : There is no impact on firm value associated with announcements of foreign direct investment via acquisition by a company already operating in the country.

H_{A,4.2.a} : There is a positive impact on firm value associated with announcements of foreign direct investment via acquisition by a company already operating in the country.

H_{0,4.3.a} : There is no impact on firm value associated with announcements of foreign direct investment via acquisition by a company not operating in the country.

H_{A,4.3.a} : There is a positive impact on firm value associated with announcements of foreign direct investment via acquisition by a company not operating in the country.

H_{0,4.4.a} : There is no impact on firm value associated with announcements of foreign direct investment via acquisition by a company with no international experience.

H_{A,4.4.a} : There is a positive impact on firm value associated with announcements of foreign direct investment via acquisition by a company with no international experience.

Joint Ventures

H_{0,4.1.j} : There is no difference between the announcement effects of an international investment via joint venture regardless of the degree of experience in the host country.

H_{A,4.1.j} : There are differences between the announcement effects of an international investment via joint venture regardless of the degree of experience in the host country.

H_{0,4.2.j} : There is no impact on firm value associated with announcements of foreign direct investment via joint venture by a company already operating in the country.

H_{A,4.2.j} : There is a positive impact on firm value associated with announcements of foreign direct investment via joint venture by a company already operating in the country.

H_{0,4.3.j} : There is no impact on firm value associated with announcements of foreign direct investment via joint venture by a company not operating in the country.

H_{A,4.3.j} : There is a positive impact on firm value associated with announcements of foreign direct investment via joint venture by a company not operating in the country.

H_{0,4.4.j} : There is no impact on firm value associated with announcements of foreign direct investment via joint venture by a company with no international experience.

H_{A,4.4.j} : There is a positive impact on firm value associated with announcements of foreign direct investment via joint venture by a company with no international experience.

A.5. Control Level Effects

Once the decision has been made to undertake an international investment the managers of the firm must decide on the level of investment to be undertaken. When a investing firm has full control of the target firm efficiency and the effectiveness may be maximized. Ahn (1988) argues that the market's response to an acquisition is positively correlated with the level of control of the target firm by the investing firm. His empirical results, derived from foreign investment in the U.S., supports this hypothesis, and shows that the cumulative abnormal return of the target is positively correlated with the level of the investing firm's control of the target firm. Thus, it appears that the more control the investing firm has in the target firm the higher return it has.

In the acquisition sample the level of control is divided into three groups: low level minority control (1 - 25 %), high level minority control (26 % - 50 %), majority control (51 % - 100 %). The joint ventures sample is divided into three levels of control: minority control (1- 49 %), equal control (50 %), and majority control (51 - 100 %).

Is the market's reaction to the announcement of an international investment dependent on the level of corporate control associated with the transaction? We hypothesize that there is no difference in the market's reaction to announcements of an international investments regardless of the level of corporate control.

H_{0,5.1} : There is no difference between the announcement effects of an international investment regardless of the level of control associated with the transaction.

H_{A,5.1} : There are differences between the announcement effects of an international investment regardless of the level of control associated with the transaction.

We have developed the hypotheses of why FDI creates value and the hypotheses of related issues of country diversification, industry diversification, host country experience, and control level effects, we need to move on the sample used to test those hypotheses.

B. DESCRIPTION OF THE SAMPLE

This sample consists of U.S. firms which have engaged in foreign direct investment between 1972 and 1991. Data is collected from public announcements of foreign direct investment (FDI). Firms in this sample are listed on the New York Stock Exchange or the American Stock Exchange and are contained on the Center for Research in Securities Prices (CRSP) data tapes.

The initial sample of firms undertaking FDI is drawn from the Foreign Acquisitions Roster of Merger and Acquisition and the Wall Street Journal Index. The initial announcement date of each firm's foreign direct investment is found in the Wall Street Journal. Firms with announcements of major financial events such as divestitures, common stock repurchases, new offerings of securities, stock splits, dividend increases, major contracts and other types of takeover activities for the fifteen-day period prior to and following the announcement date are excluded from the final sample.

As shown in Table 1, the initial sample consists of 1808 acquisition announcements. One thousand and forty-six of those acquisitions are not reported in the Wall Street Journal, and are thus excluded from the final sample. Following these screening procedures, the final number of acquisition announcements is 645. The initial sample of

joint ventures consists of 814 announcements. Yet, two hundred and fifty-four of those FDI joint ventures are not reported in the Wall Street Journal, and are thus excluded from the final sample. Therefore, the final number of joint ventures announcements is 333.

Thus, nine hundred and seventy-eight announcements of FDI are present in the sample.

In order to test the hypothesis of differential effects on firm values based on international experience impacts differently on firm value, the sample is divided into three subgroups. Experience operating in the host country is determined through Moody's Directory of Corporate Affiliations and Moody's Industrial Manuals and through Stopford, Dunning, and Haberick's World Directory of Multinational Enterprises. If the U.S. investing firm already has an operating unit such as a subsidiary or an affiliation with another firm operating in the host country (country which hosts the FDI), it is classified as "operating in the host country." In the sample, there are 488 announcements where the firm is already operating in the host country. Of this total, 379 are acquisitions and 109 are joint ventures. If the U.S. investing firm has international operations in other countries, but not in the host country these announcements are classified as "not operating in the host country." There are four hundred thirty seven announcements by firms not operating in the host country. Out of the 437, 232 are acquisitions and 205 are joint ventures. Lastly, if the investing firm is going abroad for the first time, it is classified as "going abroad for the first time." Initially 53 firms that were going abroad for the first time were identified. Of the total, 34 are by acquisition and 19 are through joint ventures. Table 2, Panel A shows the number of announcements by operational experience.

The sample is divided into three subgroups in order to test the hypothesis that the degree of economic development impacts differently on firm value. There are three categories of the degree of economic development for host countries: highly developed, developed, and less-developed. These categories are based on the standards established by the International Monetary Fund (IMF) and the Organization of Economic Cooperation and Development (OECD). The highly developed category is defined as an investment in one of the Group Seven countries (excluding the U.S.) by an American firm. The Group Seven countries (G-7) are: United States, United Kingdom, France, Italy, Germany, Canada, and Japan. The developed category is defined as industrialized countries not in the G-7, such as Spain, Netherlands, Austria, Sweden, and so on. The less-developed category is defined as less-industrialized and industrializing countries such as South Korea, Taiwan, Brazil, Venezuela, and so on.

Table 2, Panel B shows that in the sample of 978 FDI announcements, 590 are in highly developed host countries, 151 are in developed host countries, and 210 are in less-developed countries. Of the 590 announcements of FDI in the G-7 countries, 429 are acquisitions and 161 are joint ventures. Of the 151 announcements of FDI in the developed countries, 114 are acquisitions and 37 are joint ventures. Of the 210 announcements of FDI in the less-developed countries, 102 are acquisitions and 108 are joint ventures.

The sample is dichotomized to test the hypothesis that investment relatedness impacts differently on firm value. The degree of industry relatedness is determined by the first two digits of the SIC codes of the concerned parties. If the first two digits of the acquired (or

partner) firm and the U.S. company are the same, then the FDI is classified as a related investment. According to this classification, 720 announcements (420 acquisitions, 300 joint ventures) are grouped as “related investment.” There are 258 (225 acquisitions, 33 joint ventures) which are grouped as “unrelated investment.” Table 2, Panel C shows the number of announcements by investment relatedness.

The number of reported observations for a particular subsample may be less than we have just displayed. In the short-term performance evaluation, sixty six events were dropped because CRSP data starts after the event date. Fourteen events were dropped because the CRSP data ends before the event date. Nine events, which lack sufficient information to estimate model parameters, are dropped. For the long-term analysis, three hundred and forty five events were dropped because the investing firms dropped on the CRSP tapes before the end of the third year following an announcement. One hundred and eighty seven events were announced after January 1, 1989. One hundred and fifty eight announcements (made before December 31, 1988) were dropped primarily because of takeovers (109 of 158 cases). In fourteen cases, the investing firm is liquidated or declared bankrupt, and in the remaining 35 cases, it is simply delisted.

C. METHODOLOGY

Up to this point, we have described the hypotheses which will be tested and the sample. In this section, we explain the methodology used to test the hypotheses. There are three subsections in this section. The first is an explanation of the event study

methodology used for short-term performance evaluation. The second is an explanation of the long-term size-based event study methodology used for long-term performance evaluation. The final section explains the cross-sectional regression analysis.

C.1. Event Study for Short-Term Performance

The basic purpose of an event study is to evaluate the impact of firm-specific events. This methodology utilizes the returns to a firm's securities around the time of the release of an information. The idea is to determine whether the release of firm specific information generates stock returns which are abnormal or different from those would otherwise be expected. Brown and Warner (1980, 1985) review and classify event study methodologies into three categories: market model, mean adjusted model, and market adjusted model methodologies. The first two methods require an estimation period to calculate estimated parameters for the model. Based on these parameters abnormal returns are calculated for a test period, usually at the event date. In the last few years the market model has been employed in hundreds of published studies. It has been shown that the market model has an estimation bias when heteroscedasticity or cross-sectional dependence is present. To adjust for heteroscedasticity in the abnormal returns, Patell (1976) uses the standard market model approach which standardizes the abnormal returns with the standard error of the estimate from the market model regression for each security. In this study, although the sample is not clustered on specific time period rather spread

over time, we use the standardized market model methodology to reduce any possibility of heteroscedasticity.

According to Fama (1976), the market model is the equilibrium expected return generating model for common stock. It is a linear single index model which relates the return on an individual stock and the return on the market. The market model can be specified as follows:

$$R_{jt} = a_j + b_j R_{mt} + e_{jt} \quad (1)$$

where R_{jt} is the actual rate of return on security j on day t , and R_{mt} is the rate of return on the Center for Research in Securities Prices (CRSP) equal-weighted market index on day t , and e_{jt} is the random error term of security j on day t .

Abnormal returns, the difference between the observed return for a firm and the expected return for a firm, associated with a firm-specific event can be calculated as follows:

$$AR_{jt} = R_{jt} - \hat{R}_{jt} \quad (2)$$

where $\hat{R}_{jt} = \hat{a}_j + \hat{b}_j R_{mt}$. The market model parameters, \hat{a} and \hat{b} , are ordinary least squares (OLS) estimates of the intercept and slope coefficient for firm j , and \hat{R}_{jt} is the expected return on security j at time t . The market model parameters are calculated using daily returns from an estimation period that runs from day -236 ($t = -236$) to day -16 ($t = -16$) relative to the initial date of announcement in the Wall Street Journal, day $t = 0$. Daily abnormal returns are calculated for each firm over the 31-day event period, from days $t = -15$ to $t = +15$.

Daily average abnormal returns are averaged across the N firms included in the sample for each of the 31 event days. A daily average abnormal return (AAR) for each day t is obtained:

$$AAR_t = 1/N \sum_{j=1}^N AR_{jt} \quad (3)$$

The expected value of the average daily abnormal return (AAR_t) is zero in the absence of abnormal performance. A firm-specific cumulative abnormal return (CAR) between any two dates t_a and t_b is calculated as follows:

$$CAR_j = \sum_{t=t_b}^{t=t_a} AR_{jt} \quad (4)$$

The average standardized abnormal return is employed to test whether the average daily abnormal return is statistically different from zero. The average standardized abnormal return for firm j is calculated as follows:

$$ASAR_t = 1/N \sum_{j=1}^N AAR_{jt} / S_{jt} \quad (5)$$

where S_j is the square root of firm j's estimated forecast variance computed by

$$S_{jt} = [S_j^2 [1 + 1/L + (R_{mt} - \bar{R}_m)^2 / \sum_{K=1}^L (R_{mk} - \bar{R}_m)^2]]^{1/2} \quad (6)$$

where S_j^2 is the residual variance for security j from the market model regression for firm j, L is the number of observations during the estimation period (204), and R_{mk} is the return on the market portfolio for the K^{th} day of the estimation period, R_{mt} is the return on the

market portfolio for day t , and \bar{R}_m is the average return of the market portfolio for the estimation period.

Assuming the individual abnormal returns are normal and cross-sectionally independent, the statistic Z_t , which is distributed a unit-normal, is used to test the hypothesis that the average standardized abnormal return on day t is greater than or equal to zero. The test is a one-tailed test (Dodd and Warner 1983).

$$Z_t = \sqrt{N} \cdot ASAR_t \quad (7)$$

Using a methodology similar to Doukas and Travlos (1988), as well as others, the daily difference in abnormal returns (DAR) and Z-values for the daily differences are used to compare and test the performance of different groups. For example, these test statistics will be used to compare acquisitions with joint ventures. The DAR and Z-values are calculated as follows:

$$DAR_t = AAR_{1t} - AAR_{2t} \quad (8)$$

where 1 indicates firms in the first group and 2 indicates firms in the second group.

AAR_{1t} is the abnormal return of the first group and AAR_{2t} is the abnormal return of the second group.

$$Z_t = (ASAR_{1t} - ASAR_{2t}) / \sqrt{(1/N_1 + 1/N_2)} \quad (9)$$

where N_1 , N_2 are the number of the firms in the first and second groups, respectively.

$ASAR_{1t}$ is the average standardized abnormal return for the first group and $ASAR_{2t}$ is the average standardized abnormal return for the second group.

C.2. Event Study with Size Effect for Long-Run Performance

The size of the firm is an important determinant of the risk-adjusted performance of a firm. Banz (1981) demonstrates that firm size is significantly related to cross-sectional firm returns. Dimson and Marsh (1986) suggest that firm size plays an important role in studies of long-term stock price performance. Fama and French (1992) do not find evidence of a simple positive cross-sectional relationship between average stock returns and market beta over long periods of time, rather they find that size is the most significant correlate with risk. To evaluate the long-term performance of foreign direct investment we utilize a size based decile event study methodology.

While most empirical studies of foreign direct investment focus on daily stock returns surrounding announcement dates, no investigation has been made of long-term stock price performance following the announcement of a foreign direct investment. Studies of long-run performance for domestic mergers have been done by Langetieg (1978), Asquith (1983), Magenheim and Mueller (1988), Bradley and Jarrell (1988) and Franks, Harris, and Titman (1991). Three studies [Langetieg (1978), Asquith (1983), and Magenheim and Mueller (1988)] find significantly negative abnormal returns to the acquiring firm over periods ranging from one to three years following the completion of a merger. However, Bradley and Jarrell (1988) and Franks, Harris, and Titman (1991) do not find this significant long-term underperformance by acquiring firms following an acquisition. Therefore, based on the prior research, it is not clear that there is underperformance by

acquiring firms after mergers. In addition, this prior research has not utilized a methodology which adjusts for firm size.

Several recent studies on domestic mergers have utilized methodologies which adjusted for size. Loderer and Martin (1992) and Agrawal, Jaffe and Mandelker (1992) consider the firm size effect using size-based decile methodology. Loderer and Martin (1992) find that stockholders of acquiring firms do not experience underperformance during the first five years following an acquisition. In contrast, Agrawal, et al (1992) find that acquiring firms experience significant underperformance over the five-year post merger period.

Loderer and Martin (1992) and Agrawal, et al (1992) use cumulative returns in their studies. Conrad and Kaul (1993) find upward biases in cumulative returns used in long-run performance studies. They argue that the cumulating process not only cumulates raw returns but also the upward bias induced by measurement errors. They suggest that holding period returns calculated by compounding the return over time should be substituted for cumulative returns to minimize the bias in measurement returns. Therefore, this study employs size-based decile methodology and uses compounded abnormal returns rather than cumulative abnormal returns for long-run performance evaluation.

Size-based decile indices are obtained by the following process. First, firms listed on both exchange markets, NYSE and AMEX, are ranked from smallest to largest on the basis of firm value at the end of the prior year. Then, the firms are divided into ten groups of approximately equal size. Decile numbers are assigned to each group: 1 for the smallest, 10 for the largest. Next, a value-weighted size-based decile index is calculated

from the returns for each of the firms in a decile. Additionally, the decile number assigned a firm may change from year to year as a firm's value may change relative to the value of other firms.

The compounded abnormal return (CMAR) for each security j is calculated as follows:

$$\text{CMAR}_{jt} = (1 + \text{CMAR}_{j,t-1}) (1 + \text{AR}_{jt}) - 1 \quad (10)$$

where AR_{jt} is the abnormal return for firm j on the t^{th} day and the initial value of CMAR_j is zero. To test the null hypothesis of no abnormal performance standardized compounded abnormal returns will be employed to test the statistical significance of the compounded abnormal returns. The standardized abnormal return for firm j on day t is calculated as follows:

$$\text{SCMAR}_{jt} = \text{CMAR}_{jt} / \text{SCM}_{jt} \quad (11)$$

where SCM_{jt} is the square root of firm j 's estimated forecast variance on day t computed by

$$\text{SCM}_{jt} = [S_j^2 [T_2 + (T_2^2 / T_1) + T_2^2 (\bar{R}_{m1} - \bar{R}_{m2})^2 / \sum_{t=1}^{T_1} (R_{mt} - \bar{R}_{m1})^2]]^{1/2} \quad (12)$$

where S_j^2 is the residual variance for security j from the market model regression for firm j , T_1 is the number of observations during the estimation period, and T_2 is the number of observations during the forecast period, R_{mt} is the return on the market portfolio on the t^{th} day of the estimation period, \bar{R}_{m2} is the average return of the market portfolio in the forecast interval, and \bar{R}_{m1} is the average return of the market portfolio in the estimation period.

Assuming the individual abnormal returns are normal and cross-sectionally independent, the statistic Z_t , which is distributed a unit-normal, is used to test the hypothesis that the standardized compounded abnormal return on day t is greater than or equal to zero. The test is a one-tailed test (Dodd and Warner 1983).

$$Z_t = \frac{\sum_{j=1}^J SCMAR_{jt}}{\sqrt{J}} \quad (13)$$

Using a methodology similar to Doukas and Travlos (1988), differences in compounded abnormal returns (DCMAR) and corresponding Z statistics for different samples are presented to test for differences in long-term performance. The differences in compounded abnormal returns (DCMAR) and Z -values are calculated as follows:

$$DCMAR_t = CMAR_{t1} - CMAR_{t2} \quad (14)$$

where 1 indicates firms in the first group and 2 indicates firms in the second group.

$$Z_t = (SCMAR_{t1} - SCMAR_{t2}) / \sqrt{(1/N_1 + 1/N_2)} \quad (15)$$

where N_1 , N_2 are the numbers of firms in the first and second groups, respectively.

C.3. Cross-Sectional Regression Analysis

To gain further insights into the stock price response associated with foreign direct investment, a cross sectional regression analysis is employed. Regression analysis is a statistical tool used to explain the value of one quantitative variable by considering its relationship with one or more other quantitative or qualitative variables. The statistical relationship denotes a tendency of the dependent variable to vary in a systematic fashion with the explanatory variable or variables. The regression coefficient, a_0 , is the intercept

of the regression plane. The regression coefficient, a_1 , indicates the change in the mean response of the dependent variable per unit increase in the first explanatory variable with the other variables held constant. The explanatory variables are assumed to be independent of one another.

The dependent variables used in the regression are cumulative abnormal return or compounded abnormal returns. The explanatory variables are operating experience of the investing firm in the host country (EXP), degree of economic development of the host country (DEV), and degree of industrial relatedness between concerned firms (REL).

The operating experience (EXP) variable is used to test whether the abnormal returns of the investing firms depend on the experience of the expanding firm in the host country. Expansion into new geographic areas should create more benefits than expanding the firm's operations in the same country, so we expect a positive coefficient for EXP.

The degree of economic development (DEV) variable is used to test whether the abnormal returns of the investing firm depend on the level of economic development of the host country. Benefits from international diversification may be greater if the economies of two countries are less integrated. When U.S. firms invest in less-developed countries, there should be greater benefits, suggesting a positive coefficient for DEV.

The industrial relatedness (REL) variable is used to test whether the abnormal returns of the investing firm depend on the relatedness of expansion. International diversification into a new line of business is expected to increase the firm's multinational network, suggesting a positive coefficient for REL.

Therefore, the regression models explaining short-term and long-term performance are as follows:

$$\mathbf{CAR}_{j(-1,0)} = \mathbf{a}_0 + \mathbf{a}_1 \mathbf{EXP}_j + \mathbf{a}_2 \mathbf{DEV}_j + \mathbf{a}_3 \mathbf{REL}_j + \mathbf{e}_j, \quad (16)$$

$$\mathbf{CMAR}_{j(\text{year})} = \mathbf{a}_0 + \mathbf{a}_1 \mathbf{EXP}_j + \mathbf{a}_2 \mathbf{DEV}_j + \mathbf{a}_3 \mathbf{REL}_j + \mathbf{e}_j, \quad (17)$$

where $\mathbf{CAR}_{j(-1,0)}$ is the two-day cumulative abnormal return associated with the announcement of foreign direct investment, $\mathbf{CMAR}_{j(\text{year})}$ is the three-year compounded abnormal returns associated with the announcement of foreign direct investment. \mathbf{EXP} is a dummy variable representing the operating experience of the investing firm in the host country ($\mathbf{EXP} = 0$ when investing firm is already operating in host country, 1 otherwise). \mathbf{DEV} is a dummy variable representing the degree of economic development of the host country ($\mathbf{DEV} = 0$ for developed countries, 1 for less developed countries), \mathbf{REL} is a dummy variable representing the degree of industrial relatedness based on the first two SIC digits ($\mathbf{REL} = 0$ for investments across the same industry, 1 for investments across different industries),

To summarize, the hypotheses to be tested are whether foreign direct investment (FDI) is a value creating investment decision. The hypotheses are further extended as follows: country diversification effects, industry diversification effects, host country experience effects, and control level effects. These hypotheses are also tested by type of foreign direct investment: the acquisition sample and the joint ventures sample. Finally, we explained the methods used to test the hypotheses. Both short-term and long-term

performance are investigated. Short-term performance testing uses the standard market model methodology. For long-term performance testing, we use size-based decile methodology and calculate abnormal returns using the compounding method. Cross-sectional regression analysis is employed to study the relationship between abnormal returns and several qualitative variables (experience level, the level of economic development, and relatedness).

CHAPTER IV

EMPIRICAL RESULTS

The main objective of this study is to test whether foreign direct investment (FDI) is a value creating investment decision. Additional research in this study will test country diversification effects, industry diversification effects, host country experience effects and control level effects. These objectives are investigated by the samples of cross-border acquisitions and international joint ventures. Also, short-term and long-term performances are investigated to test the value creating hypotheses. For the short-term performance test, we use the standard market model methodology. For the long-term performance test, we use size-based decile methodology and then calculate compound abnormal returns. Cross-sectional regression analysis is employed to study the relationship between abnormal returns and the hypothesized causal variables (experience level, economic development level, and relatedness).

This chapter presents and discusses the empirical results of the hypotheses tests. This chapter is divided into three parts. The first part presents the empirical results from the overall sample (acquisition and joint ventures together). The second part presents the empirical results from the sample of acquisitions. The last part presents the empirical results from the sample of joint ventures.

A. OVERALL SAMPLE

When a firm decides to make an FDI it first chooses the type of FDI, choosing between acquisitions or joint ventures. In this study, the overall sample consists of acquisition events and joint venture events which test the impacts on shareholder wealth of FDI.

A.1. FDI as a Value Creating Activity

A firm generally undertakes investment projects to maximize the value of the firm's shareholder wealth. This assumption implies that a multinational firm undertakes investment in the form of an FDI only when that FDI provides a positive net present value which will increase the value of the firm. This hypothesis predicts that announcements of foreign direct investment will result in positive abnormal returns for the investing firm's common stock upon announcement of the FDI during the long post-announcement period. This can be referred to as a value-creation hypothesis.

H_{0,1.1} : There is no impact on firm value associated with announcements of FDI.

H_{A,1.1} : There is a positive impact on firm value associated with announcements of FDI.

Short-Term Announcement Effects

The short-term announcement effect test uses the market model (standardized abnormal return method) with one-tailed test statistics. Table 3 shows that the announcement-day (t = 0) abnormal return is 0.14 %, and that the Z-value is 1.7, which is statistically significant at the 0.05 level. This rejects the null hypothesis that there is no

impact on firm value associated with FDI announcements. This result indicates that unanticipated announcements of FDIs provide a positive impact on firm value, thus supporting the value creation hypothesis.

Long-Term Announcement Effects

A firm makes an FDI with a long-term perspective. The long-term effects after the announcements are investigated by using the size-based decile indices model (standardized compounded abnormal returns) along with one-tailed test statistics. Table 4 shows that the compounded abnormal returns (CMAR) for the first year is - 0.78 % and shows the Z-value for 1 year to be 0.03 (statistically insignificant at conventional levels). CMAR for the second year is 5.01 % and the Z-value is 1.46 (statistically significant at the 0.1 level). CMAR for the third year is 16.13 % and the Z-value is 3.72 (statistically significant at the 0.01 level). The results show that during the first year, CMARs fluctuate around 0 %, and that most Z-values are lower than 1.0 (statistically insignificant at conventional levels). By the end of the second year the CMAR is positive (5.01 %) and statistically significant at the 0.1 level. These results reject the null hypothesis which implies that there is no impact on firm value associated with announcements of FDI, and also supports the alternative hypothesis that the announcements of FDI provide an increasing positive impact on firm value, supporting the value creation hypothesis. At three years, the CMAR is positive (16.13 %) and statistically significant at the 0.01 level. Thus, this also rejects the null hypothesis that there is no impact on firm value associated with announcements of FDI and supports the alternative hypothesis that FDI announcements provide an increasing positive impact on firm value, supporting the value creation hypothesis.

To summarize, the hypothesis that foreign direct investment is a value increasing investment decision is supported by the results from the short-term and long-term performance tests. Now, having summarized the test results, let us move on to show the test results from the acquisition sample.

A.1.1. FDI Acquisitions as a Value Creating Activity

FDI acquisitions are used by firms which are expanding internationally. When a firm makes an FDI acquisition, it presumes that the benefits of international expansion will increase the value of the investing firm. In this section, the empirical results from the tested hypothesis that FDI acquisitions give a positive impact on firm value are presented.

H₀1.2 : There is no impact on firm value associated with announcements of FDI acquisitions.

H_A1.2 : There is a positive impact on firm value associated with announcements of FDI acquisitions.

Short -Term Announcement Effects

The short-term announcement effect test utilizes the market model (standardized abnormal return method) along with one-tailed test statistics. This hypothesis predicts positive impacts on firm value from FDI acquisitions. Table 5 shows that the announcement-day ($t = 0$) abnormal return is 0.16 %, and that the Z-value is 1.6, which is statistically significant at the 0.1 level. This rejects the null hypothesis that there is no impact on firm value following announcements of FDI acquisitions. These results can be interpreted to mean that unanticipated acquisition announcements of FDIs provide positive impacts on firm value. This finding weakly supports the value creation

hypothesis. Doukas and Travlos (1988) find insignificant positive abnormal returns at the announcement date of the cross-border acquisition. Our study may give more support to the value creation hypothesis than Doukas and Travlos (1988) because our study has more companies in the sample and a longer sample period.

In addition to short-term announcement effect, we need to examine the post-announcement effects to test the long-term performance hypothesis.

Long-Term Announcement Effects

After a firm announces an international acquisition it then becomes concerned with the postmerger performance. The long-term announcement effect test uses the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics. Table 6 shows the compounded abnormal returns (CMAR) for the first year to be - 3.17 % and the Z-value for the first year to be - 1.17 (statistically insignificant at conventional levels). CMAR for the second year is - 0.41 % with the Z-value being -0.07 (statistically insignificant at conventional levels). CMAR for the third year is 8.01 % with the Z-value being 1.69 (statistically significant at the 0.05 level). The results show that during the first and the second year, CMARs are negative and that most Z-values are not statistically significant at conventional levels; they are lower than 1.4 (statistically insignificant at conventional levels). Following the second year, the CMARs become more positive and the Z-values increase. After two and a half years, the CMARs are positive and Z-values are statistically significant at the 0.05 level. Three years after the FDI acquisition announcement, the CMAR remains positive (8.01 %) and is statistically significant at the 0.05 level. These results reject the null hypothesis and support the

alternative hypothesis that FDI acquisitions provide an increasingly positive impact on firm value for the three year period. This result therefore supports the value creating hypothesis.

Langetieg (1978) and Asquith (1983) conclude that acquiring firms experience significantly negative abnormal returns during one to three years after domestic mergers. Agrawal, Jaffe and Mandelker (1992) find that acquiring firms suffer a statistically significant loss of about 10 % over the five-year period following domestic mergers. Loderer and Martin (1992) show that, on average, acquiring firms do not underperform a control portfolio during the first five years following the acquisition. We find that U.S. acquiring firms experience significantly positive compounded abnormal returns of about 8 % over the three-year period after the international acquisition announcement.

To summarize, the hypothesis that FDI acquisitions are a value increasing investment decision is supported by the results from short-term and long-term performance tests. The results show that the international experience is much different than the domestic one. This indicates that FDI acquisitions provide more opportunities and benefits than domestic acquisitions do. In addition to the hypothesis test of FDI acquisitions, we need to examine and discuss the test results about the hypothesis of FDI joint ventures.

A.1.2. FDI Joint Ventures as a Value Creation Activity

Another type of FDI, a joint venture, entails the pooling of resources by two or more firms to accomplish some specific objectives under the combined management of the parent firms. As Harrigan (1985) and Hennart (1988) point out, joint ventures can

provide investing firms with benefits of internal strength, improvement of their competitive position in the industry, or minimization of transaction costs. Such benefits to investing firms, from joint ventures, may promote increases in common stock prices. Thus, this section provides an empirical test of the hypothesis that FDI joint ventures are value creating investment decisions.

H_{0,1.3} : There is no impact on firm value associated with announcements of FDI joint ventures.

H_{A,1.3} : There is a positive impact on firm value associated with announcements of FDI joint ventures.

Short -Term Announcement Effects

The short-term announcement test uses the market model (standardized abnormal return method) along with one-tailed test statistics. Table 7 shows that the announcement-day ($t = 0$) has an abnormal return of 0.21 %, and a Z-value of 1.3, which is statistically significant at the 0.1 level. This finding rejects the null hypothesis that there is no impact on firm value associated with announcements of FDI joint ventures. These results indicate that unanticipated joint ventures announcements of FDIs provide a positive impact on firm value. This result weakly supports the value creation hypothesis.

Lee and Wyatt (1990) find that stockholders of U.S. parent firms of international joint ventures suffer a statistically significant loss of about 0.466 % on the announcement date. On the contrary, Lummer and McConnell (1990) find that stockholders of U.S. parent firms of international joint ventures experience a statistically significant gain of about 0.40 % on the announcement date. We find a statistically significant gain of about 0.21 % on the announcement date, thus supporting the Lummer and McConnell (1990) findings.

Now, having presented and discussed the short-term empirical results, let us look at the long-term empirical results.

Long-Term Announcement Effects

When a firm makes an international joint venture it becomes necessary to evaluate the postmerger performance. The long-term announcement effect test utilizes the size-based decile indices model (standardized compounded abnormal returns) along with one-tailed test statistics. Table 8 shows the compounded abnormal returns (CMAR) for the first year to be 3.73 % and the Z-value for the first year to be 1.61 (statistically significant at the 0.1 level). CMAR for the second year is 15.25 % with the Z-value being 2.40 (statistically significant at the 0.01 level). CMAR for the third year is 29.08 % with the Z-value being 3.55 (statistically significant at the 0.01 level). The results show that after the announcement CMARs increase across the three-year period and Z-values are virtually all statistically significant. These results support the hypothesis that joint venture announcements of FDI provide an increasing positive impact on firm value up to the three year period, thus supporting the value creating hypothesis.

No previous empirical long-term performance test has been done. However, Lee and Wyatt (1990) and Lummer and McConnell (1990) did short-term announcement tests. Their findings show opposite outcomes. The former study shows a statistically significant loss to stockholders of U.S. parent firms, but the later one shows statistically significant gains to stockholders of U.S. parent firms. We find a statistically significant gain across the three-year period. These results can be interpreted to mean that FDI joint ventures provide more opportunities and benefits to investing firms, and that unanticipated announcements of FDI joint ventures give positive abnormal returns to investing firms' stockholders.

To summarize, the hypothesis that FDI joint ventures are a value increasing investment decision is supported by the results from both the short-term and long-term performance tests. After presenting the empirical results of FDI acquisitions and FDI joint ventures, it now becomes beneficial to compare the performances between FDI acquisitions and joint ventures.

A.1.3. Announcement Effect Differences by FDI Acquisitions and FDI Joint Ventures

Foreign direct investment (FDI) is achieved via acquisitions or joint ventures. The primary distinction between a corporate merger and a corporate joint venture is that the original management of the parent firms remains intact under joint ventures. Joint ventures are formed to undertake new projects whereas mergers involve the joining together of existing projects. In regards to the combining of resources, both acquisitions and joint ventures provide synergy effects. However, both acquisitions and joint ventures may have different investing motives and may provide different impacts on firm value. Thus, in this section we compare the impacts on firm value between FDI acquisitions and FDI joint ventures.

H_{0,1.4} : There is no difference in impacts on firm value between associated with announcements of acquisition and joint ventures of FDI.

H_{A,1.4} : There is a difference in impacts on firm value between associated with announcements of acquisition and joint ventures of FDI.

Short -Term Announcement Effects

Daily mean difference (DAR) and Z-values of DAR are used to test the performance difference in the two samples (Doukas and Travlos 1988). Table 9 shows daily mean

differences (DAR) and Z-values of the returns between acquisitions and joint ventures. On the announcement-day ($t = 0$), the daily mean difference (DAR) of abnormal return between these two groups is - 0.05 % (Z-value = - 0.13), which is statistically insignificant at conventional levels (not rejecting null hypothesis that there is no difference in impacts on firm value between associated with announcements of acquisitions and joint ventures of FDIs).

This result indicates that there is no difference in impacts on firm value between acquisitions and joint ventures on the announcement date. The abnormal returns of both acquisitions and joint ventures on the announcement-day are somewhat close. However the long-term CMAR difference is much larger. Let us move on to present and discuss the long-term performance test results.

Long-Term Announcement Effects

Long-term announcement returns are significantly positive for each group. Differences of compounded abnormal returns (DCMAR) and Z-values of DCMAR are presented to test the performance difference. Table 10 shows the differences of compounded abnormal returns (DCMAR) between acquisition and joint ventures for the first year to be - 6.9 % and the Z-value for the first year to be - 1.99 (statistically significant at the 0.5 level). DCMAR for the second year is - 15.66 % with the Z-value being - 2.05 (statistically significant at the 0.01 level). CMAR for the third year is - 21.07 % with the Z-value being - 2.06 (statistically significant at the 0.01 level). For each of the three years, the DCMARs are high and statistically significant at the 0.05 level. These results mean that there are differences in impacts on firm value for the three year long-term period between

acquisitions and joint ventures. Joint ventures provide higher increases in firm value than do acquisitions for long-term periods. These results can be interpreted to mean that FDI joint ventures are better ways to expand business internationally than FDI acquisitions.

To summarize, there is no difference between acquisitions and joint ventures in terms of short-term performance, but joint ventures affect higher wealth impacts than acquisitions in terms of long-term periods. These wealth impacts may be affected by the wealth of the country where the FDI occurs. We next present and discuss empirical results of country diversification effects.

A.2. Country Diversification Hypothesis

Country diversification is expected to impact the investing firm's stock value. Country diversification provides the investing firm with the benefits of risk reduction. This section tests the hypothesis that investments in a less-developed country provide higher abnormal returns to stockholders than do investments in a developed country.

H_{0,2.1} : Abnormal returns are equal to each other, regardless of the degree of the host country's economic development.

H_{A,2.1} : Abnormal returns from less-developed countries are greater than those from developed and highly developed countries.

Short -Term Announcement Effects

Short-term announcement abnormal returns are positive but statistically insignificant for each group. Daily mean difference (DAR) and Z-values of DAR are presented to test the performance difference (Doukas and Travlos 1988). Table 11 shows daily mean differences (DAR) and Z-values of the returns between highly developed and developed

countries. On the announcement-day ($t = 0$), the daily mean difference (DAR) of abnormal return between these two groups is - 0.15 % (Z-value = - 0.65), which is statistically insignificant at conventional levels (this does not reject the null hypothesis that abnormal returns are equal to each other).

Table 11 shows daily mean differences (DAR) and Z-values of the returns between highly developed and less-developed countries. On the announcement day ($t = 0$), the daily mean difference (DAR) of abnormal return between these two groups is - 0.05 % (Z-value = - 0.66), which is statistically insignificant at conventional levels (this also does not reject the null hypothesis that abnormal returns are equal to each other). These results indicate that there is no difference in impacts on firm value associated with announcements of FDI, regardless of the degree of the host country's economical development.

Abnormal returns of at day zero are somewhat close and statistically insignificant for each group. The long-term CMAR differences are also close to each other.

Long-Term Announcement Effects

The three-year long-term period CMARs are significantly positive for the group of less-developed and highly developed countries. Differences of compounded abnormal returns (DCMAR) and the Z-values of DCMAR are presented to test the performance difference between highly developed, developed and less-developed countries. Table 12 shows the differences of compounded abnormal returns (DCMAR) between highly developed and developed countries for the first year to be 2.26 % and the Z-value for the first year to be 0.21 (statistically insignificant at conventional levels). DCMAR for the second year is - 3.39 % with the Z-value being - 0.52 (statistically insignificant at

conventional levels). DCMAR for the third year is - 6.53 % with the Z-value being - 0.18 (statistically insignificant at conventional levels). For the one year period, country diversification into the highly developed country shows higher abnormal returns of 2.26 % but there are statistically insignificant benefits. For the two and three-year periods, CMARs of diversification into developed countries are higher, but are still statistically insignificant at conventional levels. This means that there is no difference in impact on firm value for the three-year long-term period between country diversification into highly developed and developed countries.

The differences of compounded abnormal returns (DCMAR) between highly developed countries and less-developed countries, along with the Z-values for the first, second, and third year are presented in Table 12. The DCMARs are - 5.09 % ($Z = -1.20$ and is insignificant at conventional levels), - 13.84 % ($Z = -2.14$ and is significant at the 0.01 level), and - 14.0 % ($Z = -1.67$ and is significant at the 0.5 level), respectively. For the two and three-year periods, CMARs of diversification into a less-developed country are higher and are statistically significant at the 0.05 level. This means that there is a difference in impact on firm value for the three-year long-term period between country diversification for highly developed countries and less-developed countries. FDIs in less-developed countries give more benefits to investing firms than FDIs in highly developed countries, especially for the three-year period.

To summarize, these results suggest that there is no difference in impacts on firm value on the announcement date of the short-term FDI regardless of the degree of the economic development in the host country, but there is a difference in impact on firm value for the

three-year long-term period. Thus, country diversification into the lesser-developed countries provides higher benefits and increases in firm value, yet country diversification into the highly developed countries does not provide these same pluses.

Empirically, Errunza and Rosenberg (1982) and Errunza (1983) show that returns on less-developed countries are relatively high and exhibit low correlation with returns on developed countries. Doukas and Travlos (1988) also show that abnormal returns are larger when firms make FDI acquisitions in less-developed countries. Gupta, McGowan, Misra, and Missirian (1991) show a positive and statistically significant abnormal returns from joint ventures with China, which is categorized as a less-developed country. However, contrary to the above studies, which support the results of our study, Collins (1990) finds that U.S. multinationals do not realize shareholder benefits by investing in less-developed countries. Collins conclusions are not supported by the results of our study.

After presenting and discussing the results of the country diversification effects by degree of the host country's economic development, it becomes necessary to discuss country diversification effects of each group, respectively.

A.2.1. Less-Developed Country

Country Diversification into Less-Developed Country : In this case, investment in a less-developed country may be a value increasing investment because of the diversification benefits. Therefore, the hypothesis that the announcement of foreign direct investment in

less-developed countries gives positive abnormal returns to investing firms may indeed prove true.

H_{0,2.2} : There is no impact on firm value associated with announcements of foreign direct investment in less-developed countries.

H_{A,2.2} : There is a positive impact on firm value associated with announcements of foreign direct investment in less-developed countries.

Short-Term Announcement Effects

Abnormal returns surrounding the announcement day represent short-term announcement effects. For this test, the market model (standardized abnormal return method) along with one-tailed test statistics are utilized. Table 13 shows that the announcement-day ($t = 0$) abnormal return is 0.13 %, and the Z-value is 1.1, which is statistically insignificant at conventional level, thus not rejecting null hypothesis that FDI in less-developed countries provides no impact on firm value. This result indicates that country diversification into less-developed country provides no impact on firm value, not supporting the value creation hypothesis.

Long -Term Announcement Effects

Concerning the post-announcement performance, long-term announcement effects are investigated. For this test, the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics are utilized. Table 14 shows that the compounded abnormal returns (CMAR) for the first year is 2.88 % and shows the Z-value for 1 year to be 0.99 (statistically insignificant at conventional levels). CMAR for the second year is 13.89 % and the Z-value is 2.38 (statistically significant at the 0.01 level). CMAR for the third year is 23.39 % and the Z-value is 3.08 (statistically significant

at the 0.01 level). The result shows that after the announcement CMARs increase across the three years and Z-values are higher than 1.4 (which is also statistically significant at conventional levels), except the periods between the first and second year. Therefore, announcements of FDIs in a less-developed country provide an increasing positive impact on firm value up to the three-year period; thus, again, supporting the value creation hypothesis.

To summarize, FDI in a less-developed country impacts positively on the investing firm value, with regard to long-term performance, but does not impact with regard to short-term performance. Having discussed the results of country diversification in less-developed countries, we next examine those in developed countries.

A.2.2. Developed Country

Country Diversification into Developed Country : Investment in a developed country may be a value increasing investment. Investments in developed countries may provide more safety from risks than less-developed countries do. As a positive net present value project, the investment in developed countries can increase the value of the investing firm. This is an empirical test of the hypothesis that FDI in a developed country gives positive abnormal returns to an investing firm's shareholders upon announcement and for a long post-announcement period.

$H_{0,2.3}$: There is no positive impact on firm value associated with announcements of foreign direct investment in developed countries.

$H_{A,2.3}$: There is a positive impact on firm value associated with announcements of foreign direct investment in developed countries.

Short -Term Announcement Effects

Short-term announcement effects from FDIs in developed countries are tested using the market model (standardized abnormal return method) along with one-tailed test statistics. Table 13 shows the announcement-day ($t = 0$) abnormal return to be 0.23 %, and the Z-value to be 1.0, which is statistically insignificant at conventional levels. Thus, the null hypothesis cannot be rejected. Furthermore, these results indicate that country diversification into developed countries provides no impact on firm value, and cannot support the value creating hypothesis.

Now, having discussed the empirical results from FDI in developed countries, let us move on to discuss those in terms of long-term performance evaluation.

Long -Term Announcement Effects

Long-term announcement effects from FDIs in developed countries are tested using the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics. Table 14 shows that the compounded abnormal returns (CMAR) for the first year is - 4.47 % and shows the Z-value for the first year to be - 0.6 (statistically insignificant at conventional levels). CMAR for the second year is 3.44 % and the Z-value is 0.43 (statistically insignificant at conventional levels). CMAR for the third year is 15.92 % and the Z-value is 1.04 (statistically insignificant at conventional levels). Thus, these results show that early after the announcement the CMARs are negative. After two years, CMARs get positive values. However, most Z-values are lower than 1.4 (statistically insignificant at conventional levels) for all three years. Additionally, these

results mean that the announcements of FDIs provide no impact on firm value for up to the three year period, and therefore do not support the value creation hypothesis.

In summary, FDI in a developed country does not impact the investing firm's value, with regards to both short-term and long-term performance. Therefore, neither performance type supports the value creating hypothesis.

Now, having discussed the empirical results from FDI in less-developed and developed countries, we move on to discuss those from FDI in highly developed countries.

A.2.3. Highly Developed Country

Country Diversification into Highly Developed Country : FDI in highly developed countries such as G-7 countries may be a value increasing investment. FDI in highly developed countries may provide more safety from risks than less-developed countries do. In this section we hypothesize that FDIs in highly developed countries will give positive abnormal returns to investing firm's shareholders upon announcement and for a long post-announcement period.

H_{0,2.4} : There is no positive impact on firm value associated with announcements of foreign direct investment in highly developed countries.

H_{A,2.4} : There is a positive impact on firm value associated with announcements of foreign direct investment in highly developed countries.

Short -Term Announcement Effects

Short-term announcement effects from FDI in highly developed countries are examined using the market model (standardized abnormal return method) and one-tailed test statistics. Table 13 shows that the announcement-day ($t = 0$) abnormal return is 0.08 %, and the Z-value is 0.5, which is statistically insignificant at conventional levels. Thus, the

null hypothesis cannot be rejected. Hence, these results indicate that country diversification into highly developed countries provides no impact on firm value, and therefore cannot support the value creating hypothesis.

Along with short-term announcement effects, it becomes necessary to investigate post-announcement performance in order to evaluate impacts of FDIs in highly developed countries.

Long -Term Announcement Effects

Long-term compounded abnormal returns test post-announcement performance. For this test, the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics are utilized. Table 14 shows the compounded abnormal returns (CMAR) for the first year to be - 2.21 % and the Z-value for the first year to be - 0.68 (statistically insignificant at conventional levels). The CMAR for the second year is 0.05 % with the Z-value being - 0.30 (statistically insignificant at conventional levels). The CMAR for the third year is 9.39 % with the Z-value being 1.56 (statistically significant at the 0.1 level). During the first two years, CMARs and Z-values are negative and statistically insignificant at conventional levels. After two years, CMARs show positive values, but Z-values are still lower (statistically significant at conventional levels). And the three-year period CMAR has a positive value and is statistically significant at the 0.1 level. Thus, support that FDI announcements provide an increasing positive impact on firm value through the three year period has been provided.

An FDI in a highly developed country provides significant positive impacts on the investing firm value with regards to long-term performance, but does not provide

significant positive impacts with regards to short-term performance. After having discussed an FDI related country diversification effects, we need to investigate FDI related industry diversification effects.

A.3. Industry Diversification Hypothesis

When a firm takes on an FDI it has an option of choosing an investment either in a related industry or in an unrelated industry. Industry diversification is expected to impact positively on the investing firm's stock value. This section discusses the empirical test of whether diversification in unrelated industries provides more benefits to investing firm's shareholder than diversification in related industries.

$H_{0,3.1}$: Abnormal returns from unrelated FDI diversification are equal to those from related FDI diversification.

$H_{A,3.1}$: Abnormal returns from unrelated FDI diversification are higher than those from related FDI diversification.

Short-Term Announcement Effects

Short-term announcement abnormal returns from diversification in unrelated industries are positive but statistically insignificant. However, short-term announcement abnormal returns from diversification in related industries are positive and statistically significant. Daily mean difference (DAR) and Z-values of DAR are presented to test the performance difference in the two groups (Doukas and Travlos 1988). Table 15 shows daily mean differences (DAR) and Z-values of the returns between diversification in unrelated and related industries. On the announcement-day ($t = 0$), DAR of abnormal return between these two groups is - 0.05 % (Z-value = 0.41), which is statistically insignificant at

conventional levels, but does not reject the null hypothesis that abnormal returns from unrelated FDI diversification are equal to those from related FDI diversification. Thus, there is an indication that there is no difference in impacts on firm value between related and unrelated industry diversification in terms of short-term performance.

The day 0 abnormal returns are somewhat close. The long-term CMAR differences are also close. Let us move on to discuss the long-term performance evaluation.

Long -Term Announcement Effects

The three-year long-term announcement abnormal returns are significantly positive for each group. Differences in compounded abnormal returns (DCMAR) and Z-values of DCMAR are presented here for the purpose of testing the performance differences in the two groups. Table 16 shows these differences of compounded abnormal returns (DCMAR), between related and unrelated diversification, and the Z-values for the first, second, and third year, as being 1.84 % (Z= - 0.33), - 1.83 % (Z= - 0.32), - 4.04 % (Z= - 0.68), respectively. Up through three years, CMARs of the unrelated industrial diversification are higher, but remain statistically insignificant at conventional levels. Therefore, there appears to be no difference in impacts on firm value between related and unrelated industry diversification.

No significant difference in impacts on firm value between related and unrelated industry diversification, in terms of both short-term and long-term performance, were found. No studies have been done to directly compare the performances between the related and unrelated industrial diversification. However, empirical studies by Singh and Montgomery (1987) and Shelton (1988) support the existence of the benefits from related

domestic acquisitions. On the contrary, studies by Lubatkin (1987) and Seth (1990) do not support the existence of the benefits from related domestic acquisitions. With cross-border acquisition sample, Doukas and Travlos (1988) find a significant relationship between abnormal returns and diversification in the unrelated industries.

After comparing the performance between diversification in the related and unrelated industries, it becomes beneficial to examine the performance of each group.

A.3.1. Unrelated Investment

Unrelated Investment Effects : As a means of a firm's FDI diversification, unrelated industry investment may be a value increasing investment. Unrelated industry investment may lead the investing firm directly into a new product market and thus provide the opportunity of a risk spread. Therefore, it is hypothesized that unrelated investment is a value increasing investment. In this section the empirical test of this hypothesis is provided.

H_{0,3.2} : There is no impact on firm value associated with announcements of foreign direct investment in the unrelated industry.

H_{A,3.2} : There is a positive impact on firm value associated with announcements of foreign direct investment in the unrelated industry.

Short-Term Announcement Effects

To evaluate the short-term announcement effects from FDI in unrelated industry, the market model (standardized abnormal return method) along with one-tailed test statistics are used. Table 17 reflects the announcement-day ($t = 0$) abnormal return as being 0.15 %, and the Z-value as being 0.3, which is statistically insignificant at conventional

levels. Therefore, the null hypothesis cannot be rejected. This result indicates that unanticipated announcements of FDI in unrelated industry provide no impact on firm value. This finding does not support of the value creation hypothesis.

Along with short-term performance evaluation, it becomes necessary to investigate the long-term post-announcement performance in order to evaluate impacts of FDIs in unrelated industries.

Long -Term Announcement Effects

To evaluate post-announcement performance, the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics are utilized. Table 18 shows the CMAR for the first year to be - 2.5 % and the Z-value for the first year to be 0.4 (statistically insignificant at conventional levels). The CMAR for the second year is 5.67 % with the Z-value being 0.91 (statistically insignificant at conventional levels). The CMAR for the third year is 17.22 % with the Z-value being 2.28 (statistically significant at the 0.01 level). Notice that for the one-year period, CMARs are negative and statistically insignificant at conventional levels; however, for the three-year period, CMARs and Z-values increase enough to provide a positive impact on firm value. This result indicates that FDIs in an unrelated industry provide positive and statistically significant impacts.

In summary, FDIs in unrelated industry positively affect firm value for the three year long-term period, but provide no substantial impacts on firm value in terms of short-term performance. Hisey and Caves (1985) provide support for unrelated diversification as a

risk aversion motivation. Doukas and Travlos (1988) also provide the supporting result that abnormal returns are larger when firms expand into a new line of business.

Now, having presented and discussed the tested hypothesis results, let us move on to discuss the issue of related industry diversification effects.

A.3.2. Related Investment

Related Investment Effects : This section provides empirical results of whether or not related investment is really a value increasing investment. Based on the assumption that related industry investment generates operating synergy effects, it is hypothesized that related industry investment is a value increasing investment.

H_{0,3.3} : There is no impact on firm value associated with announcements of foreign direct investment in the related industry.

H_{A,3.3} : There is a positive impact on firm value associated with announcements of foreign direct investment in the related industry.

Short-Term Announcement Effects

The short-term evaluation of impacts from FDI in related industry utilizes the market model (standardized abnormal return method) along with one-tailed test statistics. Table 17 shows that the announcement-day ($t = 0$) abnormal return is 0.10 %, and the Z-value remains at 1.3, which is statistically significant at the 0.1 level (rejecting null hypothesis that there is no impact on firm value associated with announcements of foreign direct investment in the related industry. Therefore, the indication that unanticipated announcements of FDI in related industry provide a positive impact on firm value is apparent and does support the value creation hypothesis.

Now, having finished short-term performance evaluation, let us move on to investigate post-announcement performance.

Long -Term Announcement Effects

The three-year post-announcement effects from FDI in related industry are examined by using the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics. Table 18 shows the CMAR for the first year to be - 0.66 % and the Z-value for the first year to be 0.01 (statistically insignificant at conventional levels). The CMAR for the second year is 3.84 % with the Z-value being 0.86 (statistically insignificant at conventional levels). The CMAR for the third year is 13.18 % with the Z-value being 2.38 (statistically significant at the 0.01 level). For the three-year period, CMAR is positive and is statistically significant at the 0.01 level. Therefore, these findings indicate that announcements of FDI in a related industry diversification provide an increasing positive impact on firm value for up to three years, thus supporting the value creation hypothesis.

In summary, FDI in a related industry is a value creating investment decision in terms of both short-term and long-term performance. Thus, these results mean that, in FDI in related industry, operating synergy effects play an important role in influencing firm value. These results are supported by empirical studies of Singh and Montgomery (1987) and Shelton (1988). However, studies by Lubatkin (1987) and Seth (1990) do not support the existence of the benefits from related domestic acquisitions.

The hypotheses of FDI related industry diversification were developed and examined. After having discussed an FDI related industry diversification effects, we need to move on the issue of FDI related host country experience effects.

A.4. Country Experience Hypothesis

When a firm expands its activities overseas, the expanding firm's previous experience in the target country may play an important role in influencing its stockholders' wealth. This section provides an empirical test of whether or not the degree of previous experience in a host country affects the investing firm's stock value.

H_{0,4.1} : Abnormal returns are equal to each other, regardless of the degree of experience in the host country.

H_{A,4.1} : Abnormal returns from a novice in international operations are greater than those for an experienced firm in international operations.

Short-Term Announcement Effects

Short-term announcement abnormal returns of each group are presented and compared. Daily mean difference (DAR) and the Z-values of DAR are utilized to test the performance difference in each group (Doukas and Travlos, 1988). Table 19 reflects these two values for the returns based on operation and non-operation in the host country. On the announcement-day ($t = 0$), the daily mean difference (DAR) of abnormal returns between these two groups is 0.33 % (Z-value = 1.87), which is statistically significant at the 0.01 level, thus this result rejects the null hypothesis that abnormal returns are equal to each other, regardless of the degree of experience in the host country.

Table 19 also shows the daily mean differences (DAR) and the Z-values for the returns derived from operations in the host country and first time overseas ventures. On the announcement day ($t = 0$), the daily mean difference (DAR) of abnormal return between these two groups is 0.1 % (Z-value = - 0.41), which is statistically insignificant at conventional levels, thus the null hypothesis that abnormal returns are equal to each other is not rejected, regardless of the degree of experience in the host country. Therefore, there are different impacts on firm value based on a firm's previous in-country experience. FDI by a firm which is already operating in the host country provides higher impacts on firm value than FDI by a firm which is not operating in the host country. However, there is no difference in impact on firm value when talking of associations with announcements of FDI by a firm already operating in the host country and FDI for the firm going abroad for the first time.

Now, having discussed short-term performance evaluation, let us move on to discuss post-announcement performance evaluation.

Long -Term Announcement Effects

The three-year long-term announcement abnormal returns from each group are presented and compared. Differences of compounded abnormal returns (DCMAR) and the Z-values of DCMAR are utilized to test the performance difference between each group. Table 20 shows the differences of compounded abnormal returns (DCMAR) between operations in and not in the host country for the first year to be 4.48 % and the Z-value for the first year to be 1.58 (statistically significant at the 0.1 level). DCMAR for the second year is 1.10 % with the Z-value being 0.88 (statistically insignificant at

conventional levels). DCMAR for the third year is 13.46 % with the Z-value being 1.83 (statistically significant at the 0.05 level). Notice that for the third year, CMAR of FDI by a firm already operating in the host country are 13.46 % higher than those made by a firm which is not operating in the host country (this is statistically significant at the 0.05 level). This means that there is a difference in impacts on firm value for the three year period. FDI by a firm already operating in the host country provides significantly greater benefits to stockholders than FDI by a firm which is not operating in the host country.

Table 20 also shows the differences between compounded abnormal returns (CMARs) for firms already operating in a host country and those going abroad for the first time, and the Z-values. DCMAR for the first year is - 5.5 % with the Z-value being 0.05, which is statistically insignificant at conventional levels. DCMAR for the second year is 11.58 % with the Z-value being 0.83, which is statistically insignificant at conventional levels. DCMAR for the third year is 7.62 % with the Z-value being 0.59, which is statistically insignificant at conventional levels. For these three years, no significant difference between CMARs of FDI by a firm already operating in the host country, and CMARs of FDI for the firm going abroad for the first time, could be found.

Doukas and Travlos (1988) speculate about the impact of the expanding firm's degree of previous international exposure on stock values. They find that expanding into a new geographic area creates more benefits than expanding the firm's operations in the same country. Their results do not coincide with our results. However, Datta and Puia (1992) show that cultural differences have a negative relationship with performance in cross-border acquisitions using a sample of 112 U.S. acquiring firms for the period 1978 - 1990.

Their results mean that if cultural difference can be reduced by experience in host country, then the country experience factor provides a positive impact on firm value, thus support our results.

To summarize, the empirical tests of short-term performance and long-term performance arrive at the same result: FDI made by a firm already operating in the host country gives higher impacts on firm value than FDI made by a firm which is not operating in the host country. And, there is no significant difference in impacts on firm value between FDI by a firm already operating in the host country and FDI for the firm going abroad for the first time.

After comparing the tested results of the country experience effects by degree of the experience in the host country, it becomes necessary to discuss the country experience effects of each group, respectively.

A.4.1. Operating already in Host Country

Operating already in Host Country : The investing firm's previous experience in the target country may play an important role in influencing the value of investing firms. This is an empirical test of the hypothesis that FDI by a firm already operating in the host country is a value creating investment.

H_{0,4.2} : There is no impact on firm value associated with announcements of foreign direct investment by a company already operating in the country.

H_{A,4.2} : There is a positive impact on firm value associated with announcements of foreign direct investment by a company already operating in the country.

Short-Term Announcement Effects

For the test of short-term announcement effects, the market model (standardized abnormal return method) and one-tailed test statistics are utilized. Table 21 shows that the announcement-day ($t = 0$) abnormal return is 0.27 %, and the Z-value is 2.1, which is statistically significant at the 0.05 level, thus reject the null hypothesis that there is no impact on firm value associated with announcements of foreign direct investment by a company already operating in the country. This result indicates that unanticipated announcements of FDI in already operating countries provide a positive impact on firm value, thus supporting the value creating hypothesis. This indication is supported by Datta and Puia (1992). They find that cultural differences have a negative relationship with performance, thus the country experience factor, reducing the difference, provides a positive impact on firm value.

Along with short-term performance evaluation, it becomes beneficial to investigate post-announcement performance.

Long -Term Announcement Effects

The three-year post-announcement performance evaluation from FDI in already operating countries are examined by using the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics. Table 22 shows the CMAR for the first year to be 0.53 % and the Z-value for the first year to be 0.84 (statistically insignificant at conventional levels). the CMAR for the second year is 4.53 % with the Z-value being 1.44 (statistically significant at the 0.1 level). the CMAR for the third year is 19.59 % with the Z-value being 3.51 (statistically significant at the

0.01 level). The result shows that CMARs and Z-values increase from negative signs to positive signs. This result shows that, in the beginning period, the announcements of the diversification into the experienced host country provide statistically insignificant negative impact on firm value, but for the two or three year periods, provide statistically significant positive impact on firm value. This result supports the value creating hypothesis.

When a firm already operating in the host country makes an FDI, it gets a significant positive impact on firm value in terms of both short-term and long-term performance, thus supporting the value creating hypothesis. Having presented and discussed the test results of value creating hypothesis from the group of operating already in the host country, let us move on to discuss those from the group of not operating in the host country.

A.4.2. Not Operating in Host Country

Not Operating in Host Country : When a firm which has experience in international operations makes an FDI in a non-experienced country, it is expected that positive impacts on firm value will arise. Therefore, it is hypothesized that an FDI by a firm which is not operating in the host country, will positively affect firm value.

H_{0,4.3} : There is no impact on firm value associated with announcements of foreign direct investment by a company which is not operating in the host country.

H_{A,4.3} : There is a positive impact on firm value associated with announcements of foreign direct investment by a company which is not operating in the host country.

Short-Term Announcement Effects

Abnormal returns surrounding the announcement day represent short-term announcement effects from the group of not operating in the host country. For this test, the market model (standardized abnormal return method) along with one-tailed test

statistics are utilized. Table 21 shows that the announcement-day ($t = 0$) abnormal return is - 0.06 %, and that the Z-value is - 0.6, which is statistically insignificant at conventional levels, thus the null hypothesis cannot be rejected. This indicates that unanticipated announcements of FDI by a company which is not experienced in the host country, will provide no impact on firm value, thus not supporting the value creating hypothesis.

Now, having presented and discussed the short-term empirical results, let us look at the long-term empirical results.

Long -Term Announcement Effects

The three-year post-announcement effects from FDI in non-experienced country are examined by using the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics. Table 22 shows that the compounded abnormal returns (CMAR) and the Z-values for the first, second, and third years to be - 3.95 % ($Z = - 1.37$), 3.43 % ($Z = 0.11$), 6.13 % ($Z = 0.71$). Notice that CMARs turn negative by the second year but eventually become positive. For the whole three year period, statistical values are not significant at any conventional levels. This indicates that FDI made by a company which is not operating in the host country provides no significant impacts on firm value.

In summary, when a firm which is not operating in the host country make an FDI, it does not have any significant, positive impact on firm value in terms of both short-term and long-term performance. Thus, it cannot support the value creating hypothesis.

Now, having presented and discussed the test results of value creating hypothesis from the group of not operating in the host country, let us move on to discuss those from the group of going abroad for the first time.

A.4.3. Going Abroad for the First Time

Going Abroad for the First Time : When a firm decides to expand its business internationally for the first time, it creates new opportunities for itself, but also faces difficulties in international business. Hence, an empirical test of the hypothesis that FDI for a firm going abroad for the first time will show positive affects on firm value, is presented.

H_{0,4.4} : There is no impact on firm value associated with announcements of foreign direct investment for the firm going abroad for the first time.

H_{A,4.4} : There is a positive impact on firm value associated with announcements of foreign direct investment for the firm going abroad for the first time.

Short-Term Announcement Effects

To evaluate the short-term announcement effects from FDI for the firm going abroad for the first time, the market model (standardized abnormal return method) along with one-tailed test statistics are used. Table 21 shows that the announcement-day ($t = 0$) abnormal return is 0.17 %, and the Z-value is 1.0, which is statistically insignificant at conventional level, thus the null hypothesis cannot be rejected. This indicates that unanticipated announcements of FDI for the firm going abroad for the first time provide no impact on firm value, thus not supporting the value creating hypothesis. This result coincides with Doukas and Travlos (1988). They also find insignificant positive abnormal returns on the announcement day.

Along with short-term performance evaluation, it becomes beneficial to investigate post-announcement.

Long -Term Announcement Effects

The three-year post-announcement effects from FDI for the firm going abroad for the first time are examined by using the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics. Table 22 shows that the compounded abnormal returns (CMAR) for the first year is 6.03 % and shows the Z-value for the first year to be 0.12 (statistically insignificant at conventional levels). The CMAR for the second year is - 7.05 % and the Z-value is - 0.56 (statistically insignificant at conventional levels). The CMAR for the third year is 11.97 % and the Z-value is 0.09 (statistically insignificant at conventional levels). Up to three years, CMARs are positive but Z-values are statistically insignificant. This means the announcements of FDI for the firm going abroad for the first time do not provide any significant positive impacts on firm value for the long-term period, and therefore cannot support the value creating hypothesis.

To summarize, when a firm which has not experienced in international operations makes an FDI for the first time, it does not have any significant positive impact on firm value in terms of both short-term and long-term performance.

Summary: This section provides the empirical results from the overall sample of foreign direct investment (FDI). Whether or not FDI is a value creating investment decision was tested. A further extension to test country diversification effects, industry diversification effects, and host country experience effects is also included. Each hypothesis is tested in

terms of short-term performance and long-term performance. The standard market model methodology is utilized for the short-term performance tests, and the size-based decile methodology and calculated abnormal returns, using the compounding method, is utilized for the long-term performance test.

The hypothesis that foreign direct investment is a value increasing investment decision is supported by the results from both short-term and long-term performance tests. The results of both the short-term and long-term performance tests show that FDI acquisitions and FDI joint ventures are value creating investment decisions. Additionally, the performance comparison of FDI acquisitions with FDI joint ventures showed that there to be no difference between FDI acquisitions and FDI joint ventures in terms of short-term performance; however, joint ventures prove to have higher impacts on wealth than acquisitions do, in terms of long-term performance.

In regards to the hypothesis concerning country diversification effects, the results find no difference in the impact on firm value on the announcement day regardless of the degree of the economic development in the host country. Three categories of degree of development used, less-developed, developed, and highly developed. When we compared performances of three categories, we found that, for the three-year period, FDI in a less-developed country provides a higher positive impact on firm value than does FDI in a highly developed country. The performances of each categories show that FDI in a less-developed country impacts positively on the investing firm's value, with regards to long-term performance, but does not impact, with regards to short-term performance. And, FDI in a developed country shows no significant impacts on the investing firm's value with

regards to both short-term and long-term performance. FDI in a highly developed country provides significant positive impacts on the investing firm value with regards to long-term performance, but does not provide significant positive impacts with regards to short-term performance.

When reviewed, the performance of industry diversification does not show any significant difference in impacts on firm value between related and unrelated industry diversification in terms of both short-term and long-term performance. Yet, it was found that FDI in the unrelated industry affects positively on firm value for the three-year long-term period, but provides no impacts on firm value in terms of short-term performance. Hence, FDI in a related industry is a value creating investment decision in terms of both short-term and long-term performance.

In testing the experience effects, it was found that the empirical tests of short-term performance and long-term performance show the same results that FDI made by a firm already operating in the host country gives higher impacts on firm value than FDI by a firm which is not operating in the host country. However, there is no difference in impacts on firm value between FDI by a firm already operating in the host country and FDI for the firm going abroad for the first time. In case of a firm which is already operating in the host country makes an FDI, it gets a significant positive impact on firm value in terms of both short-term and long-term performance. And, when a firm which is not operating in the host country makes an FDI, it does not have any significant positive impact on firm value in terms of both the short-term and long-term performances. Likewise, when a firm which has no experience in international operations, makes an FDI for the first time, it

does not have any significant positive impacts on firm value in terms of both the short-term and long-term performance.

To follow up, the empirical test results from the acquisition sample and the joint venture sample will be provided in the next section.

B. ACQUISITIONS

When a firm decides to expand its business internationally, it can choose a cross-border acquisition as a type of foreign direct investment (FDI). This part presents the empirical test results of the value creation hypotheses with the acquisition sample.

B.1. FDI Acquisitions as a Value Creating Activity

FDI acquisitions are used by firms which are expanding internationally. When a firm makes an FDI acquisition, it presumes that the benefits of international expansion will increase the value of the investing firm. In this section, the empirical results from the tested hypothesis that FDI acquisitions give a positive impact on firm value are presented.

H_{0,1.2} : There is no impact on firm value associated with announcements of FDI acquisitions.

H_{A,1.2} : There is a positive impact on firm value associated with announcements of FDI acquisitions.

Short -Term Announcement Effects

The short-term announcement effect test utilizes the market model (standardized abnormal return method) along with one-tailed test statistics. This hypothesis predicts

positive impacts on firm value from FDI acquisitions. Table 5 shows that the announcement-day ($t = 0$) abnormal return is 0.16 %, and that the Z-value is 1.6, which is statistically significant at the 0.1 level. This rejects the null hypothesis that there is no impact on firm value following announcements of FDI acquisitions. These results can be interpreted to mean that unanticipated acquisition announcements of FDI provide positive impacts on firm value. This finding weakly supports the value creation hypothesis. Doukas and Travlos (1988) find insignificant positive abnormal returns at the announcement date of the cross-border acquisition. Our study may give more support to the value creation hypothesis than Doukas and Travlos (1988) because our study has more companies in the sample and a longer sample period.

In addition to short-term announcement effect, we need to examine the post-announcement effects to test the long-term performance hypothesis.

Long-Term Announcement Effects

After a firm announces an international acquisition it then becomes concerned with the postmerger performance. The long-term announcement effect test uses the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics. Table 6 shows the compounded abnormal returns (CMAR) for the first year to be - 3.17 % and the Z-value for the first year to be - 1.17 (statistically insignificant at conventional levels). CMAR for the second year is - 0.41 % with the Z-value being -0.07 (statistically insignificant at conventional levels). CMAR for the third year is 8.01 % with the Z-value being 1.69 (statistically significant at the 0.05 level). The results show that during the first and the second year, CMARs are negative and that most Z-values are not

statistically significant at conventional levels; they are lower than 1.4 (statistically insignificant at conventional levels). Following the second year, the CMARs become more positive and the Z-values increase. After two and a half years, the CMARs are positive and Z-values are statistically significant at the 0.05 level. Three years after the FDI acquisition announcement, the CMAR remains positive (8.01 %) and is statistically significant at the 0.05 level. These results reject the null hypothesis and support the alternative hypothesis that FDI acquisitions provide an increasingly positive impact on firm value for the three year period. This result therefore supports the value creating hypothesis.

Langetieg (1978) and Asquith (1983) conclude that acquiring firms experience significantly negative abnormal returns during one to three years after domestic mergers. Agrawal, Jaffe and Mandelker (1992) find that acquiring firms suffer a statistically significant loss of about 10 % over the five-year period following domestic mergers. Loderer and Martin (1992) show that, on average, acquiring firms do not underperform a control portfolio during the first five years following the acquisition. We find that U.S. acquiring firms experience significantly positive compounded abnormal returns of about 8 % over the three-year period after the international acquisition announcement.

To summarize, the hypothesis that FDI acquisitions are a value increasing investment decision is supported by the results from short-term and long-term performance tests. The results show that the international experience is much different than the domestic one. This indicates that FDI acquisitions provide more opportunities and benefits than domestic acquisitions do. After presenting and discussing the empirical results from the tested

hypothesis that FDI acquisitions impact positively on firm value, it is necessary to summary the empirical test of country diversification effects.

B.2. Country Diversification Hypothesis

Country diversification through cross-border acquisitions is expected to impact on the investing firm's stock value. Country diversification may provide the investing firm with the benefits of risk reduction. FDI acquisitions in a less-developed country may satisfy the investor's international diversification objectives better and increase the systematic advantages inherent in a multinational network more than FDI acquisitions in a developed country do. Thus, this section tests the hypothesis that FDI acquisitions in a less-developed country provide higher abnormal returns to stockholders than do FDI acquisitions in a developed country.

H_{0,2.1.a} : Abnormal returns are equal to each other, regardless of the degree of the host country's economic development.

H_{A,2.1.a} : Abnormal returns from less-developed countries are greater than those from developed and highly developed countries.

Short-Term Announcement Effects

Short-term announcement abnormal returns of each group are tested and compared. Daily mean difference (DAR) and the Z-values of DAR are utilized to test the performance difference in each group (Doukas and Travlos, 1988). Table 23 reflects these two values for the returns between highly developed and developed countries. On the announcement-day ($t = 0$), the daily mean difference (DAR) of abnormal return between these two groups is - 0.26 % ($Z = - 1.06$), which is statistically insignificant at

conventional levels, thus cannot reject the null hypothesis that abnormal returns are equal to each other, regardless of the degree of the host country's economic development.

Table 23 also shows DARs and the Z-values for the returns between highly developed and less-developed countries. On the announcement-day ($t = 0$), the daily mean difference (DAR) of abnormal return between these two groups is -0.1% ($Z = -1.26$), which is statistically insignificant at conventional levels, thus cannot reject the null hypothesis that abnormal returns are equal to each other, regardless of the degree of the host country's economic development. These results indicate that there is no difference in impacts on firm value associated with announcements of FDI, regardless of the degree of the host country's economical development.

Abnormal returns of at the day zero are somewhat close and statistically insignificant for each group. Now, having discussed short-term performance evaluation, let us move on to discuss post-announcement performance evaluation.

Long-Term Announcement Effects

The three-year long-term announcement abnormal returns from each group are tested and compared. The three-year long-term period CMARs are significantly positive for the group of less-developed and highly developed countries. Differences of compounded abnormal returns (DCMAR) and the Z-values of DCMAR are presented to test the performance difference between highly developed, developed and less-developed countries. Table 24 shows the differences of compounded abnormal returns (DCMAR) between highly developed and developed countries for the first year to be 0.48% and the Z-value for the first year to be 0.10 (statistically insignificant at conventional levels). The

DCMAR for the second year is - 14.35 % with the Z-value being - 1.08 (statistically insignificant at conventional levels). The DCMAR for the third year is - 20.56 % with the Z-value being - 0.72 (statistically insignificant at conventional levels). For the one year period, country diversification into the highly developed country shows higher abnormal returns of 0.48 % but there are statistically insignificant benefits. For the two and three-year periods, DCMARs of diversification into developed countries are higher, but are still statistically insignificant at conventional levels. This means that there is no difference in impact on firm value for the three-year long-term period between country diversification into highly developed and developed countries.

Table 24 also shows the differences of compounded abnormal returns (DCMAR) between highly developed and less-developed countries for the first year to be - 4.43 % and the Z-value for the first year to be - 0.38 (statistically insignificant at conventional levels). The DCMAR for the second year is - 25.77 % with the Z-value being - 1.85 (statistically significant at the 0.05 level). The DCMAR for the third year is - 27.52 % with the Z-value being - 1.48 (statistically significant at the 0.1 level). For the two and three-year periods, DCMARs of diversification into a less-developed country are higher and statistically significant. These indicate that there is a difference in impact on firm value for the three-year long-term period between country diversification for highly developed countries and less-developed countries. FDIs in less-developed countries give more benefits to investing firms than FDIs in highly developed countries, especially for the three-year period.

In support of these results, Errunza and Rosenberg (1982) and Errunza (1983) show that returns on less-developed countries are relatively high and exhibit low correlation with returns on developed countries. Doukas and Travlos (1988) also show that abnormal returns are larger when firms make FDI acquisitions in less-developed countries. However, contrary to the above studies, Collins (1990) finds that U.S. multinationals do not realize shareholder benefits by investing in less-developed countries. Collins findings are not supported by the results of our study.

In summary, these results suggest that there is no difference in impacts on firm value on the announcement date of the short-term FDI acquisitions, regardless of the degree of the economic development in the host country, but there is a difference in impact on firm value for the three-year long-term period. Thus, country diversification into the lesser-developed countries provides higher benefits and increases in firm value, yet country diversification into the highly developed countries does not provide these same pluses.

After presenting and discussing the results of the country diversification effects by degree of the host country's economic development, it becomes necessary to discuss country diversification effects of each group, respectively. Let us first look at the group of FDI acquisitions in a less-developed country.

B.2.1. Less-Developed Country

FDI Acquisitions in a Less-Developed Country : Acquisition of target firms from a less-developed country may be a value increasing investment because of diversification benefits as well as prevailing lack of competition, relatively untapped consumer markets, first

mover advantages, potential for erecting preemptive strategic barriers to prevent subsequent entry by competitors, low input costs, access to raw materials, among others. Therefore, the hypothesis that the announcement of foreign direct investment in less-developed countries gives positive abnormal returns to investing firms will be tested.

H_{0,2.2.a} : There is no impact on firm value associated with announcements of FDI acquisitions in less-developed countries.

H_{A,2.2.a} : There is a positive impact on firm value associated with announcements of FDI acquisitions in less-developed countries.

Short-Term Announcement Effects

For the test of short-term announcement effects from FDI acquisitions in a less-developed country, the market model (standardized abnormal return method) along with one-tailed test statistics are utilized. Table 25 shows that the announcement-day ($t = 0$) abnormal return is 0.18 %, and the Z-value is 1.5, which is statistically significant at the 0.1 level, thus rejecting null hypothesis that FDI acquisitions in a less-developed country provide no impacts on firm value. This means that country diversification into less-developed country provides a positive impact on firm value, supporting the value creation hypothesis. This result is supported by Errunza and Rosenberg (1982), Errunza (1983), and Doukas and Travlos (1988). However, Collins (1990) finds that U.S. multinationals do not realize shareholder benefits by investing in less-developed countries. Our study does not support Collins findings.

Along with short-term performance evaluation, it becomes beneficial to investigate post-announcement performance.

Long-Term Announcement Effects

Long-term announcement effects from FDI acquisitions in a less-developed country are tested using the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics. Table 26 reflects that the CMAR for the first year to be 0.46 % and the Z-value for the first year to be - 0.12 (statistically insignificant at conventional levels). The CMAR for the second year is 17.93 % with the Z-value being 1.45 (statistically significant at the 0.1 level). The CMAR for the third year is 26.51 % with the Z-value being 1.91 (statistically significant at the 0.05 level). These results reflect that after the announcement, CMARs increase across the three years, and that after two years the Z-values become higher than 1.4, which is statistically significant at the 0.1 level. Therefore, announcements of FDI acquisitions in a less-developed country provide a significant positive impact on firm value up to the three year period, and thus supporting the value creating hypothesis.

To summarize, FDI in a less-developed country impacts positively on the investing firm value, with regards to both short-term and long-term performance. Having discussed the results of country diversification in less-developed countries, let us move on to discuss those in developed countries.

B.2.2. Developed Country

FDI Acquisitions in a Developed Country : Acquisition of target firms from a developed country may be a value increasing investment. FDI acquisitions in developed countries may provide more safety from risks than less-developed countries do. This is an empirical test of the hypothesis that FDI acquisitions in a developed country gives positive abnormal

returns to an investing firm's shareholders upon announcement and for a long post-announcement period.

H_{0,2.3.a} : There is no positive impact on firm value associated with announcements of FDI acquisitions in developed countries.

H_{A,2.3.a} : There is a positive impact on firm value associated with announcements of FDI acquisitions in developed countries.

Short -Term Announcement Effects

Short-term announcement effects from FDIs in developed countries are tested using the market model (standardized abnormal return method) along with one-tailed test statistics. Table 25 shows that the announcement-day ($t = 0$) abnormal return is 0.34 %, and the Z-value is 1.2, which is statistically insignificant at conventional levels, thus does not reject the null hypothesis that FDI acquisitions in a developed country provide no impacts on firm value. This indicates that country diversification into the developed country provides no significant positive impact on firm value, thus not supporting the value creating hypothesis.

Now, having presented and discussed the short-term empirical results, let us look at the empirical results of the hypothesis that FDI acquisitions in a developed country gives positive abnormal returns to an investing firm's shareholders for a three-year post-announcement period.

Long-Term Announcement Effects

Concerning the post-announcement performance evaluation, three-year long-term announcement effects are investigated. For this test, the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics are utilized.

Table 26 shows that the CMAR for the first year to be - 4.45 % and the Z-value for the first year to be - 0.67 (statistically insignificant at conventional levels). The CMAR for the second year is 6.51 % with the Z-value being 0.58 (statistically insignificant at conventional levels). The CMAR for the third year is 19.55 % with the Z-value being 1.06 (statistically insignificant at conventional levels). Notice that from the announcement, CMARs are negative. Yet, around the second year, CMARs get positive values. For the whole three year period, statistical values are not significant at any conventional levels. Therefore, these indicate that the announcements of FDI acquisitions in a developed country provide no impact on firm value for up through the three year period, and thus do not support the value creating hypothesis.

To summarize, FDI acquisitions in a developed country do not provide any significant impacts on firm value, in terms of both the short-term and long-term performances.

Now, having discussed the empirical results from FDI acquisitions in less-developed and developed countries, let us move on to discuss those from FDI acquisitions in highly developed countries.

B.2.3. Highly Developed Country

FDI Acquisitions in a Highly Developed Country : FDI's acquisitions in highly developed countries may be a value increasing investment. In this section, it is hypothesized that FDI's in highly developed countries will give positive abnormal returns to investing firm's shareholders upon announcement and for a long post-announcement period.

H_{0,2.4.a} : There is no positive impact on firm value associated with announcements of FDI acquisitions in highly developed countries.

H_{A,2.4.a} : There is a positive impact on firm value associated with announcements of FDI acquisitions in highly developed countries.

Short-Term Announcement Effects

Abnormal returns surrounding the announcement day represent short-term announcement effects from the group of FDI acquisitions in a highly developed country. For this test, the market model (standardized abnormal return method) and one-tailed test statistics are used. Table 25 shows that the announcement-day ($t = 0$) abnormal return is 0.08 %, and the Z-value is 0.2, which is statistically insignificant at conventional levels, thus the null hypothesis cannot be rejected. This indicates that FDI acquisitions in a highly developed country provides no impact on firm value, thus not supporting the value creating hypothesis.

Now, having presented and discussed the short-term announcement effects, let us look at the long-term empirical results.

Long-Term Announcement Effects

The three-year post-announcement performances from FDI acquisitions in a highly developed country are examined by using the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics. Table 26 shows that the CMAR for the first year to be - 3.97 % and the Z-value for the first year to be - 1.04 (statistically insignificant at conventional levels). The CMAR for the second year is - 7.84 % with the Z-value being - 1.22 (statistically insignificant at conventional levels). CMAR for the third year is - 1.01 % with the Z-value being 0.45 (statistically insignificant at conventional levels). These results shows that up through three-year

period, CMARs are negative and statistically insignificant at conventional levels. These indicate that FDI acquisitions in a highly developed country provide no impacts on firm value, thus not supporting the value creating hypothesis.

In summary, FDI acquisitions in a highly developed country provide no significant impacts on firm value in terms of both short-term and long-term performance.

The hypotheses of country diversification effects of FDI acquisitions by the degree of the host country's economic development are developed and investigated. After having discussed the empirical results of FDI acquisitions related country diversification effects, let us move on an issue of FDI acquisitions related industry diversification effects.

B.3. Industry Diversification Hypothesis

When a firm makes a cross-border acquisition, it can choose an investment either in a related or in an unrelated industry. Diversification in a related industry provides benefits of synergy effects to investing firms. Diversification in an unrelated industry provides benefits of risk reduction to investing firms. Therefore, it becomes beneficial to compare the both diversification effects.

H_{0,3.1.a} : Abnormal returns from unrelated FDI acquisitions are equal to those from related FDI acquisitions.

H_{A,3.1.a} : Abnormal returns from unrelated FDI acquisitions are higher than those from related FDI acquisitions.

Short-Term Announcement Effects

Short-term announcement abnormal returns from FDI acquisitions in unrelated industries are positive but statistically insignificant. However, short-term announcement

abnormal returns from FDI acquisitions in related industries are positive and statistically significant. The market model (standardized abnormal return method) with one-tailed test statistics are utilized to compare short-term performance. Table 27 shows daily mean differences (DAR) and the Z-values of the abnormal returns between FDI acquisitions in a related and in an unrelated industry. On the announcement-day ($t = 0$), the daily mean difference (DAR) of abnormal return between these two groups is 0.08 % (Z-value = 1.36), which is statistically significant at the 0.1 level, thus rejecting the null hypothesis that abnormal returns from FDI acquisitions in a related industry are equal to those from FDI acquisitions in an unrelated industry. Thus, this indicates that there is a difference in impacts on firm value between FDI acquisitions in a related and in an unrelated industry in terms of short-term performance. FDI acquisitions in a related industry provide significantly higher impact on firm value than those in an unrelated industry.

The day 0 abnormal returns are somewhat significantly different. Let us move on to discuss the long-term performance evaluation.

Long -Term Announcement Effects

The three-year long-term announcement abnormal returns are significantly positive for the group from FDI acquisitions in an unrelated industry. Differences in compounded abnormal returns (DCMAR) and Z-values of DCMAR are presented here for the purpose of testing the performance differences in the two groups. Table 28 shows these differences of compounded abnormal returns (DCMAR) and the Z-values between FDI acquisitions in a related and in an unrelated industry. The DCMAR and the Z-value for the first year are - 1.4 % (Z= - 0.07), which is statistically insignificant at conventional

levels. The DCMAR and Z-value for the second year are - 12.29 % ($Z = - 1.09$), which is statistically insignificant at conventional levels. For the third year, DCMAR is - 18.09 % and the Z-value is - 1.44, which is statistically significant at the 0.1 level. After two years, CMARs of the unrelated FDI acquisitions are higher and statistically significant at conventional levels. Therefore, there appears to be difference in impacts on firm value between related and unrelated FDI acquisitions. FDI acquisitions in an unrelated industry provide significantly higher impacts on firm value than those in a related industry.

To summarize, a significant difference in impacts on firm value between related and unrelated FDI acquisitions, in terms of both short-term and long-term performance, were found. For the short-term evaluation, related FDI acquisitions provide significantly higher impacts on firm value than unrelated ones. However, for the long-term evaluation, unrelated FDI acquisitions provide significantly higher impacts than related ones. No studies have been done to directly compare the performances between FDI acquisitions in a related and an unrelated industry. However, empirical studies by Singh and Montgomery (1987) and Shelton (1988) find the benefits from related domestic acquisitions. Doukas and Travlos (1988) find a significant relationship between abnormal return and FDI acquisitions in an unrelated industry.

After comparing the performance between FDI acquisitions in a related and an unrelated industry, it becomes beneficial to examine the performance of each group.

B.3.1. Unrelated Industry

Unrelated FDI Acquisitions: Unrelated FDI acquisitions expands the investing firm into a new line of business. A risk spreading motivation such as coinsurance and stable cash flows induces investments in an unrelated industry. Therefore, unrelated FDI acquisitions are expected to impact positively on firm value.

$H_{0,3.2.a}$: There is no impact on firm value associated with announcements of FDI acquisitions in the unrelated industry.

$H_{A,3.2.a}$: There is a positive impact on firm value associated with announcements of FDI acquisitions in the unrelated industry.

Short-Term Announcement Effects

For the test of short-term performance from FDI acquisitions in an unrelated industry, the market model (standardized abnormal return method) and one-tailed test statistics are utilized. Table 29 shows that the announcement-day ($t = 0$) abnormal return is 0.09 %, and the Z-value is - 0.3, which is statistically insignificant at conventional level, the null hypothesis cannot be rejected. This result can be interpreted that unanticipated announcements of FDI acquisitions in an unrelated industry provide no impact on firm value, thus not supporting the value creating hypothesis.

Now, having presented and discussed the short-term empirical results, let us look at the long-term empirical results.

Long -Term Announcement Effects

The three-year post-announcement effects from FDI acquisitions in an unrelated industry are investigated by using the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics. Table 30 shows that the compounded abnormal returns (CMAR) and the Z-values for the first, second, and third

years to be - 2.35 % ($Z = - 0.63$), 7.39 % ($Z = 0.82$), 19.46 % ($Z = 2.12$). These results indicate that for the one and a half-year period, CMARs are negative and statistically insignificant at conventional levels; however, after two years, CMARs and Z-values increase enough to provide a significant positive impact on firm value. These results indicate that FDI acquisitions in an unrelated industry provide statistically significant positive impacts on firm value.

In summary, FDI acquisitions in an unrelated industry positively affect firm value for the three year long-term period, but provide no substantial impacts on firm value in terms of short-term performance. In support of these results, Doukas and Travlos (1988) provide the supporting result that abnormal returns are larger when firms expand into a new line of business.

Now, having discussed the empirical results from the group of FDI acquisitions in an unrelated industry, let us move on to discuss the issue of FDI acquisitions in a related industry.

B.3.2. Related Industry

Related FDI Acquisitions: Related FDI acquisitions expands the investing firm into a same line of business. Synergy effects from the related FDI acquisitions may provide benefits to investing firms. Thus, it is hypothesized that the related FDI acquisition is a value creating investment. This section provides empirical results of whether or not related FDI acquisition is really a value creating investment.
value increasing investment.

H_{0,3.3.a} : There is no impact on firm value associated with announcements of FDI acquisitions in the related industry.

H_{A,3.3.a} : There is a positive impact on firm value associated with announcements of FDI acquisitions in the related industry.

Short-Term Announcement Effects

To evaluate the short-term announcement effects from FDI acquisitions in a related industry, the market model (standardized abnormal return method) along with one-tailed test statistics are used. Table 29 reflects the announcement-day ($t = 0$) abnormal return as being 0.17 %, and the Z-value as being 1.9, which is statistically significant at the 0.05 level. Therefore, the null hypothesis that related FDI acquisitions provide no impacts on firm value. This indicates that unanticipated announcements of FDI acquisitions in a related industry provide a significant positive impact on firm value, thus supporting the value creating hypothesis.

Along with short-term performance evaluation, it becomes necessary to investigate post-announcement performance in order to evaluate impacts of FDI acquisitions in a related industry.

Long -Term Announcement Effects

To evaluate post-announcement performance from FDI acquisitions in a related industry, the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics are utilized. Table 30 shows the CMAR for the first year to be - 3.75 % and the Z-value for the first year to be - 0.98 (statistically insignificant at conventional levels). The CMAR for the second year is - 4.90 % with the Z-value being - 0.73 (statistically insignificant at conventional levels). The CMAR for the third year is

1.37 % with the Z-value being 0.46 (statistically insignificant at conventional levels).

These results show that for the whole three-year period, most CMARs are negative and statistically insignificant at conventional levels. Therefore, this indicates that FDI acquisitions in a related industry provide no significant impacts on firm value, thus not supporting the value creating hypothesis.

In summary, FDI acquisitions in a related industry positively affect firm value for the short-term performance, but provide no substantial impacts on firm value in terms of long-term performance. Singh and Montgomery (1987) and Shelton (1988) find that related domestic acquisitions provide significant benefits to investing firms. However, studies by Lubatkin (1987) and Seth (1990) do not support the existence of the benefits from related domestic acquisitions.

The hypotheses of related FDI acquisitions were developed and examined. After discussing the FDI acquisitions in a related industry, it is beneficial to extend this study further into FDI acquisitions related host country experience effects.

B.4. Country Experience Hypothesis

When a firm expands its activity overseas through FDI acquisitions, it faces barriers, such as host country risks, cultural differences, and operation differences. These restrictions may influence the investing firm's decision making. Thus, the investing firm's previous experience in the target country may impress its stockholders' wealth. This

section provides an empirical result of whether or not the degree of previous experience in a host country affects the investing firm's stock value.

H_{0,4.1.a} : Abnormal returns are equal to each other, regardless of the degree of experience in host country.

H_{A,4.1.a} : Abnormal returns from a novice in international operations are greater than those for an experienced firm in international operations.

Short-Term Announcement Effects

Short-term announcement abnormal returns of each group are presented and compared. To evaluate performance difference in each group, daily mean difference (DAR) and the Z-values of DAR are utilized. Table 31 shows these two values for the returns between the group of operating already in the host country, and the group of not operating in the host country. On the announcement-day ($t = 0$), the daily mean difference (DAR) of abnormal return between these two groups is 0.39 % (Z-value = 1.71), which is statistically significant at the 0.05 level, thus rejecting the null hypothesis that abnormal returns are equal to each other, regardless of the degree of the host country's economic development. This indicates that there is a difference in impacts on firm value associated with announcements of FDI acquisitions between operating and not operating in the host country. FDI acquisitions in experienced host countries give significantly higher impacts than those in not experienced host countries.

Table 31 also shows these two values between the group of operating already in the host country and the group of going abroad for the first time. On the announcement-day ($t = 0$), the daily mean difference (DAR) of abnormal return between these two groups is - 0.32 % (Z-value = 0.82), which is statistically insignificant at conventional levels, thus the null hypothesis cannot be rejected. These results can be interpreted that there is no

difference in impacts on firm value associated with announcements of FDI acquisitions between the group of operating already in the host country and the group of going abroad for the first time.

Now, having discussed short-term performance comparison between the degree of experience in the host country, let us move on to discuss post-announcement performance comparison.

Long -Term Announcement Effects

The three-year long-term announcement abnormal returns from each group are presented and compared. The three-year period CMARs are positive for each group, but are statistically significant for only the group of operating already in the host country. Differences of compounded abnormal returns (DCMAR) and the Z-values of DCMAR are utilized to test the performance difference between each group. Table 32 shows the differences of compounded abnormal returns (DCMAR) between operations in and not in the host country for the first year to be 6.03 % and the Z-value for the first year to be 1.43 (statistically significant at the 0.1 level). The DCMAR for the second year is 0.42 % with the Z-value being 0.73 (statistically insignificant at conventional levels). The DCMAR for the third year is 6.87 % with the Z-value being 1.22 (statistically insignificant at conventional levels). For the one year period, CMAR of an FDI acquisition by a firm already operating in the host country is 6.03 % significantly higher than that made by a firm which is not operating in the host country. For the two and three-year periods, CMARs of an FDI acquisition by a firm already operating in the host country are higher, but are statistically insignificant at conventional levels. This result indicates that there is

no difference in impacts on firm value for the three-year period between operations in and not in the host country.

Table 32 also shows the differences between compounded abnormal returns (CMARs) for firms already operating in a host country and those going abroad for the first time, and the Z-values. The DCMAR for the first year is - 10.58 % with the Z-value being - 0.37, which is statistically insignificant at conventional levels. The DCMAR for the second year is - 0.47 % with the Z-value being 0.28, which is statistically insignificant at conventional levels. The DCMAR for the third year is - 12.37 % with the Z-value being 0.01, which is statistically insignificant at conventional levels. For the whole three years, CMARs of an FDI acquisition by a firm going abroad for the first time are higher than those made by a firm already operating in the host country, but are statistically insignificant at conventional levels. This means that there is no difference in impacts on firm value for the three year long-term period regardless of the degree of experience in host country.

Doukas and Travlos (1988) find that there is a significant negative relationship between experience in a host country and abnormal returns. Their results do not coincide with our results. However, Datta and Puia (1992) show that cultural differences have a negative relationship with performance in cross-border acquisitions. Their results mean that the experience in the host country can reduce cultural differences, thus the experience factor provides a positive impact on firm value, thus supports our results.

In summary, the empirical tests of short-term performance and long-term performance arrive at the same result: there is no significant difference in impacts on firm value between FDI by a firm already operating in the host country and FDI for the firm going abroad for

the first time. On the announcement day, FDI made by a firm already operating in the host country gives significant higher impacts on firm value than FDI made by a firm which is not operating in the host country. In terms of the long-term performance, the significant difference fade away. For the three-year period, there is no significant difference between the two groups.

After comparing the tested results of FDI acquisitions effects by the degree of the experience in the host country, it becomes necessary to discuss the country experience effects of each group, respectively.

B.4.1. Operating in Host Country

Operating in Host Country : When a firm already operates in the host country, the experience may reduce barriers it faces. Thus, the experience may increase the value of the investment. Therefore, it is hypothesized that FDI acquisitions by a firm already operating in the country is a value creating investment.

H_{0,4.2.a} : There is no impact on firm value associated with announcements of FDI acquisitions by a company already operating in the country.

H_{A,4.2.a} : There is a positive impact on firm value associated with announcements of FDI acquisitions by a company already operating in the country.

Short-Term Announcement Effects

Abnormal returns surrounding the announcement day represent short-term announcement effects. For this test, the market model (standardized abnormal return method) and one-tailed test statistics are utilized. Table 33 shows that the announcement-day ($t = 0$) abnormal return is 0.27 %, and the Z-value is 1.9, statistically significant at the 0.05 level, thus rejecting the null hypothesis that there is no impact on

firm value associated with FDI acquisitions in the already operating country. This indicates that unanticipated announcements of FDI acquisitions in already operating countries provide a positive impact on firm value, thus supporting the value creating hypothesis.

Along with the significant positive short-term performance, long-term performance will be investigated and presented.

Long -Term Announcement Effects

Concerning the post-announcement performance, long-term announcement effects from the group of the firm already operating in the country are investigated. For this test, the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics are utilized. Table 34 shows the CMAR for the first year to be - 1.41 % and the Z-value for the first year to be - 0.13 (statistically insignificant at conventional levels). The CMAR for the second year is - 0.51 % with the Z-value being 0.38 (statistically insignificant at conventional levels). The CMAR for the third year is 9.72 % with the Z-value being 1.99 (statistically significant at the 0.05 level). These results show that CMARs and Z-values increase from negative signs to positive signs. These results reflect that, in the beginning period, the announcements of FDI acquisitions in the experienced host country provide statistically insignificant negative impact on firm value, but after the two-year period, provide statistically significant positive impact on firm value. This result supports the value creating hypothesis.

In summary, when a firm already operating in the host country makes an FDI, it gets a significant positive impact on firm value in terms of both the short-term and long-term performances, thus supporting the value creating hypothesis.

Now, having presented and discussed the test results of value creating hypothesis from the group of the firm already operating in the host country, let us move on to discuss those from the group of the firm not operating in the host country.

B.4.2. Not Operating in Host Country

Not Operating in Host Country : When a firm which has experience in international operations makes an FDI acquisition in a non-experienced country. The firm can exploit new opportunities in a non-experienced country, and also increase the benefit of multinational network system. Therefore, it is hypothesized that an FDI acquisition by a firm which is not operating in the host country, will positively affect firm value.

H_{0,4.3.a} : There is no impact on firm value associated with announcements of FDI acquisitions by a company which is not operating in the host country.

H_{A,4.3.a} : There is a positive impact on firm value associated with announcements of FDI acquisitions by a company which is not operating in the host country.

Short-Term Announcement Effects

Short-term announcement effects from FDI acquisitions by a firm not operating in the host country are tested using the market model (standardized abnormal return method) along with one-tailed test statistics. Table 33 shows the announcement-day ($t = 0$) abnormal return to be - 0.12 %, and the Z-value is - 0.7, statistically insignificant at conventional level, thus the null hypothesis cannot be rejected. This indicates that unanticipated announcements of FDI acquisitions by a firm which does not have

experience in the host country, provide no impact on firm value, and cannot support the value creating hypothesis.

Now, having discussed the short-term empirical results from FDI acquisitions in a non-experienced country, let us move on to discuss the issue in terms of long-term performance evaluation.

Long -Term Announcement Effects

Long-term announcement effects from FDI acquisitions in a non-experienced country are tested using the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics. Table 34 shows that the compounded abnormal returns (CMAR) for the first year is - 7.44 % and shows the Z-value for the first year to be - 1.89 (statistically significant at the 0.05 level). The CMAR for the second year is - 0.93 % and the Z-value is - 0.63 (statistically insignificant at conventional levels). The CMAR for the third year is 2.85 % and the Z-value is - 0.03 (statistically insignificant at conventional levels). These results show that around the first year, CMARs are significantly negative. This indicates that around the first year after the FDI announcement, an FDI acquisition in a non-experienced country affects negatively on firm value. However, this negative effect fades away by the second year. After two years, statistical values are not significant at any conventional levels. This means that for the second and third year, an FDI acquisition in a non-experienced country provides no significant impacts on firm value.

In summary, An FDI made by a firm which is not operating in the host country does not have any significant, positive impact on firm value in terms of both the short-term and long-term performances. Thus, it cannot support the value creating hypothesis.

Now, having presented and discussed the test results of value creating hypothesis from the group of not operating in the host country, let us move on to discuss those from the group of going abroad for the first time.

B.4.3. Going abroad for the first time

Going Abroad for the First Time : A firm going abroad for the first time will create new opportunities for itself. Thus, it is hypothesized that FDI acquisitions by a firm going abroad for the first time is a value creating investment.

H_{0,4.4.a} : There is no impact on firm value associated with announcements of FDI acquisitions by a firm going abroad for the first time.

H_{A,4.4.a} : There is a positive impact on firm value associated with announcements of FDI acquisitions by a firm going abroad for the first time.

Short-Term Announcement Effects

For the test of short-term performance evaluation from an FDI acquisition by a firm going abroad for the first time, the market model (standardized abnormal return method) along with one-tailed test statistics are utilized. Table 33 shows that the announcement-day (t = 0) abnormal return is 0.59 %, and the Z-value is 1.3, which is statistically significant at the 0.1 level, thus rejecting the null hypothesis that there is no impact on firm value from FDI acquisitions by a firm going abroad for the first time. This indicates that unanticipated announcements of FDI acquisitions by a firm going abroad for the first time, provide a positive impact on firm value, thus weakly supporting the value creating

hypothesis. This result does not coincide with Doukas and Travlos (1988). They find insignificant positive abnormal returns on the announcement day.

Now, having finished short-term performance evaluation, let us move on to investigate post-announcement performance.

Long -Term Announcement Effects

The three-year post-announcement effects from FDI acquisitions by a firm going abroad for the first time are examined by using the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics. Table 34 shows the CMAR for the first year to be 9.17 % and the Z-value for the first year to be 0.35 (statistically insignificant at conventional levels). The CMAR for the second year is - 0.04 % with the Z-value being - 0.21 (statistically insignificant at conventional levels). The CMAR for the third year is 22.09 % with the Z-value being 0.41 (statistically insignificant at conventional levels). The number of firms in this group is just 10 so that it is very hard to infer from this group. For the whole three-year periods, CMARs are positive and negative, but statistically insignificant at conventional levels. These results do not support the hypothesis that FDI acquisitions by a firm going abroad for the first time provide an increase in firm value.

To summarize, FDI acquisitions by firms which do not have any experience in international operations, impact positively on firm value, with regards to short-term performance, but do not impact with regards to long-term performance. This indicates that the significant positive announcement effects diminish with time.

Now, having discussed the results of country experience effects between the degree of the experience in the host country, let us move on to discuss those effects between the degree of the control level in the target firm.

B.5. Control Level Effects Hypothesis

Different levels of control in the target firm may give different impacts on the acquiring firm's stock value. When a investing firm has the full control and involvement of the target firm, efficiency and the effectiveness can be maximized when two firms are combined.

Thus, it is hypothesized that the more control in target firm it has the higher return it has.

H_{0,5.1.a} : Abnormal returns are equal to each other, regardless of the degree of control level in the target firm.

H_{A,5.1.a} : Abnormal returns with higher control level are higher than those with lower control level in the target firm.

Short-Term Announcement Effects

Short-term announcement abnormal returns of each group are presented and compared to evaluate the performance of each group. Daily mean difference (DAR) and the Z-values of DAR are utilized to test the performance difference in each group (Doukas and Travlos, 1988). Table 35 shows daily mean differences (DAR) and the Z-values of the returns between minority and higher minority control in the target firm. On announcement day ($t = 0$), the daily mean difference (DAR) of abnormal return between these two groups is - 0.94 % (Z-value = - 2.23), which is statistically significant at the 0.01 level, thus rejecting the null hypothesis that abnormal returns are equal to each other, regardless of the degree of control level in the target firm. This indicates that abnormal return of FDI

acquisitions with high level minority control in the target firm is 0.94 % higher than that of FDI acquisitions with minority control level in the target firm.

Table 35 shows daily mean differences (DAR) and Z-values of the returns between minority and majority control in the target firm. On announcement-day ($t = 0$), the daily mean difference (DAR) of abnormal return between these two groups is - 1.05 % (Z-value = - 2.98), which is statistically significant at the 0.01 level, thus also rejecting the null hypothesis that abnormal returns are equal to each other, regardless of the degree of experience in the host country. This indicates that abnormal return of FDI acquisitions with majority control in the target firm is 1.05 % higher than that of FDI acquisitions with minority control level in the target firm. These results say that the impacts on firm value from FDI acquisitions with higher control level are significantly higher than those with lower control level.

Along with short-term performance evaluation, it becomes necessary to investigate post-announcement performance in order to evaluate impacts of FDI acquisitions with different level of control in the target firm.

Long-Term Announcement Effects

The three-year long-term announcement abnormal returns from each group are presented and compared. Differences of compounded abnormal returns (DCMAR) and the Z-values of DCMAR are utilized to test the performance difference between each group. Table 36 shows the differences of compounded abnormal returns (DCMAR) between minority control and higher minority control in the target firm for the first year to be 4.61 % and the Z-value for the first year to be 0.61 (statistically insignificant at

conventional levels). The DCMAR for the second year is 7.91 % with the Z-value being 0.46 (statistically insignificant at conventional levels). The DCMAR for the third year is 11.49 % with the Z-value being 0.29 (statistically insignificant at conventional levels). Notice that for the whole three years, CMARs of FDI acquisitions with minority control in the target firm are higher than those of higher minority control, but statistically insignificant at conventional levels.

Table 36 shows the differences between compounded abnormal returns (CMARs) of FDI acquisitions with minority control and those with majority control in the target firm. The DCMAR for the first year is - 1.08 % with the Z-value being 0.11, which is statistically insignificant at conventional levels. The DCMAR for the second year is 1.98 % with the Z-value being 0.37, which is statistically insignificant at conventional levels. The DCMAR for the third year is 6.95 % with the Z-value being 0.42, which is statistically insignificant at conventional levels. For these three years, no significant difference between CMARs of FDI acquisitions with minority control level in the target firm, and CMARs of FDI acquisitions with majority control level in the target firm, could be found.

These results suggest that there is no difference in impacts on firm value for the three year long-term period regardless of the degree of the control level in the target firm.

Ahn (1988) tests a control effect and finds that the cumulative abnormal return of the target firm has a positive relation with the extent of the investing firm's control of the target firm. Our results indicate that the empirical tests of short-term performance and long-term performance arrive at the different result: FDI acquisitions with higher control

level in the target firm gives higher impacts on firm value, in terms of short-term performance evaluation. For the long-term performance evaluation, no significant difference could be found.

After comparing the tested results of the control level effects by the degree of the control level in the target firm, it becomes necessary to discuss the control level effects of each group, respectively.

B.5.1. Minority Control Level

Minority Control Level : Control level in the target firm may influence the firm value.

FDI acquisitions with a minority control in the target firm is assumed to impact positively on firm value.

H_{0,5.2.a} : There is no impact on firm value associated with announcements of FDI acquisitions with minority control level in the target firm.

H_{A,5.2.a} : There is a positive impact on firm value associated with announcements of FDI acquisitions with minority control level in target firm.

Short-Term Announcement Effects

For the test of short-term announcement effects from the group of minority control level in the target firm, the market model (standardized abnormal return method) and one-tailed test statistics are utilized. Table 37 shows that the announcement-day ($t = 0$) abnormal return is - 0.83 %, and the Z-value is - 2.5, statistically significant at the 0.01 level, thus rejecting the null hypothesis that there is no impacts from FDI acquisitions with minority control level in the target firm. This indicates that unanticipated announcements of FDI acquisitions with minority control in target firm provide a significant negative impact on firm value.

Along with short-term performance evaluation, it becomes beneficial to investigate post-announcement performance.

Long -Term Announcement Effects

The three-year post-announcement performance evaluation from FDI acquisitions with minority control in the target firm is examined by using the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics. Table 38 shows the CMAR for the first year to be - 3.46 % and the Z-value for the first year to be - 0.11 (statistically insignificant at conventional levels). The CMAR for the second year is 2.12 % with the Z-value being 0.36 (statistically insignificant at conventional levels). The CMAR for the third year is 14.83 % with the Z-value being 0.83 (statistically insignificant at conventional levels). Notice that across the three year period, CMARs becomes positive from negative, but statistical values are insignificant at conventional level. This indicates that FDI acquisitions with minority control level in the target firm provides no significant impacts on firm value, thus not supporting the value creating hypothesis.

In summary, when a firm makes an FDI acquisition with minority control in the target firm, it gets a significant negative impact on firm value in terms of short-term performance. For the long-term performance, there is no significant impacts on firm value.

Now, having presented and discussed the test results of FDI acquisitions with minority control in the target firm, let us move on to discuss the issue with higher minority control level in the target firm.

B.5.2. Higher Minority Control Level

Higher Minority Control Level : Control level in the target firm may influence the firm value. FDI acquisitions with a higher control in the target firm indicate higher ownership in the target firm. Thus, it is hypothesized that FDI acquisitions with higher minority control in the target firm provide significant positive impacts on firm value.

H_{0,5.3.a} : There is no impact on firm value associated with announcements of FDI acquisitions with higher minority control level in the target firm.

H_{A,5.3.a} : There is a positive impact on firm value associated with announcements of FDI acquisitions with higher minority control level in target firm.

Short-Term Announcement Effects

Abnormal returns surrounding the announcement day represent short-term announcement effects of FDI acquisitions with higher minority control in the target firm. For this test, the market model (standardized abnormal return method) along with one-tailed test statistics are utilized. Table 37 shows that the announcement-day ($t = 0$) abnormal return is 0.11 %, and the Z-value is 0.4, which is statistically insignificant at conventional levels, thus the null hypothesis cannot be rejected. This indicates that unanticipated announcements of FDI acquisitions with higher minority control in the target firm provide no significant impact on firm value, thus not supporting the value creating hypothesis.

Now, having finished short-term performance evaluation, let us move on to investigate post-announcement performance.

Long -Term Announcement Effects

To evaluate the long-term announcement effects of FDI acquisitions with higher minority control in the target firm, the size-based decile indices model (standardized

compounded abnormal returns) and one-tailed test statistics are utilized. Table 38 shows the CMAR for the first year to be - 8.07 % and the Z-value for the first year to be - 1.19 (statistically insignificant at conventional levels). The CMAR for the second year is - 5.79 % with the Z-value being - 0.28 (statistically insignificant at conventional levels). The CMAR for the third year is 3.34 % with the Z-value being 0.64 (statistically insignificant at conventional levels). Notice that up through the three year period, CMARs are statistically insignificant at conventional levels, thus the null hypothesis cannot be rejected. This indicates that FDI acquisitions with higher minority control level in the target firm provides no significant impacts on firm value, thus not supporting the value creating hypothesis.

In summary, when a firm makes an FDI acquisition with higher minority control in the target firm, it gets no significant impact on firm value in terms of short-term and long-term performance.

After discussing the test results of FDI acquisitions with higher minority control in the target firm, let us move on to discuss the issue with majority control level in the target firm.

B.5.3. Majority Control Level

Majority Control Level : When a investing firm has the full control and involvement of the target firm, efficiency and the effectiveness may be maximized. Thus, it is hypothesized that FDI acquisitions with majority control in the target firm impact positively on firm value.

H_{0,5.4.a} : There is no impact on firm value associated with announcements of FDI acquisitions with majority control level in the target firm.

H_{A,5.4.a} : There is a positive impact on firm value associated with announcements of FDI acquisitions with majority control level in target firm.

Short-Term Announcement Effects

To evaluate the short-term announcement effects from FDI acquisitions with majority control in the target firm, the market model (standardized abnormal return method) along with one-tailed test statistics are used. Table 37 shows that the announcement-day ($t = 0$) abnormal return is 0.22 %, and the Z-value is 2.0, statistically significant at the 0.05 level, thus rejecting the null hypothesis that there is no impact on firm value from FDI acquisitions with majority control in the target firm. This indicates that unanticipated announcements of FDI acquisitions with majority control in the target firm provide a significant positive impact on firm value, thus supporting the value creating hypothesis.

Along with short-term performance evaluation, it becomes necessary to investigate post-announcement performance.

Long -Term Announcement Effects

Concerning the post-announcement performance, long-term announcement effects from FDI acquisitions with majority control in the target firm are investigated. For this test, the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics are utilized. Table 38 shows the CMAR for the first year to be - 2.38 % and the Z-value for the first year to be - 0.76 (statistically insignificant at conventional levels). The CMAR for the second year is 0.14 % with the Z-value being - 0.08 (statistically insignificant at conventional levels). The CMAR for the third year is 7.88 % with the Z-value being 1.33 (statistically significant at the 0.10 level). These

results show that CMARs and Z-values increase from negative signs to positive signs. These results reflect that, in the beginning period, the announcements of FDI acquisitions with majority control in the target firm provide statistically insignificant negative impact on firm value, but for the three-year period, provide statistically significant positive impact on firm value, thus weakly supporting the value creating hypothesis.

In summary, FDI acquisitions with majority control in the target firm is a value creating investment decision in terms of both short-term and three-year long-term performance.

Summary : Empirical results from the acquisition sample of FDI were presented and discussed. Whether or not FDI acquisitions are a value creating investment decision was tested. A further extension to test country diversification effects, industry diversification effects, host country experience effects, and control level effects is also included.

The hypothesis that FDI acquisitions are a value creating investment decision is supported by the results from both the short-term and long-term performance evaluations. In regards to the hypothesis concerning country diversification effects, the short-term results indicate that there is no difference in impacts on firm value associated with announcements of FDI acquisitions, regardless of the degree of the host country's economical development. The three-year performance results reflect that FDI acquisitions in a less-developed country provide significant higher impacts on firm value than FDI acquisitions do in a highly developed country. For each group performance (less-developed, developed, and highly developed countries), FDI acquisitions in a less-developed country impacts positively on the investing firm's value, with regards to both

the short-term and long-term performances. And, FDI acquisitions in a developed and a highly developed country provide significant impacts on firm value in terms of both the short-term and long-term performances.

When reviewed the industry diversification effect, a significant difference in impacts on firm value between related and unrelated FDI acquisitions, in terms of both short-term and long-term performance, were found. For the short-term evaluation, related FDI acquisitions provide significantly higher impacts on firm value than unrelated ones. However, for the long-term evaluation, unrelated FDI acquisitions provide significantly higher impacts than related ones. Yet, it was found that FDI acquisitions in an unrelated industry affect positively on firm value for the three-year long-term period, but provide no impacts on firm value in terms of short-term performance. FDI acquisitions in a related industry positively affect firm value for the short-term performance, but provide no substantial impacts on firm value in terms of long-term performance.

In testing the experience effects, it was found that the empirical tests of the short-term performance and the long-term performance reflect that there is no significant difference in impacts on firm value between an FDI acquisition by a firm already operating in the host country and an FDI acquisition for the firm going abroad for the first time. However, on the announcement day, an FDI acquisition made by a firm already operating in the host country gives significant higher impacts on firm value than an FDI acquisition made by a firm which is not operating in the host country. In terms of the long-term performance, there is no significant difference between the two groups. In case of a firm which is already operating in the host country makes an FDI acquisition, it gets a significant

positive impact on firm value in terms of both the short-term and long-term performances. And, when a firm which is not operating in the host country makes an FDI acquisition, it does not have any significant positive impact on firm value in terms of both short-term and long-term performance. FDI acquisitions by firms which do not have any experience in international operations, impact positively on firm value, with regards to short-term performance, but do not impact with regards to long-term performance.

When reviewed, the empirical tests of control level effects show the different result. In terms of short-term performance evaluation, FDI acquisitions with higher control level in the target firm gives higher impacts on firm value. For the long-term performance evaluation, no significant difference could be found. When a firm makes an FDI acquisition with minority control in the target firm, it gets a significant negative impact on firm value in terms of short-term performance. For the long-term performance, there is no significant impacts on firm value. FDI acquisitions with higher minority control in the target firm provide no significant impact on firm value in terms of short-term and long-term performance. However, FDI acquisitions with majority control in the target firm provide a significantly positive impact on firm value in terms of both short-term and three-year long-term performance.

To follow up, the empirical test results from the joint venture sample will be provided in the next section.

C. JOINT VENTURES

When a firm makes foreign direct investment (FDI), it can choose an international joint venture. This part presents the empirical test results of the value creation hypotheses and related hypotheses with the joint venture sample.

C.1. FDI Joint Ventures as a Value Creation Activity

Another type of FDI, a joint venture, entails the pooling of resources by two or more firms to accomplish some specific objectives under the combined management of the parent firms. As Harrigan (1985) and Hennart (1988) point out, joint ventures can provide investing firms with benefits of internal strength, improvement of their competitive position in the industry, or minimization of transaction costs. Such benefits to investing firms, from joint ventures, may promote increases in common stock prices. Thus, this section provides an empirical test of the hypothesis that FDI joint ventures are value creating investment decisions.

H_{0,1.3} : There is no impact on firm value associated with announcements of FDI joint ventures.

H_{A,1.3} : There is a positive impact on firm value associated with announcements of FDI joint ventures.

Short -Term Announcement Effects

The short-term announcement test uses the market model (standardized abnormal return method) along with one-tailed test statistics. Table 7 shows that the announcement-day ($t = 0$) has an abnormal return of 0.21 %, and a Z-value of 1.3, which is statistically significant at the 0.1 level (rejecting null hypothesis that there is no impact

on firm value associated with announcements of FDI joint ventures). These results indicate that unanticipated joint ventures announcements of FDIs provide a positive impact on firm value. This weakly supports the value creation hypothesis.

Lee and Wyatt (1990) find that stockholders of U.S. parent firms of international joint ventures suffer a statistically significant loss of about 0.466 % on the announcement date. On the contrary, Lummer and McConnell (1990) find that stockholders of U.S. parent firms of international joint ventures experience a statistically significant gain of about 0.40 % on the announcement date. We find a statistically significant gain of about 0.21 % on the announcement date, thus supporting Lummer and McConnell (1990) findings.

Now, having presented and discussed the short-term empirical results, let us look at the long-term empirical results.

Long-Term Announcement Effects

When a firm makes an international joint venture it becomes necessary to evaluate the postmerger performance. The long-term announcement effect test utilizes the size-based decile indices model (standardized compounded abnormal returns) along with one-tailed test statistics. Table 8 shows the compounded abnormal returns (CMAR) for the first year to be 3.73 % and the Z-value for the first year to be 1.61 (statistically significant at the 0.1 level). The CMAR for the second year is 15.25 % with the Z-value being 2.40 (statistically significant at the 0.01 level). The CMAR for the third year is 29.08 % with the Z-value being 3.55 (statistically significant at the 0.01 level). The results show that after the announcement, CMARs increase across the three-year period and Z-values are virtually all statistically significant. These results support the hypothesis that joint venture

announcements of FDI provide an increasing positive impact on firm value up to the three year period, thus supporting the value creating hypothesis.

No empirical long-term performance test has been done. However, Lee and Wyatt (1990) and Lummer and McConnell (1990) did short-term announcement tests. Their findings show the conflict outcomes. The former study shows a statistically significant loss to stockholders of U.S. parent firms, but the later one shows a statistically significant gains to stockholders of U.S. parent firms. We find a statistically significant gain across the three-year period. These results can be interpreted to mean that FDI joint ventures provide more opportunities and benefits to investing firms, and that unanticipated announcements of FDI joint ventures give positive abnormal returns to investing firms' stockholders.

To summarize, the hypothesis that FDI joint ventures are a value increasing investment decision is supported by the results from both the short-term and long-term performance tests.

After having discussed the empirical results of FDI joint ventures, let us move on to discuss the issue of country diversification effects from FDI joint ventures.

C.2. Country Diversification Hypothesis

Country diversification through international joint ventures is expected to give impacts on the investing firm's stock value. Country diversification may reduce the risk to the extent that asset returns of foreign investments are not perfectly correlated with those of

domestic investments. This section tests the hypothesis that FDI joint ventures in a less-developed country provide higher benefits to the firm than do FDI joint ventures in a developed country.

H_{0,2.1,j} : Abnormal returns are equal to each other, regardless of the degree of the host country's economic development.

H_{A,2.1,j} : Abnormal returns from less-developed countries are greater than those from developed and highly developed countries.

Short-Term Announcement Effects

Short-term announcement abnormal returns of FDI joint ventures from each group are tested and compared to evaluate the performance. Daily mean difference (DAR) and the Z-values of DAR are presented to test the performance difference in each group (Doukas and Travlos 1988). Table 39 shows DAR and the Z-values between highly developed and developed countries. On the announcement-day ($t = 0$), DAR of abnormal return between these two groups is - 0.1 % (Z-value = 0.05), which is statistically insignificant at conventional levels, thus cannot reject the null hypothesis that abnormal returns from FDI joint ventures in highly developed countries are equal to those from FDI joint ventures in developed countries. Thus, there is an indication that there is no difference in impacts on firm value between FDI joint ventures in highly developed and developed countries in terms of short-term performance.

Table 39 shows daily mean differences (DAR) and Z-values between highly developed and less-developed countries. On the announcement-day ($t = 0$), the daily mean difference (DAR) of abnormal return between these two groups is 0.13 % (Z-value = 0.74), which is statistically insignificant at conventional levels (this also cannot reject the null hypothesis that abnormal returns are equal to each other). These results indicate that there is no

difference in impacts on firm value associated with announcements of FDI joint ventures, regardless of the degree of the host country's economical development.

Abnormal returns of at the day zero are somewhat close between each group. The long-term CMAR differences are to tested. Let us move on to discuss the long-term performance evaluation.

Long -Term Announcement Effects

The three-year long-term announcement abnormal returns of FDI acquisitions are significantly positive for the highly developed and less-developed groups. Differences in compounded abnormal returns (DCMAR) and Z-values of DCMAR are presented here for the purpose of testing the performance differences in each group. Table 40 shows the differences of compounded abnormal returns (DCMAR) between highly developed and developed countries for the first year to be 7.46 % and the Z-value for the first year to be 0.16 (statistically insignificant at conventional levels). The DCMAR for the second year is 35.84 % with the Z-value being 0.91 (statistically insignificant at conventional levels). The DCMAR for the third year is 43.05 % with the Z-value being 0.97 (statistically insignificant at conventional levels). For the whole three year period, FDI joint ventures in highly developed countries provide higher abnormal returns but there are statistically insignificant benefits. This means that there is no difference in impact on firm value for the three-year long-term period between FDI joint ventures in highly developed and developed countries.

The DCMARs between highly developed countries and less-developed countries, along with the Z-values for the first, second, and third year are presented in Table 40. The

DCMARs are - 0.33 % ($Z = - 0.60$ and is insignificant at conventional levels), 22.07 % ($Z = 0.10$ and is insignificant at conventional levels), and 29.95 % ($Z = 0.30$ and is insignificant at conventional levels), respectively. Notice that for the one-year period, CMARs of FDI joint ventures in a less-developed country are higher but are statistically insignificant at conventional levels. For the two and three-year periods, CMARs of FDI joint ventures in a highly developed country are higher but statistically insignificant at conventional levels. This indicates that there is no difference in impact on firm value for the three-year long-term period between FDI joint ventures for highly developed countries and less-developed countries.

To summarize, these results suggest that there is no difference in impacts on firm value from FDI joint ventures, regardless of the degree of the economic development in the host country in terms of both short-term and long-term performance.

After presenting and discussing the results of the country diversification effects by degree of the host country's economic development from the joint venture sample, it becomes necessary to discuss country diversification effects of each group, respectively.

C.2.1. Less-Developed Country

FDI Joint Ventures in a Less-Developed Country : Joint ventures with a firm from a less-developed country can provide a diversification benefit. This benefit may increase the value of the investing firm. Therefore, it is hypothesized that an FDI joint venture in a less-developed country provides a positive impact on firm value.

$H_{0,2.2,j}$: There is no impact on firm value associated with announcements of FDI joint ventures in less-developed countries.

$H_{A,2.2,j}$: There is a positive impact on firm value associated with announcements of FDI joint ventures in less-developed countries.

Short-Term Announcement Effects

Short-term announcement effects from FDI joint ventures in less-developed countries are tested using the market model (standardized abnormal return method) along with one-tailed test statistics. Table 41 shows that the announcement-day ($t = 0$) abnormal return is 0.12 %, and the Z-value is 0.2, statistically insignificant at conventional level, thus cannot reject the null hypothesis that there is no impact on firm value from FDI joint ventures in less-developed countries. This indicates that unanticipated announcements of FDI joint ventures in less-developed countries provide no significant impact on firm value, thus cannot support the value creating hypothesis.

Now, having presented and discussed the short-term empirical results, let us look at the long-term empirical results.

Long-Term Announcement Effects

The three-year post-announcement effects from FDI joint ventures in less-developed countries are examined by using the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics. Table 42 shows that the compounded abnormal returns (CMAR) for the first year is 3.22 % and shows the Z-value for the first year to be 1.19 (statistically insignificant at conventional levels). The CMAR for the second year is 6.40 % and the Z-value is 1.56 (statistically significant at the 0.1 level). The CMAR for the third year is 16.21 % and the Z-value is 2.13 (statistically significant at the 0.01 level). Up through the third year, most of CMARs are positive values. After the two-year period, Z-values reflect statistical significance. This indicates

that FDI joint ventures in less-developed countries provide significant positive impacts on firm value for the long-term period, and thus support the value creating hypothesis.

To summarize, when a firm makes an FDI joint venture with a partner firm which is in a less-developed country, it has a significant positive impact on firm value in terms of long-term performance, but does not experience any significance in terms of short-term performance. Empirically, in terms of short-term performance, Gupta, McGowan, Misra, and Missirian (1991) show a positive and statistically significant abnormal returns from joint ventures with China, which is categorized as a less-developed country.

Now, having discussed the results of FDI joint ventures in less-developed countries, let us move on to discuss those in developed countries.

C.2.2. Developed Country

FDI Joint Ventures in a Developed Country : Joint ventures with a firm from a developed country can provide more safety from operating risks. The safety may influence positively on firm value. Thus, it is hypothesized that FDI joint ventures in developed countries provide a positive impact on firm value.

H_{0,2.3,j} : There is no impact on firm value associated with announcements of FDI joint ventures in developed countries.

H_{A,2.3,j} : There is a positive impact on firm value associated with announcements of FDI joint ventures in developed countries.

Short-Term Announcement Effects

Abnormal returns surrounding the announcement day represent short-term announcement effects. For this short-term performance test of FDI joint ventures in developed countries, the market model (standardized abnormal return method) along with

one-tailed test statistics are utilized. Table 41 shows that the announcement-day ($t = 0$) abnormal return is 0.35 %, and the Z-value is 0.6, which is statistically insignificant at conventional level, thus cannot reject the null hypothesis that there is no impact on firm value from FDI joint ventures in developed countries. This indicates that unanticipated announcements of FDI joint ventures in developed countries provide no significant impact on firm value, thus cannot support the value creating hypothesis.

Now, having presented and discussed the short-term empirical results, let us look at the long-term empirical results.

Long-Term Announcement Effects

Long-term announcement effects from FDI joint ventures in developed countries are tested using the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics. Table 42 reflects that the CMAR for the first year to be - 4.57 % and the Z-value for the first year to be - 0.02 (statistically insignificant at conventional levels). The CMAR for the second year is - 7.37 % with the Z-value being - 0.17 (statistically insignificant at conventional levels). The CMAR for the third year is 3.11 % with the Z-value being 0.21 (statistically insignificant at conventional level). These results reflect that after the announcement, CMARs are statistically insignificant negative values. By the third year, CMARs come back positive from negative, but are statistically insignificant. Therefore, announcements of FDI joint ventures in developed countries provide no significant impact on firm value up to the three year period, thus cannot support the value creation hypothesis.

To summarize, FDI joint ventures in developed countries provide no significant impacts on the investing firm value, with regards to both the short-term and long-term performances.

Now, having discussed the results of FDI joint ventures in developed countries, let us move on to discuss those in highly developed countries.

C.2.3. Highly Developed Country

FDI Joint Ventures in a Highly Developed Country : Economically, highly developed countries are very closely related with each other. This relationship cannot generate much diversification benefits, but can provide political, operational, and financial safety. These benefits may increase the value of the investing firm. Thus, it is hypothesized that FDI joint ventures in highly developed countries provide a positive impact on firm value.

H_{0,2.4,j} : There is no impact on firm value associated with announcements of FDI joint ventures in highly developed countries.

H_{A,2.4,j} : There is a positive impact on firm value associated with announcements of FDI joint ventures in highly developed countries.

Short-Term Announcement Effects

To evaluate the short-term announcement effects from FDI joint ventures in highly developed countries, the market model (standardized abnormal return method) along with one-tailed test statistics are used. Table 41 shows that the announcement-day ($t = 0$) abnormal return is 0.25 %, and the Z-value is 1.3, statistically significant at the 0.1 level, thus rejecting the null hypothesis that there is no impact on firm value from FDI joint ventures in highly developed countries. This indicates that unanticipated announcements

of FDI joint ventures in highly developed countries provide a significant positive impact on firm value, thus supporting the value creating hypothesis.

Now, having discussed the short-term empirical results from FDI joint ventures in highly developed countries, let us move on to discuss the issue in terms of long-term performance evaluation.

Long-Term Announcement Effects

Concerning the post-announcement performance, long-term announcement effects of FDI joint ventures in highly developed countries are investigated. For this investigation, the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics are utilized. Table 42 shows the CMAR for the first year to be 2.89 % and the Z-value for the first year to be 0.29 (statistically insignificant at conventional levels). The CMAR for the second year is 28.47 % with the Z-value being 1.59 (statistically significant at the 0.1 level). The CMAR for the third year is 46.16 % with the Z-value being 2.39 (statistically significant at the 0.01 level). Notice that up to the second year, CMARs are statistically insignificant at conventional levels. From the second year, CMARs are statistically significant positive values. These findings support that FDI announcements provide an increasing positive impact on firm value through the three year period.

In summary, FDI joint ventures in highly developed countries provide significant positive impacts on the investing firm value with regards to short-term and long-term performance.

The hypotheses of country diversification effects from FDI joint ventures by the degree of the host country's economic development were developed and tested. After having discussed the results of the tested hypothesis, we need to move on an issue of the industry diversification effects from FDI joint ventures.

C.3. Industry Diversification Hypothesis

When a firm makes an FDI joint venture, the partner firm can be operating in a same line of business or a new line of business. Industry diversification from FDI joint ventures is expected to impact on the investing firm's stock value. This section discusses the empirical test of whether FDI joint ventures in unrelated industries provide more benefits to investing firm's shareholder than FDI joint ventures in related industries.

$H_{0,3.1j}$: Abnormal returns from unrelated FDI joint ventures are equal to those from related FDI joint ventures.

$H_{A,3.1j}$: Abnormal returns from unrelated FDI joint ventures are higher than those from related FDI joint ventures.

Short-Term Announcement Effects

Short-term announcement abnormal returns from FDI joint ventures in related industries are positive and statistically significant, but those from unrelated industries are statistically insignificant. Table 43 shows daily mean differences (DAR) and Z-values of the returns between FDI joint ventures in related and unrelated industries. On announcement-day ($t = 0$), the daily mean difference (DAR) of abnormal return between these two groups is 0.23 % ($Z = 0.33$), which is statistically insignificant at conventional level, thus cannot reject the null hypothesis that abnormal returns are equal to each other.

This indicates that there is no difference in impacts on firm value between FDI joint ventures in related and unrelated industries.

The day 0 abnormal returns are somewhat close between the two groups. The long-term CMAR differences are also close. Let us move on to discuss the long-term performance evaluation.

Long -Term Announcement Effects

The three-year long-term announcement abnormal returns are significantly positive for the group from FDI joint ventures in related industries. Differences in compounded abnormal returns (DCMAR) and Z-values of DCMAR are presented here for the purpose of testing the performance differences in the two groups. Table 44 shows these differences of compounded abnormal returns (DCMAR) and the Z-values between FDI joint ventures in a related and in an unrelated industry. The DCMAR and the Z-value for the first year are 6.73 % ($Z = -0.19$), which is statistically insignificant at conventional levels. The DCMAR and Z-value for the second year are 23.42 % ($Z = 0.33$), which is statistically insignificant at conventional levels. For the third year, the DCMAR is 29.53 % and the Z-value is 0.26, which is also statistically insignificant at conventional levels. Notice that up through three years CMARs of the related FDI joint ventures are higher but statistically insignificant at conventional levels. Therefore, there appears to be no significant difference in impacts on firm value between the related and unrelated FDI joint ventures.

To summarize, there is no significant difference in impacts on firm value between related and unrelated FDI joint ventures, in terms of both the short-term and long-term performances.

After comparing the performance between FDI joint ventures in a related and an unrelated industry, it becomes beneficial to examine the performance of each group.

C.3.1. Unrelated Industry

Unrelated FDI Joint Ventures Effects : Unrelated FDI joint ventures expand the investing firm into a new product market, thus provide the opportunity of a risk spread. Therefore, it is hypothesized that unrelated FDI joint ventures may be a value creating investment. In this section, the empirical test of this hypothesis is provided.

H_{0,3.2j} : There is no impact on firm value associated with announcements of FDI joint ventures in the unrelated industry.

H_{A,3.2j} : There is a positive impact on firm value associated with announcements of FDI joint ventures in the unrelated industry.

Short-Term Announcement Effects

To evaluate the short-term announcement effects from FDI joint ventures in unrelated industry, the market model (standardized abnormal return method) along with one-tailed test statistics are used. Table 45 shows that the announcement-day ($t = 0$) abnormal return is 0.00 %, and the Z-value is - 0.1, which is statistically insignificant at conventional levels, thus cannot reject the null hypothesis that unrelated FDI joint ventures provide no impacts on firm value. This indicates that unanticipated announcements of FDI joint ventures in unrelated industry provide no impact on firm value, thus not supporting the value creating hypothesis.

Along with short-term performance evaluation, it becomes necessary to investigate post-announcement performance in order to evaluate impacts of FDI joint ventures in unrelated industries.

Long -Term Announcement Effects

To evaluate post-announcement performance of FDI joint ventures in unrelated industries, the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics are utilized. Table 46 shows the CMAR for the first year to be - 3.55 % and the Z-value for the first year to be 0.55 (statistically insignificant at conventional levels). The CMAR for the second year is - 6.57 % with the Z-value being 0.41 (statistically insignificant at conventional levels). The CMAR for the third year is 1.33 % with the Z-value being 0.83 (statistically insignificant at conventional levels). These results show that up to the three-year period, CMARs are statistically insignificant. This indicates that related FDI joint ventures provide no significant impact on firm value, thus not supporting the value creating hypothesis.

In summary, FDI joint ventures in unrelated industry provide no significant impact on firm value in terms of both short-term and long-term performance. Having presented and discussed the tested hypothesis results from the group of related FDI joint ventures, let us move on to discuss the issue of related FDI joint ventures.

C.3.2. Related Industry

Related FDI Joint Ventures Effects : FDI joint ventures in the same line of business may provide synergy effects. Thus, it is hypothesized that a related FDI joint venture is a value creating investment.

H_{0,3.3,j} : There is no impact on firm value associated with announcements of FDI joint ventures in the related industry.

H_{A,3.3,j} : There is a positive impact on firm value associated with announcements of FDI joint ventures in the related industry.

Short-Term Announcement Effects

The short-term evaluation of impacts from FDI joint ventures in related industry utilizes the market model (standardized abnormal return method) and one-tailed test statistics. Table 45 shows that the announcement-day ($t = 0$) abnormal return is 0.23 %, and the Z-value is 1.4, which is statistically significant at the 0.1 level, thus rejecting the null hypothesis that related FDI joint ventures provide no impact on firm value. This indicates that unanticipated announcements of FDI joint ventures in related industries provide a significant positive impact on firm value, thus supporting the value creating hypothesis.

Now, having finished short-term performance evaluation, let us move on to investigate post-announcement performance.

Long -Term Announcement Effects

The three-year post-announcement effects from FDI joint ventures in related industries are examined by using the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics. Table 46 shows the CMAR for the first year to be 3.18 % and the Z-value for the first year to be 0.96 (statistically insignificant at conventional levels). The CMAR for the second year is 16.85 % with the Z-value being 2.09 (statistically significant at the 0.01 level). The CMAR for the third year is 30.86 % with the Z-value being 3.03 (statistically significant at the 0.001 level). For the whole

three years, CMARs are positive. For the second, and third year, CMARs are positive and statistically significant. Therefore, this indicates that announcements of FDI joint ventures in related industries provide a significant positive impact on firm value for up to three years, thus supporting the value creating hypothesis.

In summary, FDI joint ventures in related industries are a value creating investment decision in terms of both the short-term and long-term performances. Thus, these results can be interpreted that, in FDI joint ventures in related industry, operating synergy effects play an important role in influencing firm value positively.

The hypotheses of industry diversification from FDI joint ventures were developed and examined. After having discussed the results of an FDI joint venture in the related industry, we need to move on the issue of host country experience effects from FDI joint ventures.

C.4. Country Experience Hypothesis

The investing firm's previous experience in the partner firm's country may play an important role in operating the joint venture. When a firm expands its business overseas, it faces barriers, such as political risks, cultural differences, and operation differences. Experiences in the partner firm's country may absorb those barriers, contributing to lower levels of uncertainty in such international expansions. Therefore, it is hypothesized that whether or not the degree of previous experience in a host country affects the investing firm's stock value.

$H_{0,4.1,j}$: Abnormal returns from FDI joint ventures by a firm already operating in the country are equal to those from FDI joint ventures by a firm not operating in the country.

H_{A,4.1,j} : Abnormal returns from FDI joint ventures by a firm not operating in the country are higher than those from FDI joint ventures by a firm already operating in the country.

Short-Term Announcement Effects

Short-term announcement abnormal returns of each group are presented and compared. Daily mean difference (DAR) and the Z-values of DAR are utilized to test the performance difference in each group (Doukas and Travlos, 1988). The group of novice in international operation was deleted because there is only one observation left for the three-year performance evaluation. Table 47 reflects these two values for the returns based on operation and non-operation in the partner firm's country. On announcement-day ($t = 0$), the daily mean difference (DAR) of abnormal return between these two groups is 0.08 % (Z-value = 0.26), which is statistically insignificant at conventional levels, thus cannot reject the null hypothesis that abnormal returns are equal to each other. This indicates that there is no difference in impacts on firm value associated with FDI joint ventures announcements, regardless the degree of experience in the host country.

Now, having discussed short-term performance evaluation, let us move on to discuss post-announcement performance evaluation.

Long -Term Announcement Effects

The three-year long-term announcement abnormal returns from each group are presented and compared. Differences of compounded abnormal returns (DCMAR) and the Z-values of DCMAR are utilized to test the performance difference between each group. The group of novice in international operation was deleted because there is only one observation left for the three-year performance evaluation. Table 48 shows the

differences of compounded abnormal returns (DCMAR) between operations in and not in the partner firm's country for the first year to be 6.88 % and the Z-value for the first year to be 1.54 (statistically significant at the 0.1 level). The DCMAR for the second year is 17.15 % with the Z-value being 1.53 (statistically significant at the 0.1 level). The DCMAR for the third year is 53.82 % with the Z-value being 2.61 (statistically significant at the 0.01 level). These results reflect that for three years, CMARs of an FDI joint venture by a firm already operating in the partner firm's country are significantly higher than those by a firm which is not operating in the partner firm's country. This can be interpreted that an FDI joint venture by a firm already operating in the partner firm's country provides significantly greater benefits to stockholders than an FDI joint venture by a firm which is not operating in the partner firm's country.

To summarize, the empirical tests of short-term performance and long-term performance arrive at the different results. There is no significant difference in the short-term performances. However, the long-term performances show that experience in the partner firm's country provide significantly higher impact on firm value than non-experience in the partner firm's country.

After comparing the tested results of the country experience effects by degree of the experience in the host country, it becomes necessary to discuss the country experience effects of each group, respectively.

C.4.1. Operating in Host Country

Operating already in Host Country : When a firm already operates in the partner firm's country, it is said to have an experience in that country. The experience may reduce the operating difficulties faced. Therefore, it is hypothesized that an FDI joint venture by a firm experienced in the partner firm's country is a value creating investment.

H_{0,4.2,j} : There is no impact on firm value associated with announcements of FDI joint ventures by a firm already operating in the partner firm's country.

H_{A,4.2,j} : There is a positive impact on firm value associated with announcements of FDI joint ventures by a firm already operating in the partner firm's country.

Short-Term Announcement Effects

Short-term announcement effects from FDI joint ventures in the experienced countries are investigated using the market model (standardized abnormal return method) along with one-tailed test statistics. Table 49 shows that the announcement-day (t = 0) abnormal return is 0.23 %, and the Z-value is 0.9, which is statistically insignificant at conventional levels, thus cannot reject the null hypothesis that there is no impact on firm value from FDI joint ventures in the experienced countries. This indicates that unanticipated announcements of FDI joint ventures in already experienced countries provide no significant impact on firm value, thus not supporting value creating hypothesis.

Now, having discussed short-term performance evaluation, let us move on to discuss post-announcement performance evaluation.

Long -Term Announcement Effects

To evaluate post-announcement performance from FDI joint ventures in the experienced countries, the size-based decile indices model (standardized compounded

abnormal returns) and one-tailed test statistics are utilized. Table 50 shows the CMAR for the first year to be 6.78 % and the Z-value for the first year to be 1.87 (statistically significant at the 0.05 level). The CMAR for the second year is 25.41 % with the Z-value being 2.49 (statistically significant at the 0.01 level). The CMAR for the third year is 62.48 % with the Z-value being 3.97 (statistically significant at the 0.01 level). These results show that for the whole three-year period, most CMARs are positive and statistically significant. Therefore, this indicates that FDI joint ventures in the experienced countries provide significant positive impacts on firm value, thus supporting the value creating hypothesis.

In summary, FDI joint ventures by a firm already operating in the partner firm's country provide no significant impacts on firm value for the short-term performance, but in terms of the long-term performance, provide significant positive impacts on firm value, thus strongly supporting the value creating hypothesis.

Now, having presented and discussed the test results of the value creating hypothesis from FDI joint ventures in the experienced countries, let us move on to discuss those from FDI joint ventures in the non-experienced countries.

C.4.2. Not Operating in Host Country

Not Operating in Host Country : When a firm experienced in international operations makes an FDI joint venture in a non-experienced country, it may face operating difficulties. However, these difficulties can be solved through the partner firm. Thus, the investing firm can exploit new opportunities in a non-experienced country. Therefore, it is

hypothesized that FDI joint ventures in non-experienced countries provide positive impacts on firm value.

H_{0,4.3j} : There is no impact on firm value associated with announcements of FDI joint ventures by a firm not experienced in partner firm's country.

H_{A,4.3j} : There is a positive impact on firm value associated with announcements of FDI joint ventures by a firm not experienced in partner firm's country.

Short-Term Announcement Effects

Abnormal returns surrounding the announcement day represent short-term announcement effects. For this test, the market model (standardized abnormal return method) and one-tailed test statistics are utilized. Table 49 shows that the announcement-day (t = 0) abnormal return is 0.15 %, and the Z-value is 0.8, which is statistically insignificant at conventional levels, thus cannot reject the null hypothesis that there is no impact on firm value from FDI joint ventures in the non-experienced countries. This indicates that unanticipated announcements of FDI joint ventures in the non-experienced countries provide no significant impacts on firm value, thus not supporting the value creating hypothesis.

Along with short-term performance evaluation, it becomes beneficial to investigate post-announcement.

Long -Term Announcement Effects

The three-year post-announcement effects from FDI joint ventures in the non-experienced countries are examined by using the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics. Table 50 shows that the compounded abnormal returns (CMAR) for the first year is - 0.10 % and

shows the Z-value for the first year to be - 0.07 (statistically insignificant at conventional levels). The CMAR for the second year is 8.26 % and the Z-value is 0.81 (statistically insignificant at conventional levels). The CMAR for the third year is 8.66 % and the Z-value is 0.99 (statistically insignificant at conventional levels). Notice that for the first year, CMARs are negative, but Z-values are statistically insignificant. For the second and third year, CMARs are insignificantly positive. This means that an FDI joint venture by a firm not operating in the partner firm's country provides no significant impacts on firm value for the long-term period, thus cannot support the value creating hypothesis.

To summarize, FDI joint ventures in the non-experienced countries provide no significant impacts on firm value in terms of both the short-term and long-term performances. Having discussed the results of country experience effects between the degree of the experience in the host country, let us move on to discuss those effects between the degree of the control level in the target firm.

C.5. Control Level Effects Hypothesis

When a firm makes an FDI joint venture, it has to consider the control level in that new venture. Different levels of control in the joint venture may give different impacts on the investing firm's stock value. In most cases, the control level in joint ventures are equal to each other (50 % : 50%). However, there are some different levels of ownership (minority or majority). When a investing firm has the full control and involvement of the

joint ventures, the investing firm can exploit benefits from the new joint venture. Thus, it is hypothesized that the more control in the joint venture it has the higher return it has.

H_{0,5.1,j} : Abnormal returns are equal to each other, regardless of the degree of control level in the joint venture.

H_{A,5.1,j} : Abnormal returns with higher control level are higher than those with lower control level in the joint venture.

Short-Term Announcement Effects

Short-term announcement abnormal returns of each group are presented and compared to evaluate the performance of each group. Daily mean difference (DAR) and the Z-values of DAR are utilized to test the performance difference in each group (Doukas and Travlos, 1988). Table 51 shows daily mean differences (DAR) and the Z-values of the returns between minority and equal control in the joint venture. On the announcement-day ($t = 0$), the daily mean difference (DAR) of abnormal return between these two groups is - 0.15 % ($Z = - 0.32$), which is statistically insignificant at conventional levels, thus the null hypothesis cannot be rejected. Table 51 shows daily mean differences (DAR) and the Z-values of the returns between minority and majority control in the joint venture. On the announcement-day ($t = 0$), the daily mean difference (DAR) of abnormal return between these two groups is - 0.15 % ($Z\text{-value} = - 0.16$), which is statistically insignificant at conventional levels, thus the null hypothesis cannot be rejected. This indicates that there is no significant difference in impacts on firm value associated with announcements of FDI joint ventures between the degree of the control level in the joint venture.

Along with short-term performance evaluation, it becomes necessary to investigate post-announcement performance in order to evaluate impacts of FDI joint ventures with different level of control in the joint venture.

Long-Term Announcement Effects

The three-year long-term announcement abnormal returns from each group are presented and compared. Differences of compounded abnormal returns (DCMAR) and the Z-values of DCMAR are utilized to test the performance difference between each group. Table 52 shows the differences of compounded abnormal returns (DCMAR) between minority control and equal control in the target firm for the first year to be - 32.08 % and the Z-value for the first year to be - 2.56 (statistically significant at the 0.01 level). The DCMAR for the second year is - 68.74 % with the Z-value being - 2.74 (statistically significant at the 0.01 level). The DCMAR for the third year is - 52.57 % with the Z-value being - 1.57 (statistically significant at the 0.05 level). Notice that for the whole three years, CMARs of FDI joint ventures with equal control in the joint venture are higher than those of minority control, and statistically significant at the 0.05 level.

Table 52 shows the differences between compounded abnormal returns (CMARs) of FDI joint ventures with minority control and those with majority control in the joint venture. The DCMAR for the first year is 13.78 % with the Z-value being 0.50, which is statistically insignificant at conventional levels. The DCMAR for the second year is - 0.55 % with the Z-value being 0.20, which is statistically insignificant at conventional levels. DCMAR for the third year is - 28.93 % with the Z-value being - 0.06, which is statistically insignificant at conventional levels. For these three years, no significant

difference between CMARs of FDI joint ventures with minority control and majority control in the joint venture, could be found.

In summary, the empirical tests of short-term performance reflect that no significant difference could be found. For the long-term performance evaluation, FDI joint ventures with equal control level provide significant higher impacts on firm value than those with minority control level.

After comparing the tested results of the control level effects by the degree of the control level in the joint venture, it becomes necessary to discuss the control level effects of each group, respectively.

C.5.1. Minority Control Level

Minority Control Level : Minority control level in the FDI joint venture may influence the firm value. FDI acquisitions with a minority control in the target firm is assumed to impact positively on firm value.

$H_{0,5.2,j}$: There is no impact on firm value associated with announcements of FDI joint ventures with minority control level.

$H_{A,5.2,j}$: There is a positive impact on firm value associated with announcements of FDI joint ventures with minority control level.

Short-Term Announcement Effects

For the test of short-term announcement effects from the group of minority control level in the joint ventures firm, the market model (standardized abnormal return method) and one-tailed test statistics are utilized. Table 53 reflects that the announcement-day ($t = 0$) abnormal return is 0.24 %, and the Z-value is 0.5, which is statistically insignificant at conventional levels that cannot reject the null hypothesis that there is no impact

associated with FDI joint ventures with minority control level. This indicates that unanticipated announcements of FDI joint ventures with minority control provide no significant impacts on firm value, not supporting the value creating hypothesis.

Along with short-term performance evaluation, it becomes beneficial to investigate post-announcement performance.

Long -Term Announcement Effects

The three-year post-announcement performance evaluation from FDI joint ventures with equal control is examined by using the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics. Table 54 shows the CMAR for the first year to be - 5.74 % and the Z-value for the first year to be - 0.07 (statistically insignificant at conventional levels). The CMAR for the second year is - 9.48 % with the Z-value being - 0.17 (statistically insignificant at conventional levels). The CMAR for the third year is - 1.51 % with the Z-value being 0.35 (statistically insignificant at conventional levels). Notice that across the three year period, CMARs are negative, but statistical values are insignificant at conventional levels. This indicates that FDI joint ventures with minority control level provide no significant impacts on firm value, thus not supporting the value creating hypothesis.

In summary, when a firm makes an FDI joint venture with minority control, it gets no significant impact on firm value in terms of short-term and long-term performance.

Now, having presented and discussed the test results of FDI joint ventures with minority control, let us move on to discuss the issue with equal control level in the joint venture.

C.5.2. Equal Control

Equal Control Level : Control level in the FDI joint venture may influence the firm value.

FDI joint ventures with equal control mean equal ownership in the new joint venture.

Thus, it is hypothesized that FDI joint ventures with equal control provide significant positive impacts on firm value.

H_{0,5.3,j} : There is no impact on firm value associated with announcements of FDI joint ventures with equal control level.

H_{A,5.3,j} : There is a positive impact on firm value associated with announcements of FDI joint ventures with equal control level.

Short-Term Announcement Effects

Abnormal returns surrounding the announcement day represent short-term announcement effects of FDI joint ventures with equal control. For this test, the market model (standardized abnormal return method) along with one-tailed test statistics are utilized. Table 53 shows that the announcement-day ($t = 0$) abnormal return is 0.39 %, and the Z-value is 0.9, statistically insignificant at conventional level, thus cannot reject the null hypothesis that there is no impact associated with FDI joint ventures with equal control level. This indicates that unanticipated announcements of FDI joint ventures with equal control provide no significant impacts on firm value, not supporting the value creating hypothesis.

Along with short-term performance evaluation, it becomes beneficial to investigate post-announcement performance.

The three-year post-announcement performance evaluation from FDI joint ventures with minority control is examined by using the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics. Table 54 shows the CMAR for the first year to be 29.89 % and the Z-value for the first year to be 3.60 (statistically significant at the 0.01 level). The CMAR for the second year is 59.3 % with the Z-value being 3.48 (statistically significant at the 0.01 level). The CMAR for the third year is 51.06 % with the Z-value being 2.38 (statistically significant at the 0.01 level). Notice that for the whole three year period, CMARs are significantly positive. This indicates that FDI joint ventures with minority control level provide significant positive impacts on firm value, thus strongly supporting the value creating hypothesis.

In summary, when a firm makes an FDI joint venture with equal control, it gets no significant impact on firm value in terms of short-term performance. However, for the long-term performance, there is a significant impacts on firm value. Having presented and discussed the test results of FDI acquisitions with equal control, let us move on to discuss the issue with majority control level.

C.5.3. Majority Control Level

Majority Control Level : When a firm has a majority control and involvement of the joint venture, it can operate the joint venture its business ways and can exploit the benefits of the joint venture. Thus, it is hypothesized that FDI joint ventures with majority control in the joint venture impact positively on firm value.

H_{0,5.4,j} : There is no impact on firm value associated with announcements of FDI joint ventures with majority control in the joint venture.

H_{A,5.4j} : There is a positive impact on firm value associated with announcements of FDI joint ventures with majority control in the joint venture.

Short-Term Announcement Effects

To evaluate the short-term announcement effects from FDI joint ventures with majority control in the joint venture, the market model (standardized abnormal return method) along with one-tailed test statistics are used. Table 53 shows that the announcement-day ($t = 0$) abnormal return is 0.39 %, and the Z-value is 0.6, which is statistically insignificant at conventional levels, thus the null hypothesis cannot be rejected. This indicates that unanticipated announcements of FDI joint ventures with majority control provide no significant impact on firm value, thus not supporting the value creating hypothesis.

Now, having presented and discussed the short-term empirical results, let us look at the long-term empirical results.

Long-Term Announcement Effects

The three-year post-announcement effects from FDI joint ventures with majority control are examined by using the size-based decile indices model (standardized compounded abnormal returns) and one-tailed test statistics. Table 54 shows that the compounded abnormal return (CMAR) for the first year is - 21.6 % and shows the Z-value for the first year to be - 1.82 (statistically significant at the 0.05 level). The CMAR for the second year is - 8.93 % and the Z-value is - 0.78 (statistically insignificant at conventional levels). The CMAR for the third year is 27.42 % and the Z-value is 0.42 (statistically insignificant at conventional levels). Up through the third year, most of CMARs are negative values and statistically insignificant. This indicates that FDI joint

ventures with majority control in the joint venture provide no significant impacts on firm value for the long-term period, and thus not supporting the value creating hypothesis.

To summarize, when a firm makes an FDI joint venture with majority control, there is no significant impact on firm value in terms of both the short-term and long-term performances, thus not supporting the value creating hypothesis.

Summary: Empirical results from the sample of FDI joint ventures were presented and discussed. Whether or not FDI joint ventures are a value creating investment decision was tested. A further extension to test country diversification effects, industry diversification effects, host country experience effects, and control level effects is also included.

The hypothesis that FDI joint ventures are a value creating investment decision is supported by the results from both the short-term and long-term performance evaluations. In regards to the hypothesis concerning country diversification effects, there is no significant difference in impacts on firm value from FDI joint ventures, regardless of the degree of the economic development in the host country in terms of both the short-term and long-term performances. For each group performance (less-developed, developed, and highly developed countries), when a firm makes an FDI joint venture with a partner firm which is in a less-developed country, it has a significant positive impact on firm value in terms of long-term performance, but does not experience any significance in terms of short-term performance. And, FDI joint ventures in developed countries provide no significant impacts on the investing firm value, with regards to both short-term and long-term performance. However, FDI joint ventures in highly developed countries provide

significant positive impacts on the investing firm value with regards to short-term and long-term performance.

When reviewed, no significant difference in impacts on firm value between related and unrelated FDI joint ventures, in terms of both short-term and long-term performance, were found. Yet, it was found that FDI joint ventures in unrelated industry provide no significant impact on firm value in terms of both short-term and long-term performance. However, FDI joint ventures in related industries provide significant positive impacts on firm value in terms of both short-term and long-term performance.

In testing the experience effects, the empirical tests of short-term performance and long-term performance arrive at the different results. There is no significant difference in the short-term performances. However, the long-term performances show that experience in the partner firm's country provide significantly higher impact on firm value than non-experience in the partner firm's country. For each group, FDI joint ventures by a firm already operating in the partner firm's country provide no significant impacts on firm value for the short-term performance, but in terms of long-term performance, provide significant positive impacts on firm value. FDI joint ventures in the non-experienced countries provide no significant impacts on firm value in terms of both short-term and long-term performance.

When reviewed, the empirical tests of control level effects reflect that no significant difference could be found in terms of short-term performance. For the long-term performance evaluation, FDI joint ventures with equal control level provide significant higher impacts on firm value than those with minority control level. When a firm makes

an FDI joint venture with minority control, it gets no significant impact on firm value in terms of short-term and long-term performance. And, when a firm makes an FDI joint venture with equal control, it gets no significant impact on firm value in terms of short-term performance. However, for the long-term performance, there is a significant impacts on firm value. FDI joint ventures with majority control provide no significant impact on firm value in terms of both short-term and long-term performance.

To follow up, the empirical test results from the cross-sectional regression analysis will be provided in the next section.

D. CROSS-SECTIONAL REGRESSION ANALYSIS

To obtain additional insights into the stock price effects of foreign direct investment (FDI), cross sectional regression analysis is utilized. Statistical relationship between the abnormal returns from FDIs and the independent variables were examined. The statistical relationship reflects a tendency of the abnormal returns to vary in a systematic way with the independent variables. The independent variables are EXP (operating experience of the investing firm in the host country), DEV (degree of economic development of the host country), and REL (degree of industrial relatedness between concerned firms).

The results of the cross sectional regression analysis are divided into three parts. The first part presents empirical results from the overall sample (FDI acquisitions and FDI joint ventures together). The second part displays empirical results from the sample of FDI acquisitions only. The last part shows those from the sample of FDI joint ventures only.

D.1 Overall Sample

Abnormal returns from the overall sample in terms of short-term and long-term performance are regressed on the hypothesized independent variables. The EXP variable is used to test whether the abnormal returns of the investing firms depend on the experience of the expanding firm in the host country. It is expected that the coefficient for EXP is positive. The DEV variable is used to test whether the abnormal returns of the investing firm depend on the level of economic development of the host country. It is expected that the coefficient for DEV is positive. The REL variable is used to test whether the abnormal returns of the investing firm depend on the relatedness and unrelatedness of expansion. A positive coefficient for REL is expected.

The regression results associating cumulative abnormal return (CAR) for short-term performance and compounded abnormal return (CMAR) for long-term performance with the independent variables are presented. For the short-term performance, the two-day cumulative abnormal return (day = - 1 to day = 0) associated with the announcement of foreign direct investment are examined, and for the long-term performance, the three-year compounded abnormal returns associated with the announcement of foreign direct investment are tested.

Short-Term Announcement Effects CAR(-1,0)

The two-day cumulative abnormal return was regressed on three independent variables to explain the short-term analysis. Table 55 reflects that the regression model has a relatively weak explanatory power ($F=1.736$, $\text{Prob}>F=0.16$). The coefficients of DEV

and REL have the predicted positive signs, but are statistically insignificant at conventional levels. Only the coefficient of EXP has the unpredicted negative sign and is statistically significant at the 0.01 level. This result does not coincide with the argument that diversifying across new geographic area gives benefits to the expanding firm, but indicates that expanding into the experienced country provides more benefits than expanding into new geographic area does.

Now, having discussed the regression results for short-term performance, let us move on to discuss those for long-term performance.

Long-Term Announcement Effects CMAR (1 year, 2 year, 3 year)

Long-term regression analysis was executed. Table 55 shows that the regression models of first two years have a relatively strong explanatory power (for the first year, $F=2.17$, $\text{Prob}>F=0.09$, which is significant at the 0.09 level, for the second year, $F=2.65$, $\text{Prob}>F=0.05$, which is significant at the 0.05 level). The coefficients of DEV and REL have the unpredicted negative signs, but are statistically insignificant at conventional levels. Only the coefficients of EXP have the predicted positive sign and are statistically significant at the 0.05 and 0.01 levels. These results reflect that expanding into new geographic area provides benefits. For the three-year period regression model, it has a very weak explanatory power ($F=0.21$, $\text{Prob}>F=0.89$). The coefficients of all three variables have the predicted positive sign, but are statistically insignificant at conventional levels. This implies that for the three year long-term periods, there is no significant relationship between compounded abnormal returns and the three independent variables.

After discussing the cross sectional regression results from the overall sample, let us expand this analysis into the sample of FDI acquisitions.

D.2. FDI Acquisition Sample

Abnormal returns from the sample of FDI acquisitions in terms of short-term and long-term performance are regressed on the hypothesized independent variables. The coefficients of independent variables (EXP, DEV, and REL) are expected positive same as the previous experiment. The test method also follows the previous experiment. The two-day cumulative abnormal return and the three-year compounded abnormal return are regressed to examine short-term performance and long-term performance, respectively.

Short-Term Announcement Effects CAR(-1,0)

For the short-term regression analysis, Table 56 shows regression results indicating that the regression model with the sample of FDI acquisitions has a more explanatory power ($F=2.0$, $\text{Prob}>F=0.1$, which is significant at the 0.1 level) than that with overall sample. Like the result of the overall sample, the coefficients of DEV and REL have the predicted positive signs, but are statistically insignificant at conventional levels. Only the coefficient of EXP has the unpredicted negative sign and is statistically significant at the 0.01 level. This result does not support the argument that diversifying across new geographic area gives benefits to the expanding firm, but indicates that expanding into the experienced country provides more benefits than expanding into new geographic area does.

However, the three-year period regression analysis show weak explanations. Let us move on to discuss the long-term performance analysis.

Long-Term Announcement Effects CMAR (1 year, 2 year, 3 year)

For the three-year period regression analysis, Table 56 reflects that for the first year the regression model has a weak explanatory power ($F=0.263$, $\text{Prob}>F=0.85$). The coefficients of EXP and DEV have the predicted positive signs, but are statistically insignificant at conventional level. Only the coefficient of REL has the unpredicted negative sign, but is also statistically insignificant at conventional level. The third year regression model also has a weak explanatory power ($F=1.1$, $\text{Prob}>F=0.35$). The coefficients of all three variables have the predicted positive signs, but are statistically insignificant at conventional level. Only for the second year, the regression model has an explanatory power ($F=2.19$, $\text{Prob}>F=0.08$, which is statistically significant at the 0.08 level). Among the three variables, the coefficient of DEV has a predicted positive sign, and is statistically significant at the 0.08 level. This indicates that expanding into the lesser developed country provides positive impacts on the two year period CMAR. For the three-year period, no significant relationship between the compounded abnormal return and the three independent variables were found.

Regression results from the sample of FDI acquisitions were presented and discussed, let us expand this analysis into the sample of FDI joint ventures.

D.3. FDI Joint Venture Sample

The hypothesized three independent variables are regressed on the abnormal returns from the sample of FDI joint ventures in terms of short-term and long-term performance. The independent variables (EXP, DEV, and REL) are predicted as positive coefficients. The same test method as the previous experiment is utilized.

First, cumulative abnormal returns of two days are examined as a short-term analysis. After then, the three-year compounded abnormal return is regressed to analyze long-term performance.

Short-Term Announcement Effects CAR(-1,0)

To explain the short-term analysis, Table 57 reflects that the regression model has a very weak explanatory power ($F=0.66$, $\text{Prob}>F =0.58$). Like the case of the overall sample, the coefficients of DEV and REL have the predicted positive signs, but are statistically insignificant at conventional levels. The coefficient of EXP has the unpredicted negative sign, but is still statistically insignificant at conventional levels. This indicates that no significant relationship between two-day cumulative abnormal return and the three independent variables were found.

In case of the long-term analysis, some explanatory models can be found. Let us move on to discuss the long-term analysis.

Long-Term Announcement Effects CMAR (1 year, 2 year, 3 year)

For the presentation of the three-year period regression analysis, Table 57 reflects the empirical regression results indicating that the first two year regression models have a relatively strong explanatory power (for the first year, $F=2.45$, $\text{Prob}>F=0.06$, which is statistically significant at the 0.06 level, for the second year, $F=3.02$, $\text{Prob}>F=0.03$, which is statistically significant at the 0.03 level). The coefficients of EXP and REL have the predicted positive signs, but only EXP is statistically significant at the 0.05 level. The coefficient of DEV has the unpredicted negative sign and is statistically significant at the 0.05 level. These results indicate that expanding into the inexperienced country provides positive impacts on the first two year CMARs, and expanding into lesser developed country gives negative impacts on the first two year CMARs. The three year regression model has a weak explanatory power. The coefficients of three variables are statistically insignificant at conventional levels. This is interpreted that there is no significant relationship between the compounded abnormal return of the third year and the three independent variables.

Summary : The results of the cross sectional regression analysis were presented. This analysis was executed for each sample group. In case of the overall sample, only the EXP variable has a statistical significance. However, the sign is unpredictedly negative. This indicate that FDI in the already experienced country provides more benefits than FDI in the inexperienced country. For the three- year long-term analysis, no significant relationship between the compounded abnormal return and the three independent variables were found.

When reviewed the case of FDI acquisitions, only the coefficient of EXP has the unpredicted negative sign and is statistically significant at the 0.01 level. This indicates that expanding via FDI acquisitions into the experienced country provides more benefits than expanding via FDI acquisitions into new geographic area does. For the three- year long-term analysis, no significant relationship between the compounded abnormal return and the three independent variables were found.

In case of FDI joint ventures, there is no significant relationship between abnormal return and the three independent variables were found in terms of both short-term and long-term analysis.

CHAPTER V

SUMMARY and CONCLUSIONS

The main objective of this study is to address the issue of whether or not foreign direct investment (FDI) is a value creating investment decision. The research is expanded to include an examination of country diversification effects, industry diversification effects, host country experience effects and control level effects to obtain greater insight into their impact on firm value. The samples of FDI acquisitions and FDI joint ventures are used both combined and separately to investigate these objectives. Also, these objectives are evaluated in terms of both short-term and long-term performance.

This study leads to several conclusions regarding the impact on firm value. The major contributions of this study are summarized in the following paragraphs. The summary is divided into three parts. The first part summarizes major contributions from the overall sample (FDI acquisitions and FDI joint ventures together). The second and third parts summarize those from the samples of FDI acquisitions and FDI joint ventures, respectively. The chapter concludes with recommendations for future study.

A. SUMMARY

A.1. Overall Sample

The portion of this study involving the overall sample reaches several conclusions regarding the foreign direct investment (FDI) related hypotheses. Table 58 is a summary spreadsheet of the results. First, this study develops a theoretical hypothesis which demonstrates a linkage between announcements of FDI and the price of the underlying stock. The hypothesis illustrates that an announcement of FDI provides a positive impact on firm value. Empirical test of the hypothesis provides evidence consistent with the hypothesis. The empirical results from the overall sample reflects that shareholders of U.S. firms engaging in direct foreign investment experience significant positive abnormal returns at the announcement of the investment. For the three-year long-term period, shareholders of direct foreign investing U.S. firms also experience significant positive compounded abnormal returns.

A second aspect of this study is to examine the country diversification effects. The empirical results find no significant difference in the impact on firm value on the announcement day, regardless of the degree of the economic development in the host country. Three categories of the degree of development are used, less-developed, developed and highly developed. For the three-year period, FDI in a less-developed country provides a higher positive impact on firm value than does FDI in a highly developed country. When the performance of each individual category is reviewed, both FDI in a less-developed country and FDI a highly-developed country impact positively on

the investing firm's value concerning long-term performance, but do not impact concerning short-term performance. However, no significant impacts from FDI were found for the middle group, developed countries. Thus, this indicates that when a firm makes an FDI, it has a positive impact on firm value over the three-year period only if it expands into the two extremes, the less-developed or highly developed countries. This suggests that less-developed countries provide more diversification benefits and highly developed countries provide more security benefits.

The results of the industry diversification effects show that no significant differences in the impact on firm value between related and unrelated industry investments. This was found in terms of both the short-term and long-term performances. FDI in a related industry provides significant positive impacts on firm value in terms of both short-term and long-term performances. Yet, it was found that FDI in the unrelated industry affects positively on firm value for the three-year long-term period, but provides no significant impacts on firm value in terms of the short-term performance.

A fourth contribution from this study is the evidence concerning the experience effects. The result leads to a conclusion that FDI made by a firm already operating in the host country has significantly higher positive impact on firm value than FDI by a firm which is not operating in the host country in terms of both the short-term and long-term analyses. This indicates that experience in the host country plays a significantly positive role in influencing the firm value. Examining the variables individually, FDI by a firm already operating in the host country provides a significant positive impact on firm value in terms of both the short-term and long-term performances. And, when a firm which is not

operating in the host country engages in FDI, it does not have any significant positive impact on firm value in terms of both short-term and long-term performances. Likewise, no significant impact on firm value was found for a firm which is novice in international operations.

In this combined sample, we did not investigate control effects because the control level is classified differently between acquisitions and joint ventures.

A.2. ACQUISITION SAMPLE

With the sample limited to FDI acquisitions, several conclusions regarding the foreign direct investment (FDI) related hypotheses are drawn from this study. Table 59 is a summary spreadsheet of the results. First it is hypothesized that an FDI acquisition provides a positive impact on firm value. Empirical testing provides evidence in support of the hypothesis. Specifically, the empirical results show that the hypothesis, that an FDI acquisition is a value creating investment decision, is supported by the results from both short-term and long-term performance evaluations.

A second contribution from this study is to examine the hypothesis that there is no difference between the announcement effects of an international investment in a developed, a highly developed or a less-developed country, concerning country diversification effects. The short-term results indicate that there is no significant difference in the impact on firm value from FDI acquisitions, regardless of the degree of economic development in the host country. The three-year performance results reflect

that FDI acquisitions in a less-developed country yield a significantly higher positive impact on firm value than FDI acquisitions in a highly developed country. Significant positive impacts on firm value in terms of both short-term and long-term performances were found only in the case of FDI acquisitions in less-developed countries. FDI acquisitions in a developed and a highly developed country provide no significant impacts on firm value in terms of either short-term or long-term performance. Thus, this indicates that when a firm makes an FDI acquisition, only FDI acquisitions in a less-developed country provide significant positive impacts on firm value about both short-term and long-term performances.

A third portion of this study concerns industry diversification effects. For the short-term period evaluation, related FDI acquisitions provide significantly higher impacts on firm value than unrelated ones. In contrast, for the long-term evaluation, unrelated FDI acquisitions provide significantly higher impacts on firm value than related ones. In summary, it was found that FDI acquisitions in an unrelated industry positively affect firm value for the three-year period, but have no significant impact on firm value in terms of short-term performance. FDI acquisitions in a related industry positively affect firm value for the short-term performance, but provide no substantial impacts on firm value in terms of long-term performance. Thus, this indicates that in the long-term outlook, the industry diversification hypothesis, which predicts a maximum diversification benefit when expanding into less related industry, was supported. However, in the short-term reaction, this result does not support the industry diversification hypothesis.

The results of the investigation of the effects of the degree of experience in the host country indicate that there is no significant difference in the impact on firm value between an FDI acquisition by a firm already operating in the host country and an FDI acquisition by the firm going abroad for the first time in terms of both short-term and long-term analyses. However, an FDI acquisition made by a firm already operating in the host country gives significantly higher impacts on firm value than an FDI acquisition made by a firm which is not operating in the host country in terms of the short-term performance. No significant difference between the two groups was found in terms of the long-term performance. When a firm engages in an FDI acquisition in a country in which it has experience, it yields a significant positive impact on firm value in terms of both short-term and long-term performances. And, when a firm engages in a first-time FDI acquisition in a country, it does not have any significant impact on firm value in terms of both short-term and long-term performances. FDI acquisitions by firms which do not have any experience in international operations impact positively on firm value in terms of short-term performance, but do not impact with regard to long-term performance. Thus, this indicates that when a firm makes an FDI acquisition, experience in the host country has a significant positive influence on firm value.

A final contribution from this study is results from the tests of the hypothesis concerning the degree of control in the target firm. Empirical tests of the control level effects show that FDI acquisitions with higher control level in the target firm have a stronger impact on firm values in the short-term. For the long-term performance evaluation, no significant difference could be found. FDI acquisitions with minority

control in the target firm provide a significant negative impact on firm value in terms of short-term performance. For the long-term performance, there is no significant impacts on firm value. However, FDI acquisitions with majority control in the target firm provide a significant positive impact on firm value in terms of both short-term and three-year long-term performances. Thus, this indicates that when a firm makes an FDI acquisition, the greater its degree of control in the target firm, the greater the benefits in terms of firm value.

A.3. JOINT VENTURE SAMPLE

The empirical analysis with the sample of only FDI joint ventures provides results regarding the foreign direct investment (FDI) related hypotheses. Table 60 is a summary spreadsheet of the results. First, conjectural relationships between FDI joint ventures and stock price reaction were developed and tested. According to the empirical test results from the joint ventures sample, the hypothesis that FDI joint ventures are a value creating investment decision is supported in both the short-term and long-term performance evaluations.

Second, this study examines the country diversification effects. The result shows that there is no significant difference in the impact on firm value from FDI joint ventures, regardless of the degree of the economic development in the host country, in terms of both short-term and long-term performances. When a firm makes an FDI joint venture with a partner firm which is in a less-developed country, it has a significant positive impact on

firm value in terms of long-term performance, but does not experience any results of significance in terms of short-term performance. No significant impacts were found from FDI joint ventures in developed countries in terms of both short-term or long-term performances. However, FDI joint ventures in highly developed countries provide significant positive impacts on the investing firm's value both in the short-term and long-term performances.

A third portion this study examines the industry diversification effects from FDI joint ventures. When analyzed, no significant difference in impacts on firm value between related and unrelated FDI joint ventures, in terms of both short-term and long-term performance, were found. No significant impact on firm value from FDI joint ventures in unrelated industries, in terms of both short-term and long-term performances, were found. However, FDI joint ventures in related industries provide significant positive impacts on firm value in terms of both short-term and long-term performances.

The investigation of the hypothesis concerning the experience effects from FDI joint ventures showed no significant difference in terms of the short-term performances, when the performances of the two experience groups were compared. However, the long-term performances show that experience in the partner firm's country provides significantly higher impact on firm value than non-experience in the partner firm's country. This indicates that when a firm with experience in the partner firm's country makes an FDI joint venture, it benefits more than when it does not have experience. FDI joint ventures by a firm already operating in the partner firm's country provide no significant impacts on firm value for the short-term performance, but in terms of long-term performance, provide

significant positive impacts on firm value. No significant impacts were found from FDI joint ventures in the non-experienced countries in terms of either short-term or long-term performances.

Finally, the empirical tests of control level effects from FDI joint ventures reflect that no significant difference between the groups could be found in terms of short-term performance. For the long-term performance evaluation, FDI joint ventures with equal control level provide significantly higher impacts on firm value than those with minority control level. No significant impacts from FDI joint ventures with minority control, in terms of short-term and long-term performances, were found. And, when a firm makes an FDI joint venture with equal control, there is no significant impact on firm value in terms of short-term performance. However, for the long-term performance, there is a significant impact on firm value. FDI joint ventures with majority control provide no significant impact on firm value in terms of both short-term and long-term performances. Thus, this indicates that when a firm makes an FDI joint venture, it has a positive long-term impact on firm value only when it has an equal control level in the joint venture.

B. CONCLUSIONS

Policy implications from this study relate to international investment strategy. Whenever a firm considers international expansion of its business, it has to study many strategic options before making a final decision. It has to decide the target country, industry relatedness, control level, and method of foreign direct investment. This study

investigates some factors such as host country's economic development level, investment relatedness, experience in host country, and control level in target firm. It examines these issues for a sample of FDI via acquisitions, FDI via joint ventures, and FDI for the two sample combined. The study finds, in terms of both the short-term and long-term performance, the greatest benefits to shareholders occurs from FDI via joint ventures.

This study points to the need for future research in several areas. Only acquisitions and joint ventures were used to investigate foreign direct investment in this study. This study can be extended to include other types of foreign direct investment, such as equity increase, building a new plant, and purchasing real estate. Inclusion of these types of foreign direct investment would provide a more comprehensive understanding of foreign direct investment and its impact on firm value. This study also shows that FDI via joint ventures yields higher benefits than FDI via acquisitions. Thus, this study needs to be extended to compare the two types (FDI acquisitions and FDI joint ventures). In this study, we did not distinguish between joint ventures with foreign governments and joint ventures with private firms. This distinction provides a further research issue.

In summary, this study has developed a theoretical model that reflects a relation between the announcement of foreign direct investment and the price of the underlying stock. The hypothesis that foreign direct investment is a value creating investment decision was developed and then tested using the sample of both FDI acquisitions and FDI joint ventures, of FDI only via acquisitions, and of FDI joint ventures only. Empirical results show considerable evidence that FDI is a value creating investment decision, although not in all cases. Shareholders of U.S. firms engaged in direct foreign investment

experience significant positive abnormal returns at the announcement of the investment and for the three-year long-term period. When the FDI acquisitions and FDI joint ventures samples are evaluated separately significant positive impacts on firm value in terms of short-term and long-term performance evaluation were found from the two samples. These results support the value creating hypothesis of foreign direct investment.

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Table 1
Announcements Excluded from Final Sample

| | Acquisition | Joint Ventures | Total |
|-------------------|-------------|----------------|-------|
| Initial Sample | 1808 | 814 | 2622 |
| Not on WSJ | 1046 | 254 | 1300 |
| Other Takeovers | 41 | 59 | 100 |
| Major Contracts | 19 | 101 | 120 |
| Dividend Increase | 25 | 25 | 50 |
| New Offerings | 11 | 10 | 21 |
| Stock Repurchase | 3 | 7 | 10 |
| Divestitures | 12 | 24 | 36 |
| Stock Splits | 6 | 1 | 7 |
| Final Sample | 645 | 333 | 978 |

Table 2

Number of Announcements by Each Classification

Panel A: Country Experience by Degree of Host Country Experience

| | Acquisition | Joint Ventures | Total |
|---------------------------------|-------------|----------------|-------|
| Operating in Host Country | 379 | 109 | 488 |
| Not Operating in Host Country | 232 | 205 | 437 |
| Going Abroad for the First Time | 34 | 19 | 53 |

Panel B: Country Classification by Degree of Economic Development

| | Acquisition | Joint Ventures | Total |
|--------------------------|-------------|----------------|-------|
| Highly Developed G7 | 429 | 161 | 590 |
| Developed w/o G7 Country | 114 | 37 | 151 |
| Less-Developed Country | 102 | 135 | 237 |

Panel C: Industry Relatedness

| | Acquisition | Joint Ventures | Total |
|----------------------|-------------|----------------|-------|
| Related Investment | 420 | 300 | 720 |
| Unrelated Investment | 225 | 33 | 258 |

Table 3

**Daily Average Abnormal Returns (AR) from the Market Model and Z-values for U.S. FDI Firms
from Five Days before and Five Days after the Announcement Date
for Overall Sample**

| Overall Sample | | |
|-----------------------|---------------|----------------|
| (N=881) | | |
| Day | AR (%) | Z-value |
| -5 | -0.00 | 0.5 |
| -4 | 0.00 | 0.2 |
| -3 | -0.05 | -1.3 |
| -2 | -0.12 | -1.8 ** |
| -1 | 0.00 | -0.5 |
| 0 | 0.14 | 1.7 ** |
| +1 | 0.05 | 0.1 |
| +2 | 0.01 | -0.1 |
| +3 | -0.02 | -0.6 |
| +4 | -0.06 | -0.8 |
| +5 | 0.01 | 0.3 |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 4
Compounded Abnormal Returns (CMAR), Z-values of
U.S. FDI Firms for Periods up to Three Years.
for Overall Sample

| Overall N=536 | | |
|------------------|----------|----------|
| Day | CMAR (%) | Z-value |
| 0 | -0.03 | -0.78 |
| 21 | -0.01 | -0.49 |
| 42 | 0.11 | 0.67 |
| 63 | -0.14 | 0.41 |
| 85 | -0.12 | 0.33 |
| 106 | -0.04 | 0.52 |
| 127 | -0.78 | -0.07 |
| 148 | -0.89 | -0.02 |
| 170 | -1.12 | -0.14 |
| 191 | -1.52 | -0.42 |
| 212 | -1.96 | -0.65 |
| 233 | -1.40 | -0.26 |
| 254 | -0.78 | 0.03 |
| 275 | -0.52 | 0.05 |
| 296 | -0.48 | -0.04 |
| 318 | 0.02 | 0.13 |
| 340 | -0.60 | -0.18 |
| 361 | -0.08 | 0.08 |
| 382 | -0.16 | -0.04 |
| 403 | -0.36 | 0.22 |
| 424 | 1.17 | 0.52 |
| 445 | 1.33 | 0.57 |
| 466 | 1.49 | 0.57 |
| 487 | 2.78 | 0.83 |
| 508 | 5.01 | 1.46 * |
| 529 | 5.63 | 1.57 * |
| 550 | 5.51 | 1.58 * |
| 571 | 8.66 | 2.32 *** |
| 592 | 8.54 | 2.31 *** |
| 613 | 9.79 | 2.59 *** |
| 635 | 9.96 | 2.67 *** |
| 656 | 11.06 | 2.87 *** |
| 677 | 12.66 | 3.13 *** |
| 698 | 13.48 | 3.31 *** |
| 719 | 14.11 | 3.43 *** |
| 740 | 16.13 | 3.79 *** |
| 762 | 16.13 | 3.72 *** |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 5

**Daily Average Abnormal Returns (AR) from the market model and Z-values for U.S. FDI Firms
from Five Days before and Five Days after the Announcement Date
for Acquisition Sample**

| Acquisitions (N=585) | | |
|---------------------------------|---------------|----------------|
| Day | AR (%) | Z-value |
| -5 | 0.00 | 0.6 |
| -4 | -0.04 | -0.3 |
| -3 | -0.07 | -1.0 |
| -2 | -0.12 | -2.0 ** |
| -1 | 0.02 | -0.4 |
| 0 | 0.16 | 1.6 * |
| +1 | 0.00 | -0.5 |
| +2 | 0.10 | 1.0 |
| +3 | -0.07 | -1.0 |
| +4 | -0.02 | -0.4 |
| +5 | -0.00 | 0.4 |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 6
Compounded Abnormal Returns (CMAR), Z-values of
U.S. FDI Firms for Periods up to Three Years.
for Acquisition Sample

| Acquisitions (N=378) | | |
|-------------------------|----------|---------|
| Day | CMAR (%) | Z-value |
| 0 | -0.13 | -0.53 |
| 21 | -0.64 | -1.23 |
| 42 | -0.57 | -0.54 |
| 63 | -1.06 | -0.86 |
| 85 | -0.97 | -0.68 |
| 106 | -1.60 | -1.18 |
| 127 | -2.35 | -1.46 * |
| 148 | -2.52 | -1.30 |
| 170 | -2.52 | -1.08 |
| 191 | -2.95 | -1.30 |
| 212 | -3.51 | -1.54 * |
| 233 | -3.71 | -1.49 * |
| 254 | -3.17 | -1.17 |
| 275 | -2.95 | -1.16 |
| 296 | -3.15 | -1.27 |
| 318 | -2.82 | -1.07 |
| 340 | -4.16 | -1.50 * |
| 361 | -4.17 | -1.43 * |
| 382 | -4.42 | -1.44 * |
| 403 | -4.22 | -1.26 |
| 424 | -3.30 | -0.85 |
| 445 | -3.46 | -0.90 |
| 466 | -3.02 | -0.74 |
| 487 | -2.24 | -0.50 |
| 508 | -0.41 | -0.07 |
| 529 | 0.03 | 0.04 |
| 550 | -0.30 | -0.01 |
| 571 | 1.79 | 0.49 |
| 592 | 1.87 | 0.52 |
| 613 | 3.99 | 0.92 |
| 635 | 3.38 | 0.81 |
| 656 | 4.60 | 1.06 |
| 677 | 6.10 | 1.33 * |
| 698 | 6.33 | 1.41 * |
| 719 | 6.33 | 1.49 * |
| 740 | 8.56 | 1.80 ** |
| 762 | 8.01 | 1.69 ** |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 7

**Daily Average Abnormal Returns (AR) from the Market Model and Z-values for U.S. FDI Firms
from Five Days before and Five Days after the Announcement Date
for Joint Venture Sample**

| Joint Ventures (N=296) | | |
|-----------------------------------|---------------|----------------|
| Day | AR (%) | Z-value |
| -5 | - 0.00 | - 0.6 |
| -4 | 0.00 | - 0.1 |
| -3 | 0.04 | 0.5 |
| -2 | - 0.22 | - 1.9 ** |
| -1 | 0.11 | 0.7 |
| 0 | 0.21 | 1.3 * |
| +1 | - 0.12 | - 1.2 |
| +2 | - 0.01 | - 0.3 |
| +3 | - 0.02 | - 0.1 |
| +4 | 0.01 | - 0.2 |
| +5 | - 0.02 | - 0.5 |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 8

**Compounded Abnormal Returns (CMAR), Z-values of
U.S. FDI Firms for Periods up to Three Years.
for Joint Venture Sample**

| Joint Ventures (N=158) | | |
|---------------------------|----------|----------|
| Day | CMAR (%) | Z-value |
| 0 | 0.15 | 0.78 |
| 21 | 0.71 | 0.96 |
| 42 | 1.44 | 1.88 ** |
| 63 | 1.68 | 1.92 ** |
| 85 | 1.21 | 1.31 * |
| 106 | 3.19 | 2.55 *** |
| 127 | 2.47 | 1.90 ** |
| 148 | 2.39 | 1.73 ** |
| 170 | 1.61 | 1.22 |
| 191 | 1.03 | 0.99 |
| 212 | 0.98 | 1.00 |
| 233 | 2.80 | 1.50 * |
| 254 | 3.73 | 1.61 * |
| 275 | 3.93 | 1.62 * |
| 296 | 4.72 | 1.68 ** |
| 318 | 5.74 | 1.75 ** |
| 340 | 6.40 | 1.73 ** |
| 361 | 7.98 | 2.05 ** |
| 382 | 8.29 | 1.83 ** |
| 403 | 9.17 | 1.97 ** |
| 424 | 9.63 | 1.90 ** |
| 445 | 10.26 | 2.03 ** |
| 466 | 10.04 | 1.86 ** |
| 487 | 12.25 | 1.92 ** |
| 508 | 15.25 | 2.40 *** |
| 529 | 15.90 | 2.36 *** |
| 550 | 16.38 | 2.51 *** |
| 571 | 22.14 | 3.13 *** |
| 592 | 21.39 | 3.06 *** |
| 613 | 20.54 | 2.97 *** |
| 635 | 22.22 | 3.26 *** |
| 656 | 22.42 | 3.15 *** |
| 677 | 24.63 | 3.23 *** |
| 698 | 26.32 | 3.41 *** |
| 719 | 28.14 | 3.45 *** |
| 740 | 28.84 | 3.53 *** |
| 762 | 29.08 | 3.55 *** |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 9

**Daily Mean Differences of Average Abnormal Returns (DAR) from the Market Model
between FDI Acquisitions and FDI Joint Ventures,
for the Period -5 Days before to +5 Days
after the Announcement Date**

| Daily Mean Differences (DARs) and Z-values between Acquisitions (N=585) and Joint Ventures (N=296) | | |
|---|-----------------------------|-----------------------------|
| Day | DAR (%) ^a | Z-value ^b |
| -5 | 0.00 | 0.84 |
| -4 | -0.04 | -0.09 |
| -3 | -0.11 | -0.99 |
| -2 | 0.10 | 0.39 |
| -1 | -0.09 | -0.80 |
| 0 | -0.05 | -0.13 |
| +1 | 0.12 | 0.69 |
| +2 | 0.11 | 0.82 |
| +3 | -0.05 | -0.50 |
| +4 | -0.03 | -0.07 |
| +5 | 0.02 | 0.64 |

a $DAR = AAR_1 - AAR_2$, where 1 represents firms in group 1 and 2 represents firms in group 2.

b $Z\text{-value} = (ASAR_1 - ASAR_2) / \sqrt{(1/N_1 + 1/N_2)}$, where N_1 and N_2 represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 10

**Differences of Compounded Abnormal Returns (DCMAR) and Z-values
between FDI Acquisitions and FDI Joint Ventures
Periods up to Three Years**

| YEAR | FDI Acquisitions (N=378) | | FDI Joint Ventures (N=158) | | Difference between FDI Acquisitions and FDI Joint Ventures | |
|--------|-----------------------------|---------|-------------------------------|----------|--|----------------------|
| | CMAR (%) | Z-value | CMAR (%) | Z-value | DCMAR ^a (%) | Z-value ^b |
| 1 year | -3.17 | -1.17 | 3.73 | 1.61 * | -6.90 | -1.99 ** |
| 2 year | -0.41 | -0.07 | 15.25 | 2.40 *** | -15.66 | -2.05 *** |
| 3 year | 8.01 | 1.69 ** | 29.08 | 3.55 *** | -21.07 | -2.06 *** |

a DCMAR=CMAR₁-CMAR₂, where 1 represents firms in group 1 and 2 represents firms in group 2.

b Z-value= (ASAR₁ - ASAR₂) / $\sqrt{(1/N_1 + 1/N_2)}$, where N₁ and N₂ represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 11

**Daily Mean Differences of Average Abnormal Returns between Highly Developed, Developed, and Less-Developed Countries, for the Period -5 Days before to +5 Days after the Announcement Date
Overall Sample**

| DAY | Daily Mean Differences (DARs), Z-values between Highly Developed (N=514) and Developed (N=141) Countries | | Daily Mean Differences(DARs), Z-values between Highly Developed (N=514) and Less-Developed (N=210) Countries | |
|-----|---|----------------------|---|----------------------|
| | DAR ^a (%) | Z-value ^b | DAR ^a (%) | Z-value ^b |
| -5 | 0.35 | 1.74 ** | -0.13 | -0.91 |
| -4 | 0.05 | 0.03 | -0.18 | -1.98 ** |
| -3 | -0.35 | -1.77 ** | -0.17 | -0.94 |
| -2 | 0.16 | 0.42 | 0.21 | 0.64 |
| -1 | 0.13 | 0.98 | 0.03 | 0.64 |
| 0 | -0.15 | -0.65 | -0.05 | -0.66 |
| +1 | -0.26 | -1.65 ** | -0.12 | -0.38 |
| +2 | -0.07 | -0.55 | -0.13 | -0.60 |
| +3 | -0.03 | -0.27 | 0.22 | 1.10 |
| +4 | 0.16 | 1.29 | 0.16 | 1.43 |
| +5 | 0.07 | 0.46 | 0.20 | -0.14 |

a DAR=AAR₁ -AAR₂, where 1 represents firms in group 1 and 2 represents firms in group 2.

b Z-value= (ASAR₁ - ASAR₂) / $\sqrt{(1/N_1 + 1/N_2)}$, where N₁ and N₂ represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 12

**Differences of Compounded Abnormal Returns (DCMAR) and Z-values of
U.S. FDI Firms for Periods up to Three Years.
Overall Sample by Economic Development**

| Year | DCMARs and Z-values between Highly Developed Countries (N=298) and Developed Countries (N=86) | | DCMARs and Z-values between Highly Developed Countries (N=298) and Less-Developed Countries (N=137) | |
|--------|--|----------------------|--|-----------------------|
| | DCMAR ^a (%) | Z-value ^b | DCMAR ^a (%) | Z-values ^b |
| 1 year | 2.26 | 0.21 | - 5.09 | - 1.2 |
| 2 year | - 3.39 | - 0.52 | - 13.84 | - 2.14 *** |
| 3 year | - 6.53 | - 0.18 | - 14.00 | - 1.67 ** |

a DCMAR=CMAR₁-CMAR₂, where 1 represents firms in group 1 and 2 represents firms in group 2.

b Z-value= (ASAR₁ - ASAR₂) / $\sqrt{(1/N_1 + 1/N_2)}$, where N₁ and N₂ represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 13

**Daily Average Abnormal Returns (AR) from the Market Model and Z-values for U.S. FDI Firms
from Five Days before and Five Days after the Announcement Date
Overall Sample by Economic Development**

| Day | Less-Developed Countries (N=210) | | Developed Countries (N=141) | | Highly Developed Countries (N=514) | |
|-----|-------------------------------------|---------|--------------------------------|---------|--|---------|
| | AR (%) | Z-value | AR (%) | Z-value | AR (%) | Z-value |
| -5 | 0.15 | 1.4 * | -0.33 | -1.7 ** | 0.02 | 0.5 |
| -4 | 0.16 | 1.9 ** | -0.07 | -0.4 | -0.02 | -0.7 |
| -3 | 0.02 | -0.1 | 0.20 | 1.0 | -0.15 | -1.9 ** |
| -2 | -0.26 | -1.4 * | -0.21 | -1.0 | -0.05 | -1.0 |
| -1 | 0.02 | -0.5 | -0.08 | -0.9 | 0.05 | 0.4 |
| 0 | 0.13 | 1.1 | 0.23 | 1.0 | 0.08 | 0.5 |
| +1 | 0.11 | 0.0 | 0.25 | 1.5 * | -0.01 | -0.7 |
| +2 | 0.08 | 0.2 | 0.02 | 0.2 | -0.05 | -0.8 |
| +3 | -0.19 | -1.3 | 0.06 | 0.3 | 0.03 | 0.0 |
| +4 | -0.17 | -1.5 * | -0.17 | -1.3 | -0.01 | 0.3 |
| +5 | -0.14 | 0.8 | -0.01 | 0.0 | 0.06 | 1.0 |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 14

**Compounded Abnormal Returns (CMAR) and Z-values of
U.S. FDI Firms for Periods up to Three Years.
Overall Sample by Economic Development**

| Day | Less-Developed Countries (N=137) | | Developed Countries (N=86) | | Highly Developed Countries (N=298) | |
|-----|-------------------------------------|----------|-------------------------------|-----------|---------------------------------------|----------|
| | CMAR % | Z-value | CMAR % | Z-value | CMAR % | Z-value |
| 0 | 0.40 | 1.11 | - 0.24 | - 1.29 | - 0.16 | - 1.01 |
| 21 | 1.23 | 1.71 ** | - 0.85 | - 0.07 | - 0.49 | - 1.68 * |
| 42 | 1.58 | 2.14 ** | - 1.47 | - 0.56 | 0.05 | - 0.40 |
| 63 | 1.90 | 1.67 ** | - 2.65 | - 0.94 | - 0.43 | - 0.29 |
| 85 | 1.78 | 1.30 * | - 3.70 | - 1.28 | - 0.33 | - 0.24 |
| 106 | 2.43 | 1.62 * | - 4.18 | - 1.23 | - 0.53 | - 0.35 |
| 127 | 2.38 | 1.40 * | - 6.24 | - 1.88 ** | - 1.07 | - 0.41 |
| 148 | 2.11 | 1.15 | - 6.56 | - 1.82 ** | - 1.01 | - 0.16 |
| 170 | 1.46 | 0.91 | - 6.04 | - 1.38 * | - 1.51 | - 0.47 |
| 191 | 1.16 | 0.81 | - 6.42 | - 1.34 * | - 1.94 | - 0.72 |
| 212 | 0.76 | 0.62 | - 6.60 | - 1.35 * | - 2.42 | - 0.83 |
| 233 | 2.06 | 0.95 | - 6.29 | - 1.14 | - 2.43 | - 0.79 |
| 254 | 2.88 | 0.99 | - 4.47 | - 0.60 | - 2.21 | - 0.68 |
| 275 | 3.21 | 1.04 | - 4.95 | - 0.69 | - 1.89 | - 0.66 |
| 296 | 3.63 | 1.10 | - 6.13 | - 0.90 | - 1.77 | 0.74 |
| 318 | 4.39 | 1.20 | - 5.53 | - 0.80 | - 1.48 | - 0.64 |
| 340 | 2.56 | 0.81 | - 4.32 | - 0.52 | - 2.28 | - 1.01 |
| 361 | 3.51 | 0.93 | - 2.72 | - 0.23 | - 2.15 | - 0.85 |
| 382 | 4.11 | 1.04 | - 2.52 | - 0.23 | - 2.29 | - 0.92 |
| 403 | 4.97 | 1.21 | - 2.73 | - 0.18 | - 2.29 | - 0.87 |
| 424 | 5.21 | 1.28 | 0.58 | 0.27 | - 2.10 | - 0.82 |
| 445 | 6.83 | 1.46 * | - 0.26 | 0.11 | - 2.23 | - 0.74 |
| 466 | 8.01 | 1.57 * | - 0.69 | 0.02 | - 2.17 | - 0.69 |
| 487 | 9.91 | 1.86 ** | 0.66 | 0.16 | - 1.10 | - 0.60 |
| 508 | 13.89 | 2.38 *** | 3.44 | 0.43 | 0.05 | - 0.30 |
| 529 | 14.48 | 2.35 *** | 4.13 | 0.46 | 0.53 | - 0.19 |
| 550 | 14.08 | 2.34 *** | 4.93 | 0.46 | 0.03 | - 0.20 |
| 571 | 17.28 | 2.81 *** | 9.04 | 0.74 | 2.94 | 0.30 |
| 592 | 15.99 | 2.65 *** | 8.26 | 0.61 | 3.52 | 0.48 |
| 613 | 17.00 | 2.66 *** | 11.28 | 0.89 | 4.36 | 0.72 |
| 635 | 17.73 | 2.73 *** | 13.14 | 1.08 | 3.66 | 0.64 |
| 656 | 17.62 | 2.66 *** | 14.48 | 1.11 | 5.25 | 0.95 |
| 677 | 18.39 | 2.64 *** | 15.19 | 1.11 | 7.18 | 1.24 |
| 698 | 19.46 | 2.74 *** | 14.71 | 1.06 | 7.81 | 1.37 * |
| 719 | 20.10 | 2.80 *** | 13.58 | 1.02 | 8.65 | 1.45 * |
| 740 | 22.53 | 3.01 *** | 16.64 | 1.11 | 9.58 | 1.64 * |
| 762 | 23.39 | 3.08 *** | 15.92 | 1.04 | 9.39 | 1.56 * |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 15

**Daily Mean Differences of Average Abnormal Returns (DARs) and Z-values between
Related and Unrelated Investments for the Period -5 Days before to +5 Days
after the Announcement Date
Overall Sample**

| Daily Mean Differences (DARs) and Z-values between Related Investments (N=640) and Unrelated Investments (N=225) | | |
|---|----------------------------|----------------------------|
| Day | DAR^a (%) | Z-value^b |
| -5 | 0.02 | 0.48 |
| -4 | -0.22 | -1.51 * |
| -3 | 0.10 | 0.86 |
| -2 | 0.03 | 0.49 |
| -1 | -0.29 | -0.79 |
| 0 | -0.05 | 0.41 |
| +1 | 0.28 | 2.61 *** |
| +2 | -0.20 | -1.64 ** |
| +3 | 0.11 | 0.50 |
| +4 | -0.04 | -0.29 |
| +5 | 0.08 | -0.31 |

a $DAR = AAR_1 - AAR_2$, where 1 represents firms in group 1 and 2 represents firms in group 2.

b $Z\text{-value} = (ASAR_1 - ASAR_2) / \sqrt{(1/N_1 + 1/N_2)}$, where N_1 and N_2 represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 16

**Differences of Compounded Abnormal Returns (DCMAR) and Z-values of
U.S. FDI Firms for Periods up to Three Years.
Overall Sample by Industry Diversification**

| Differences of Compounded Abnormal Returns (DCMAR) and Z-values between Related Investments (N=378) and Unrelated Investments (N=146) | | |
|--|------------------------------|----------------------------|
| Year | DCMAR^a (%) | Z-value^b |
| 1 year | 1.84 | - 0.33 |
| 2 year | - 1.83 | - 0.32 |
| 3 year | - 4.04 | - 0.68 |

a DCMAR=CMAR₁-CMAR₂, where 1 represents firms in group 1 and 2 represents firms in group 2.

b Z-value= (ASAR₁ - ASAR₂) / $\sqrt{(1/N_1 + 1/N_2)}$, where N₁ and N₂ represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 17

**Daily Average Abnormal Returns (AR) from the Market Model and Z-values for U.S. FDI Firms
from Five Days before and Five Days after the Announcement Date
Overall Sample by Industry Diversification**

| Day | Unrelated Investments (N=225) | | Related Investments (N=640) | |
|-----|----------------------------------|---------|--------------------------------|---------|
| | AR (%) | Z-value | AR (%) | Z-value |
| -5 | -0.02 | -0.2 | 0.00 | 0.6 |
| -4 | 0.18 | 1.4 * | -0.04 | -0.6 |
| -3 | -0.12 | -1.3 * | -0.02 | -0.5 |
| -2 | -0.15 | -1.4 * | -0.12 | -1.4 * |
| -1 | 0.24 | 0.5 | -0.05 | -0.7 |
| 0 | 0.15 | 0.3 | 0.10 | 1.3 * |
| +1 | -0.15 | -2.2 ** | 0.13 | 1.4 * |
| +2 | 0.14 | 1.2 | -0.06 | -1.2 |
| +3 | -0.10 | -0.7 | 0.01 | -0.2 |
| +4 | -0.04 | -0.2 | -0.08 | -0.9 |
| +5 | -0.06 | 0.3 | 0.02 | -0.1 |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 18

**Compounded Abnormal Returns (CMAR) and Z-values of
U.S. FDI Firms for Periods up to Three Years
Overall Sample by Industry Diversification**

| Day | Unrelated Investments (N=146) | | Related Investments (N=378) | |
|-----|----------------------------------|----------|--------------------------------|----------|
| | CMAR (%) | Z-value | CMAR (%) | Z-value |
| 0 | -0.16 | - 1.00 | 0.02 | - 0.26 |
| 21 | - 0.73 | - 1.10 | 0.15 | 0.19 |
| 42 | - 0.79 | - 0.70 | 0.62 | 1.48 |
| 63 | - 1.25 | - 0.79 | 0.28 | 0.87 |
| 85 | - 1.27 | - 0.71 | 0.08 | 0.47 |
| 106 | - 1.83 | - 0.91 | 0.27 | 0.70 |
| 127 | - 3.08 | - 1.27 | - 0.15 | 0.44 |
| 148 | - 3.30 | - 1.24 | - 0.17 | 0.53 |
| 170 | - 3.40 | - 1.20 | - 0.63 | 0.30 |
| 191 | - 2.81 | - 0.74 | - 1.41 | - 0.27 |
| 212 | - 3.83 | - 0.95 | - 1.58 | - 0.35 |
| 233 | - 2.43 | - 0.41 | - 1.59 | - 0.35 |
| 254 | - 2.50 | 0.40 | - 0.66 | 0.01 |
| 275 | - 1.04 | 0.07 | - 0.96 | - 0.28 |
| 296 | - 0.74 | 0.06 | - 1.09 | - 0.40 |
| 318 | - 0.93 | - 0.02 | - 0.37 | - 0.16 |
| 340 | - 1.34 | 0.02 | - 1.22 | - 0.61 |
| 361 | - 0.91 | 0.11 | - 0.56 | - 0.32 |
| 382 | - 0.92 | 0.12 | - 0.39 | - 0.32 |
| 403 | - 0.84 | 0.11 | - 0.16 | - 0.14 |
| 424 | 0.27 | 0.27 | 0.42 | 0.06 |
| 445 | 0.55 | 0.35 | 0.60 | 0.12 |
| 466 | 1.71 | 0.53 | 0.52 | 0.06 |
| 487 | 2.67 | 0.60 | 2.01 | 0.34 |
| 508 | 5.67 | 0.91 | 3.84 | 0.86 |
| 529 | 7.82 | 1.21 | 3.78 | 0.77 |
| 550 | 7.75 | 1.23 | 3.45 | 0.74 |
| 571 | 13.49 | 1.99 ** | 5.64 | 1.13 |
| 592 | 13.10 | 2.00 ** | 5.61 | 1.13 |
| 613 | 17.34 | 2.44 *** | 5.68 | 1.19 |
| 635 | 15.75 | 2.19 *** | 6.50 | 1.43 * |
| 656 | 16.19 | 2.13 *** | 7.82 | 1.70 ** |
| 677 | 17.24 | 2.25 *** | 9.39 | 1.88 ** |
| 698 | 16.88 | 2.30 *** | 10.32 | 2.00 ** |
| 719 | 15.47 | 2.20 *** | 11.52 | 2.15 *** |
| 740 | 18.23 | 2.40 *** | 12.78 | 2.36 *** |
| 762 | 17.22 | 2.28 *** | 13.18 | 2.38 *** |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 19

Daily Mean Differences of Average Abnormal Returns (DARs) and Z-values between Experience Levels in the Host Country for the Period -5 Days before to +5 Days after the Announcement Date Overall Sample

| Day | Daily Mean Differences (DARs) and Z-values between Operating in Host Countries (N=444) and Not Operating in Host Countries (N=388) | | Daily Mean Differences (DARs) and Z-values between Operating in Host Countries (N=444) and Going Abroad for the First Time (N=33) | |
|-----|--|----------------------|---|----------------------|
| | DAR ^a (%) | Z-value ^b | DAR ^a (%) | Z-value ^b |
| -5 | 0.09 | 1.12 | 0.03 | - 0.03 |
| -4 | 0.05 | - 0.07 | - 0.61 | - 1.47 * |
| -3 | - 0.06 | - 0.74 | - 0.33 | - 0.75 |
| -2 | 0.05 | - 0.08 | - 0.16 | - 0.08 |
| -1 | 0.07 | 0.37 | 0.02 | 0.10 |
| 0 | 0.33 | 1.87 ** | 0.10 | - 0.41 |
| +1 | - 0.14 | - 0.51 | 0.18 | 1.32 * |
| +2 | - 0.08 | - 0.40 | - 0.59 | - 1.75 ** |
| +3 | 0.09 | 0.53 | - 0.95 | - 2.71 *** |
| +4 | - 0.04 | - 0.61 | - 0.02 | 0.32 |
| +5 | 0.00 | 0.49 | 0.00 | 0.49 |

a DAR=AAR₁ -AAR₂, where 1 represents firms in group 1 and 2 represents firms in group 2.

b Z-value= (ASAR₁ - ASAR₂) / $\sqrt{(1/N_1 + 1/N_2)}$, where N₁ and N₂ represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 20

**Differences of Compounded Abnormal Returns (DCMARs) and Z-values of
U.S. FDI Firms for Periods up to Three Years.
Overall Sample by Host Country Experience**

| Year | DCMARs and Z-values between Operating in Host Countries (N=281) and Not Operating in Host Countries (N=229) | | DCMARs and Z-values between Operating in Host Countries (N=281) and Going Abroad for the First Time (N=11) | |
|--------|--|----------------------|---|-----------------------|
| | DCMAR ^a (%) | Z-value ^b | DCMAR ^a (%) | Z-values ^b |
| 1 year | 4.48 | 1.58 * | - 5.50 | 0.05 |
| 2 year | 1.10 | 0.88 | 11.58 | 0.83 |
| 3 year | 13.46 | 1.83 ** | 7.62 | 0.59 |

a DCMAR=CMAR₁-CMAR₂, where 1 represents firms in group 1 and 2 represents firms in group 2.

b Z-value= (ASAR₁ - ASAR₂) / $\sqrt{(1/N_1 + 1/N_2)}$, where N₁ and N₂ represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 21

**Daily Average Abnormal Returns (AR) from the Market Model and Z-values for U.S. FDI Firms
from Five Days before and Five Days after the Announcement Date
Overall Sample by Host Country Experience**

| Day | Operating in Host Countries (N=444) | | Not Operating in Host Countries (N=388) | | Going Abroad for the First Time (N=33) | |
|-----|--|---------|--|---------|---|---------|
| | AR (%) | Z-value | AR (%) | Z-value | AR (%) | Z-value |
| -5 | 0.04 | 1.0 | -0.05 | -0.6 | 0.01 | 0.3 |
| -4 | 0.01 | -0.1 | -0.04 | 0.0 | 0.62 | 1.5 * |
| -3 | -0.09 | -1.4 * | -0.03 | -0.3 | 0.24 | 0.4 |
| -2 | -0.11 | -1.4 * | -0.16 | -1.2 | 0.05 | -0.3 |
| -1 | 0.05 | 0.0 | -0.02 | -0.5 | 0.03 | -0.1 |
| 0 | 0.27 | 2.1 ** | -0.06 | -0.6 | 0.17 | 1.0 |
| +1 | 0.00 | -0.1 | 0.14 | 0.6 | -0.18 | -1.4 * |
| +2 | -0.07 | -0.8 | 0.01 | -0.2 | 0.52 | 1.6 * |
| +3 | -0.01 | -0.4 | -0.10 | -1.1 | 0.94 | 2.7 *** |
| +4 | -0.09 | -1.0 | -0.05 | -0.1 | -0.07 | -0.6 |
| +5 | 0.00 | 0.4 | 0.00 | -0.3 | -0.00 | -0.4 |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 22

**Compounded Abnormal Returns (CMAR) and Z-values of
U.S. FDI Firms for Periods up to Three Years.
Overall Sample by Host Country Experience**

| Day | Operating in Host Countries (N=281) | | Not Operating in Host Countries (N=229) | | Going Abroad for the First Time (N=11) | |
|-----|-------------------------------------|----------|---|----------|--|---------|
| | CMAR(%) | Z-value | CMAR (%) | Z-value | CMAR (%) | Z-value |
| 0 | -0.11 | -0.97 | 0.08 | 0.12 | -0.34 | -0.97 |
| 21 | -0.41 | -0.87 | 0.35 | 0.49 | -2.71 | -1.00 |
| 42 | -0.27 | 0.12 | 0.55 | 0.90 | 3.64 | 0.80 |
| 63 | -0.69 | 0.01 | 0.14 | 0.17 | 4.62 | 0.72 |
| 85 | -1.04 | -0.19 | 0.08 | -0.07 | 7.61 | 0.87 |
| 106 | -0.64 | 0.35 | -0.52 | -0.56 | 8.49 | 1.03 |
| 127 | -0.77 | 0.35 | -1.81 | -1.13 | 7.44 | 0.78 |
| 148 | -0.44 | 0.58 | -2.33 | -1.21 | 5.05 | 0.55 |
| 170 | -0.24 | 0.71 | -3.34 | -1.54 * | 2.82 | 0.13 |
| 191 | 0.29 | 0.84 | -4.85 | -2.02 ** | 2.23 | 0.08 |
| 212 | -0.01 | 0.74 | -5.21 | -2.09 ** | 1.24 | -0.08 |
| 233 | -0.09 | 0.79 | -4.52 | -1.70 ** | -1.16 | -0.35 |
| 254 | 0.53 | 0.84 | -3.95 | -1.37 * | 6.03 | 0.12 |
| 275 | 0.48 | 0.74 | -3.20 | -1.18 | 0.72 | -0.23 |
| 296 | 0.80 | 0.78 | -3.60 | -1.37 * | -0.01 | -0.33 |
| 318 | 0.86 | 0.78 | -2.79 | -1.18 | -2.68 | -0.43 |
| 340 | 0.63 | 0.64 | -4.20 | -1.57 ** | -2.38 | -0.43 |
| 361 | 0.79 | 0.73 | -3.13 | -1.25 | -0.35 | -0.28 |
| 382 | 0.99 | 0.71 | -3.11 | -1.21 | -0.55 | -0.33 |
| 403 | 1.62 | 0.80 | -3.39 | -1.07 | -2.49 | -0.41 |
| 424 | 1.99 | 0.98 | -2.18 | -0.88 | -3.13 | -0.40 |
| 445 | 1.88 | 0.95 | -1.59 | -0.71 | -6.81 | -0.57 |
| 466 | 2.55 | 1.07 | -1.67 | -0.73 | -9.14 | -0.69 |
| 487 | 3.59 | 1.20 | -0.11 | -0.49 | -6.98 | -0.58 |
| 508 | 4.53 | 1.44 * | 3.43 | 0.11 | -7.05 | -0.56 |
| 529 | 5.58 | 1.58 * | 3.43 | 0.09 | -5.98 | -0.49 |
| 550 | 4.92 | 1.45 * | 3.70 | 0.22 | -5.84 | -0.47 |
| 571 | 7.09 | 1.88 ** | 8.21 | 0.84 | -3.13 | -0.34 |
| 592 | 8.34 | 2.06 ** | 6.27 | 0.64 | -1.05 | -0.26 |
| 613 | 9.83 | 2.30 *** | 7.02 | 0.77 | 3.03 | -0.11 |
| 635 | 10.94 | 2.34 *** | 6.63 | 0.78 | 7.03 | 0.00 |
| 656 | 11.96 | 2.55 *** | 6.29 | 0.78 | 18.32 | -0.35 |
| 677 | 14.63 | 2.84 *** | 6.19 | 0.79 | 19.82 | 0.39 |
| 698 | 15.54 | 2.93 *** | 6.33 | 0.87 | 17.72 | 0.31 |
| 719 | 16.23 | 3.09 *** | 6.58 | 0.83 | 16.24 | 0.24 |
| 740 | 18.37 | 3.38 *** | 7.69 | 0.93 | 15.38 | 0.20 |
| 762 | 19.59 | 3.51 *** | 6.13 | 0.71 | 11.97 | 0.09 |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 23

Daily Mean Differences of Average Abnormal Returns (DARs) and Z-values between Highly Developed, Developed, and Less-Developed Countries for the Period -5 Days before to +5 Days after the Announcement Date Acquisition Sample

| DAY | Daily Mean Differences (DARs) and Z-values between Highly Developed (N=373) and Developed (N=99) Countries | | Daily Mean Differences (DARs) and Z-values between Highly Developed (N=373) and Less-Developed (N=90) Countries | |
|-----|--|----------------------|---|----------------------|
| | DAR ^a (%) | Z-value ^b | DAR ^a (%) | Z-value ^b |
| -5 | 0.38 | 1.87 ** | -0.27 | -0.99 |
| -4 | -0.02 | -0.32 | -0.05 | -0.94 |
| -3 | -0.26 | -1.31 | -0.02 | -0.30 |
| -2 | 0.23 | 0.16 | 0.26 | 0.64 |
| -1 | 0.14 | 0.54 | 0.08 | 0.71 |
| 0 | -0.26 | -1.06 | -0.10 | -1.26 |
| +1 | -0.31 | -1.75 ** | -0.37 | -1.11 |
| +2 | -0.01 | -0.40 | -0.09 | -0.67 |
| +3 | -0.22 | -0.95 | 0.14 | 0.05 |
| +4 | 0.03 | 0.50 | 0.36 | 1.83 ** |
| +5 | 0.07 | 0.54 | 0.00 | 0.54 |

a DAR=AAR₁-AAR₂, where 1 represents firms in group 1 and 2 represents firms in group 2.

b Z-value= (ASAR₁ - ASAR₂) / $\sqrt{(1/N_1 + 1/N_2)}$, where N₁ and N₂ represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 24

**Differences of Compounded Abnormal Returns (DCMAR) and Z-values of
U.S. FDI Firms for Periods up to Three Years.
Acquisition Sample by Economic Development**

| Year | DCMARs and Z-values between Highly Developed Countries (N=237) and Developed Countries (N=67) | | DCMARs and Z-values between Highly Developed Countries (N=237) and Less-Developed Countries (N=66) | |
|--------|---|----------------------|--|-----------------------|
| | DCMAR ^a (%) | Z-value ^b | DCMAR ^a (%) | Z-values ^b |
| 1 year | 0.48 | 0.10 | - 4.43 | - 0.38 |
| 2 year | - 14.35 | - 1.08 | - 25.77 | - 1.85 ** |
| 3 year | - 20.56 | - 0.72 | - 27.52 | - 1.48 * |

a $DCMAR = CMAR_1 - CMAR_2$, where 1 represents firms in group 1 and 2 represents firms in group 2.

b $Z\text{-value} = (ASAR_1 - ASAR_2) / \sqrt{(1/N_1 + 1/N_2)}$, where N_1 and N_2 represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 25

**Daily Average Abnormal Returns (AR) from the Market Model and Z-values for U.S. FDI Firms
from Five Days before and Five Days after the Announcement Date
Acquisition Sample by Economic Development**

| Day | Less-Developed Countries (N=90) | | Developed Countries (N=99) | | Highly Developed Countries (N=373) | |
|-----|------------------------------------|---------|-------------------------------|---------|--|---------|
| | AR (%) | Z-value | AR (%) | Z-value | AR (%) | Z-value |
| -5 | 0.27 | 1.2 | -0.38 | -1.9 ** | 0.00 | 0.4 |
| -4 | 0.00 | 0.7 | -0.03 | -0.0 | -0.05 | -0.7 |
| -3 | -0.10 | -0.4 | 0.14 | 0.7 | -0.12 | -1.5 * |
| -2 | -0.31 | -1.2 | -0.28 | -0.8 | -0.05 | -1.2 |
| -1 | 0.00 | -0.6 | -0.06 | -0.4 | 0.08 | 0.4 |
| 0 | 0.18 | 1.5 * | 0.34 | 1.2 | 0.08 | 0.2 |
| +1 | 0.27 | 0.5 | 0.21 | 1.1 | -0.10 | -1.5 * |
| +2 | 0.14 | 0.8 | 0.06 | 0.5 | 0.05 | 0.1 |
| +3 | -0.21 | -0.6 | 0.15 | 0.5 | -0.07 | -1.1 |
| +4 | -0.33 | -1.7 ** | 0.00 | -0.2 | 0.03 | 0.7 |
| +5 | -0.03 | -0.5 | -0.10 | -0.5 | -0.03 | 0.2 |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 26

**Compounded Abnormal Returns (CMAR) and Z-values of
U.S. FDI Firms for Periods up to Three Years.
Acquisition Sample by Economic Development**

| Day | Less-Developed Countries (N=66) | | Developed Countries (N=67) | | Highly Developed Countries (N=237) | |
|-----|------------------------------------|---------|-------------------------------|----------|---------------------------------------|----------|
| | CMAR % | Z-value | CMAR % | Z-value | CMAR % | Z-value |
| 0 | 0.49 | 1.56 * | -0.41 | -1.26 | -0.21 | -1.28 |
| 21 | 0.79 | 0.90 | -1.64 | -0.96 | -0.64 | -1.58 * |
| 42 | 0.76 | 0.93 | -2.18 | -1.10 | -0.33 | -0.38 |
| 63 | 0.26 | 0.14 | -3.06 | -1.06 | -0.73 | -0.51 |
| 85 | -0.09 | -0.06 | -3.52 | -1.07 | -0.37 | -0.17 |
| 106 | -0.29 | -0.23 | -4.28 | -1.19 | -1.08 | -0.65 |
| 127 | -1.11 | -0.46 | -5.93 | -1.57 * | -1.58 | -0.66 |
| 148 | -0.93 | -0.33 | -6.89 | -1.72 ** | -1.63 | -0.48 |
| 170 | -1.43 | -0.35 | -5.69 | -1.16 | -1.98 | -0.53 |
| 191 | -0.53 | -0.17 | -6.05 | -1.15 | -2.85 | -0.92 |
| 212 | -1.69 | -0.47 | -6.05 | -1.17 | -3.43 | -1.06 |
| 233 | -1.00 | -0.36 | -6.77 | -1.20 | -3.77 | -1.04 |
| 254 | 0.46 | -0.12 | -4.45 | -0.67 | -3.97 | -1.04 |
| 275 | 1.02 | -0.01 | -4.77 | -0.75 | -3.74 | -1.05 |
| 296 | 2.52 | 0.17 | -5.93 | -0.94 | -4.22 | -1.21 |
| 318 | 5.05 | 0.48 | -4.65 | -0.73 | -4.74 | -1.23 |
| 340 | 1.77 | 0.04 | -3.28 | -0.48 | -6.19 | -1.65 ** |
| 361 | 0.97 | -0.11 | -1.66 | -0.24 | -6.39 | -1.60 * |
| 382 | 2.43 | 0.11 | -1.11 | -0.18 | -7.40 | -1.74 ** |
| 403 | 3.69 | 0.29 | -0.77 | -0.06 | -7.82 | -1.71 ** |
| 424 | 5.01 | 0.49 | 2.70 | 0.33 | -7.83 | -1.58 * |
| 445 | 6.89 | 0.62 | 1.49 | 0.13 | -8.23 | -1.59 * |
| 466 | 8.63 | 0.71 | 1.18 | 0.13 | -7.81 | -1.42 * |
| 487 | 11.56 | 0.96 | 3.66 | 0.38 | -8.17 | -1.40 * |
| 508 | 17.93 | 1.45 * | 6.51 | 0.58 | -7.84 | -1.22 |
| 529 | 18.96 | 1.46 * | 6.58 | 0.54 | -7.44 | -1.06 |
| 550 | 17.21 | 1.31 * | 7.16 | 0.54 | -7.77 | -1.07 |
| 571 | 20.09 | 1.55 * | 12.34 | 0.84 | -6.61 | -0.71 |
| 592 | 17.82 | 1.39 * | 11.37 | 0.69 | -5.66 | -0.53 |
| 613 | 20.90 | 1.56 * | 15.12 | 0.96 | -4.46 | -0.30 |
| 635 | 22.07 | 1.64 * | 16.37 | 1.06 | -6.01 | -0.51 |
| 656 | 21.16 | 1.55 * | 18.16 | 1.11 | -4.17 | -0.14 |
| 677 | 22.93 | 1.64 * | 18.89 | 1.12 | -2.65 | 0.11 |
| 698 | 23.57 | 1.69 ** | 18.04 | 1.06 | -2.38 | 0.19 |
| 719 | 22.54 | 1.63 * | 16.85 | 1.06 | -1.83 | 0.32 |
| 740 | 26.04 | 1.85 ** | 20.32 | 1.14 | -0.24 | 0.56 |
| 762 | 26.51 | 1.91 ** | 19.55 | 1.06 | -1.01 | 0.45 |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 27

Daily Mean Differences of Average Abnormal Returns (DARs) and Z-values between Related and Unrelated Investments for the Period -5 Days before to +5 Days after the Announcement Date Acquisition Sample

| Daily Mean Differences (DARs) and Z-values between Related Investments (N=372) and Unrelated Investments (N=198) | | |
|---|----------------------------|----------------------------|
| Day | DAR^a (%) | Z-value^b |
| -5 | - 0.16 | - 0.82 |
| -4 | - 0.24 | - 1.62 * |
| -3 | 0.05 | 0.49 |
| -2 | 0.09 | 0.67 |
| -1 | - 0.24 | - 0.68 |
| 0 | 0.08 | 1.36 * |
| +1 | 0.30 | 2.59 *** |
| +2 | - 0.27 | - 1.95 ** |
| +3 | 0.06 | 0.21 |
| +4 | 0.05 | 0.04 |
| +5 | 0.04 | - 0.22 |

a $DAR = AAR_1 - AAR_2$, where 1 represents firms in group 1 and 2 represents firms in group 2.

b $Z\text{-value} = (ASAR_1 - ASAR_2) / \sqrt{(1/N_1 + 1/N_2)}$, where N_1 and N_2 represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 28

**Differences of Compounded Abnormal Returns (DCMARs) and Z-values of
U.S. FDI Firms for Periods up to Three Years.
Acquisition Sample by Industry Diversification**

| Differences of Compounded Abnormal Returns (DCMARs) and Z-values between Related Investments (N=242) and Unrelated Investments (N=128) | | |
|---|------------------------------|----------------------------|
| Year | DCMAR^a (%) | Z-value^b |
| 1 year | - 1.40 | - 0.07 |
| 2 year | - 12.29 | - 1.09 |
| 3 year | - 18.09 | - 1.44 * |

a $DCMAR = CMAR_1 - CMAR_2$, where 1 represents firms in group 1 and 2 represents firms in group 2.

b $Z\text{-value} = (ASAR_1 - ASAR_2) / \sqrt{(1/N_1 + 1/N_2)}$, where N_1 and N_2 represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 29

**Daily Average Abnormal Returns (AR) from the Market Model and Z-values for U.S. FDI Firms
from Five Days before and Five Days after the Announcement Date
Acquisition Sample by Industry Diversification**

| Day | Unrelated Investments (N=198) | | Related Investments (N=372) | |
|-----|----------------------------------|----------|--------------------------------|---------|
| | AR (%) | Z-value | AR (%) | Z-value |
| -5 | 0.10 | 0.8 | -0.06 | -0.3 |
| -4 | 0.12 | 1.2 | -0.12 | -1.1 |
| -3 | -0.09 | -0.9 | -0.04 | -0.4 |
| -2 | -0.19 | -1.7 ** | -0.10 | -1.2 |
| -1 | 0.19 | 0.4 | -0.05 | -0.6 |
| 0 | 0.09 | -0.3 | 0.17 | 1.9 ** |
| +1 | -0.19 | -2.4 *** | 0.11 | 1.1 |
| +2 | 0.24 | 1.9 ** | -0.03 | -0.7 |
| +3 | -0.09 | -0.7 | -0.03 | -0.6 |
| +4 | -0.06 | -0.2 | -0.01 | -0.2 |
| +5 | -0.05 | 0.2 | -0.01 | -0.1 |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 30

**Compounded Abnormal Returns (CMAR) and Z-values of
U.S. FDI Firms for Periods up to Three Years.
Acquisition Sample by Industry Diversification**

| Day | Unrelated Investments (N=128) | | Related Investments (N=242) | |
|-----|----------------------------------|----------|--------------------------------|---------|
| | CMAR (%) | Z-value | CMAR (%) | Z-value |
| 0 | -0.38 | -1.06 | 0.02 | -0.37 |
| 21 | -1.24 | -1.83 ** | -0.20 | -0.27 |
| 42 | -1.32 | -1.31 * | -0.02 | 0.47 |
| 63 | -1.56 | -1.06 | -0.67 | -0.21 |
| 85 | -1.10 | -0.69 | -0.78 | -0.26 |
| 106 | -1.65 | -0.97 | -1.45 | -0.68 |
| 127 | -2.71 | -1.21 | -2.06 | -0.85 |
| 148 | -2.85 | -1.13 | -2.25 | -0.73 |
| 170 | -2.64 | -1.01 | -2.51 | -0.60 |
| 191 | -2.54 | -0.82 | -3.26 | -1.00 |
| 212 | -3.67 | -1.12 | -3.56 | -1.10 |
| 233 | -2.22 | -0.61 | -4.66 | -1.41 * |
| 254 | -2.35 | -0.63 | -3.75 | -0.98 |
| 275 | -1.13 | -0.31 | -4.10 | -1.21 |
| 296 | -0.78 | -0.33 | -4.68 | -1.36 * |
| 318 | -0.99 | -0.40 | -4.03 | -1.06 |
| 340 | -1.55 | -0.39 | -5.67 | -1.58 * |
| 361 | -1.11 | -0.31 | -5.87 | -1.53 * |
| 382 | -1.02 | -0.26 | -6.35 | -1.57 * |
| 403 | -0.60 | -0.18 | -6.54 | -1.45 * |
| 424 | 1.03 | 0.11 | -6.09 | -1.21 |
| 445 | 1.19 | 0.13 | -6.40 | -1.28 |
| 466 | 2.42 | 0.33 | -6.25 | -1.21 |
| 487 | 3.86 | 0.50 | -5.87 | -1.05 |
| 508 | 7.39 | 0.82 | -4.90 | -0.73 |
| 529 | 9.98 | 1.20 | -5.58 | -0.88 |
| 550 | 9.53 | 1.11 | -5.97 | -0.90 |
| 571 | 14.48 | 1.68 ** | -5.24 | -0.68 |
| 592 | 14.59 | 1.74 ** | -5.25 | -0.70 |
| 613 | 19.43 | 2.22 *** | -4.76 | -0.58 |
| 635 | 17.85 | 1.99 ** | -4.78 | -0.53 |
| 656 | 18.65 | 2.01 ** | -3.15 | -0.21 |
| 677 | 19.85 | 2.14 *** | -1.62 | 0.01 |
| 698 | 18.99 | 2.12 *** | -0.95 | 0.09 |
| 719 | 17.07 | 1.98 ** | -0.01 | 0.29 |
| 740 | 20.52 | 2.23 *** | 1.64 | 0.50 |
| 762 | 19.46 | 2.12 *** | 1.37 | 0.46 |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 31

Daily Mean Differences of Average Abnormal Returns (DARs) and Z-values between Experience Levels in Host Country for the Period -5 Days before to +5 Days after the Announcement Date Acquisition Sample

| Day | Daily Mean Differences (DARs) and Z-values between Operating in Host Countries (N=346) and Not Operating in Host Countries (N=204) | | Daily Mean Differences (DARs) and Z-values between Operating in Host Countries (N=346) and Going Abroad for the First Time (N=20) | |
|-----|--|----------------------|---|----------------------|
| | DAR ^a (%) | Z-value ^b | DAR ^a (%) | Z-value ^b |
| -5 | 0.18 | 1.40 * | -0.16 | -0.06 |
| -4 | 0.22 | 1.12 | -0.56 | -0.78 |
| -3 | 0.03 | -0.25 | -0.23 | -0.19 |
| -2 | -0.01 | -0.34 | 0.57 | 1.18 |
| -1 | 0.19 | 1.38 * | 0.54 | 0.65 |
| 0 | 0.39 | 1.71 ** | -0.32 | -0.82 |
| +1 | -0.16 | -0.46 | 0.43 | 1.15 |
| +2 | -0.16 | -1.18 | -0.63 | -1.67 * |
| +3 | 0.11 | 0.53 | -0.83 | -1.91 ** |
| +4 | -0.03 | -0.10 | -0.37 | -0.36 |
| +5 | -0.01 | 0.26 | 0.34 | 0.85 |

a DAR=AAR₁-AAR₂, where 1 represents firms in group 1 and 2 represents firms in group 2.

b Z-value=(ASAR₁ - ASAR₂) / $\sqrt{(1/N_1 + 1/N_2)}$, where N₁ and N₂ represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 32

**Differences of Compounded Abnormal Returns (DCMAR) and Z-values of
U.S. FDI Firms for Periods up to Three Years.
Acquisition Sample by Experience in Host Country**

| Year | DCMARs and Z-values between Operating in Host Country (N=229) and Not Operating in Host Country (N=131) | | DCMARs and Z-values between Operating in Host Country (N=229) and Going Abroad for the First Time (N=10) | |
|--------|--|----------------------|---|-----------------------|
| | DCMAR ^a (%) | Z-value ^b | DCMAR ^a (%) | Z-values ^b |
| 1 year | 6.03 | 1.43 * | - 10.58 | - 0.37 |
| 2 year | 0.42 | 0.73 | - 0.47 | 0.28 |
| 3 year | 6.87 | 1.22 | - 12.37 | 0.01 |

a $DCMAR = CMAR_1 - CMAR_2$, where 1 represents firms in group 1 and 2 represents firms in group 2.

b $Z\text{-value} = (ASAR_1 - ASAR_2) / \sqrt{(1/N_1 + 1/N_2)}$, where N_1 and N_2 represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 33

**Daily Average Abnormal Returns (AR) from the Market Model and Z-values for U.S. FDI Firms
from Five Days before and Five Days after the Announcement Date
Acquisition Sample by Host Country Experience**

| Day | Operating in Host Countries (N=346) | | Not Operating in Host Countries (N=204) | | Going Abroad for the First Time (N=20) | |
|-----|--|---------|--|---------|---|---------|
| | AR (%) | Z-value | AR (%) | Z-value | AR (%) | Z-value |
| -5 | 0.05 | 1.0 | -0.13 | -1.0 | 0.21 | 0.3 |
| -4 | 0.02 | 0.4 | -0.20 | -1.1 | 0.58 | 0.9 |
| -3 | -0.05 | -0.8 | -0.08 | -0.3 | 0.18 | 0.0 |
| -2 | -0.12 | -1.6 * | -0.11 | -0.8 | -0.69 | -1.6 * |
| -1 | 0.12 | 0.7 | -0.07 | -1.2 | -0.42 | -0.5 |
| 0 | 0.27 | 1.9 ** | -0.12 | -0.7 | 0.59 | 1.3 * |
| +1 | -0.03 | -0.5 | 0.13 | 0.2 | -0.46 | -1.3 * |
| +2 | -0.01 | -0.5 | 0.15 | 1.1 | 0.62 | 1.6 * |
| +3 | -0.04 | -0.7 | -0.15 | -1.2 | 0.79 | 1.8 ** |
| +4 | -0.05 | -0.3 | -0.02 | -0.1 | 0.32 | 0.3 |
| +5 | -0.02 | 0.3 | -0.01 | -0.1 | -0.36 | -0.8 |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 34

**Compounded Abnormal Returns (CMAR) and Z-values of
U.S. FDI Firms for Periods up to Three Years.
Acquisition Sample by Host Country Experience**

| Day | Operating in Host Countries (N=229) | | Not Operating in Host Countries (N=131) | | Going Abroad for the First Time (N=10) | |
|-----|-------------------------------------|---------|---|-----------|--|---------|
| | CMAR(%) | Z-value | CMAR (%) | Z-value | CMAR (%) | Z-value |
| 0 | -0.17 | -1.29 | 0.00 | -0.48 | -0.53 | -1.26 |
| 21 | -0.72 | -1.29 | -0.14 | -0.23 | -2.53 | -0.86 |
| 42 | -0.88 | -0.78 | -0.10 | 0.13 | 4.07 | 0.85 |
| 63 | -1.37 | -0.71 | -0.75 | -0.60 | 5.08 | 0.75 |
| 85 | -1.85 | -0.98 | 0.08 | 0.02 | 8.35 | 0.91 |
| 106 | -1.90 | -0.88 | -1.68 | -1.02 | 9.26 | 1.06 |
| 127 | -2.04 | -0.75 | -3.58 | -1.63 * | 9.17 | 0.96 |
| 148 | -1.89 | -0.53 | -4.20 | -1.65 ** | 7.49 | 0.83 |
| 170 | -1.27 | -0.05 | -5.41 | -1.84 ** | 5.32 | 0.40 |
| 191 | -0.90 | 0.05 | -7.30 | -2.34 *** | 4.83 | 0.35 |
| 212 | -1.44 | -0.14 | -7.96 | -2.47 *** | 4.10 | 0.19 |
| 233 | -1.62 | -0.13 | -8.02 | -2.30 *** | 0.92 | -0.16 |
| 254 | -1.41 | -0.13 | -7.44 | -1.89 ** | 9.17 | 0.35 |
| 275 | -1.92 | -0.32 | -5.61 | -1.53 * | 3.67 | -0.00 |
| 296 | -1.67 | -0.21 | -6.76 | -1.88 ** | 3.80 | -0.05 |
| 318 | -1.08 | -0.03 | -6.58 | -1.74 ** | 0.63 | -0.18 |
| 340 | -1.65 | -0.23 | -9.17 | -2.17 *** | 0.92 | -0.20 |
| 361 | -1.71 | -0.19 | -9.19 | -2.13 *** | 3.40 | -0.04 |
| 382 | -1.96 | -0.21 | -9.61 | -2.10 *** | 3.92 | -0.06 |
| 403 | -1.74 | -0.13 | -9.79 | -1.94 ** | 1.89 | -0.15 |
| 424 | -1.22 | 0.14 | -8.22 | -1.69 ** | 1.38 | -0.14 |
| 445 | -1.64 | 0.03 | -7.63 | -1.56 * | -2.15 | -0.30 |
| 466 | -1.09 | 0.17 | -6.91 | -1.42 * | -4.85 | -0.44 |
| 487 | -0.92 | 0.25 | -5.37 | -1.19 | -1.18 | -0.28 |
| 508 | -0.51 | 0.38 | -0.93 | -0.63 | -0.04 | -0.21 |
| 529 | -0.25 | 0.47 | -0.22 | -0.59 | 1.35 | -0.13 |
| 550 | -0.72 | 0.37 | -0.59 | -0.58 | 1.73 | -0.11 |
| 571 | 1.31 | 0.84 | 1.85 | -0.37 | 4.53 | 0.00 |
| 592 | 1.68 | 0.88 | 1.07 | -0.42 | 7.17 | 0.08 |
| 613 | 3.06 | 1.11 | 3.94 | -0.12 | 11.89 | 0.24 |
| 635 | 2.38 | 0.97 | 3.22 | -0.14 | 16.11 | 0.34 |
| 656 | 4.23 | 1.25 | 2.83 | -0.15 | 28.69 | 0.70 |
| 677 | 5.99 | 1.48 * | 3.62 | -0.04 | 30.39 | 0.74 |
| 698 | 6.78 | 1.56 * | 2.81 | -0.03 | 27.88 | 0.64 |
| 719 | 7.32 | 1.69 ** | 1.86 | -0.04 | 26.34 | 0.56 |
| 740 | 9.64 | 1.97 ** | 4.25 | 0.13 | 25.78 | 0.52 |
| 762 | 9.72 | 1.99 ** | 2.85 | -0.03 | 22.09 | 0.41 |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 35

Daily Mean Differences of Average Abnormal Returns (DARs) and Z-values between Control Levels in the Target Firm for the Period -5 Days before to +5 Days after the Announcement Date Acquisition Sample

| Day | Daily Mean Differences (DARs) and Z-values between Minority Control in the Target Firm (N=36) and Higher Minority Control in the Target Firm (N=62) | | Daily Mean Differences (DARs) and Z-values between Minority Control in the Target Firm (N=36) and Majority Control in the Target Firm (N=472) | |
|-----|---|----------------------|---|----------------------|
| | DAR ^a (%) | Z-value ^b | DAR ^a (%) | Z-value ^b |
| -5 | 0.63 | 1.33 * | 0.67 | 1.60 * |
| -4 | -0.77 | -1.45 * | -0.94 | -2.28 *** |
| -3 | 0.07 | 0.30 | -0.09 | 0.19 |
| -2 | 0.46 | 0.75 | 0.36 | 0.58 |
| -1 | -0.10 | 0.14 | -0.10 | -0.17 |
| 0 | -0.94 | -2.23 * ** | -1.05 | -2.98 *** |
| +1 | 0.24 | 0.21 | 0.52 | 1.04 |
| +2 | 0.46 | 1.44 * | 0.19 | 1.00 |
| +3 | 0.12 | -0.07 | -0.01 | -0.54 |
| +4 | -0.03 | -0.46 | 0.48 | 1.43 * |
| +5 | -0.30 | -0.24 | -0.24 | -0.32 |

a DAR=AAR₁-AAR₂, where 1 represents firms in group 1 and 2 represents firms in group 2.

b Z-value= (ASAR₁ - ASAR₂) / $\sqrt{(1/N_1 + 1/N_2)}$, where N₁ and N₂ represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 36

**Differences of Compounded Abnormal Returns (DCMAR) and Z-values of
U.S. FDI Firms for Periods up to Three Years.
Acquisition Sample by Control Level**

| Year | DCMARs and Z-values between Minority Control in the Target Firm (N=25) and Higher Minority Control in the Target Firm (N=47) | | DCMARs and Z-values between Minority Control in the Target Firm (N=25) and Majority Control in the Target Firm (N=297) | |
|--------|---|----------------------|---|-----------------------|
| | DCMAR ^a (%) | Z-value ^b | DCMAR ^a (%) | Z-values ^b |
| 1 year | 4.61 | 0.61 | - 1.08 | 0.11 |
| 2 year | 7.91 | 0.46 | 1.98 | 0.37 |
| 3 year | 11.49 | 0.29 | 6.95 | 0.42 |

a $DCMAR = CMAR_1 - CMAR_2$, where 1 represents firms in group 1 and 2 represents firms in group 2.

b $Z\text{-value} = (ASAR_1 - ASAR_2) / \sqrt{(1/N_1 + 1/N_2)}$, where N_1 and N_2 represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 37

**Daily Average Abnormal Returns (AR) from the Market Model and Z-values for U.S. FDI Firms
from Five Days before and Five Days after the Announcement Date
Acquisition Sample by Control Level**

| Day | Minority Control in the Target Firm (N=36) | | Higher Minority Control in the Target Firm (N=62) | | Majority Control in the Target Firm (N=472) | |
|-----|--|----------|---|---------|---|---------|
| | AR (%) | Z-value | AR (%) | Z-value | AR (%) | Z-value |
| -5 | 0.62 | 1.6 * | -0.01 | -0.1 | -0.05 | -0.2 |
| -4 | -0.90 | -2.2 *** | -0.13 | -0.5 | 0.04 | 0.6 |
| -3 | -0.12 | -0.0 | -0.19 | -0.5 | -0.03 | -0.7 |
| -2 | 0.21 | 0.1 | -0.25 | -1.1 | -0.15 | -1.8 ** |
| -1 | -0.06 | -0.2 | 0.04 | -0.5 | 0.04 | -0.1 |
| 0 | -0.83 | -2.5 *** | 0.11 | 0.4 | 0.22 | 2.0 ** |
| +1 | 0.47 | 0.8 | 0.23 | 0.7 | -0.05 | -1.0 |
| +2 | 0.27 | 1.2 | -0.19 | -0.8 | 0.08 | 0.6 |
| +3 | -0.05 | -0.7 | -0.17 | -0.8 | -0.04 | -0.5 |
| +4 | 0.36 | 1.1 | 0.39 | 2.2 *** | -0.12 | -1.4 * |
| +5 | -0.26 | -0.3 | 0.04 | 0.0 | -0.02 | 0.1 |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 38

**Compounded Abnormal Returns (CMAR) and Z-values of
U.S. FDI Firms for Periods up to Three Years.
Acquisition Sample by Control Level**

| Day | Minority Control in the Target Firm (N=25) | | Higher Minority Control in the Target Firm (N=47) | | Majority Control in the Target Firm (N=297) | |
|-----|--|---------|---|---------|---|---------|
| | CMAR(%) | Z-value | CMAR (%) | Z-value | CMAR (%) | Z-value |
| 0 | -0.13 | -0.29 | -0.36 | -1.27 | -0.08 | -1.11 |
| 21 | -2.24 | -0.82 | -1.21 | -1.10 | -0.28 | -0.70 |
| 42 | 0.15 | 0.49 | -2.01 | -0.99 | -0.25 | -0.14 |
| 63 | -0.06 | 0.41 | -3.68 | -1.44 * | -0.58 | -0.39 |
| 85 | -0.99 | -0.06 | -3.48 | -0.94 | -0.44 | -0.27 |
| 106 | -3.64 | -0.51 | -4.11 | -1.08 | -0.92 | -0.67 |
| 127 | -5.52 | -0.85 | -4.80 | -1.14 | -1.58 | -0.83 |
| 148 | -5.07 | -0.65 | -4.86 | -0.96 | -1.83 | -0.81 |
| 170 | -2.92 | -0.19 | -4.92 | -1.07 | -2.12 | -0.69 |
| 191 | -3.62 | -0.25 | -7.93 | -1.56 * | -2.13 | -0.72 |
| 212 | -4.07 | -0.28 | -7.56 | -1.34 * | -2.87 | -1.09 |
| 233 | -4.19 | -0.19 | -7.20 | -1.10 | -3.18 | -1.14 |
| 254 | -3.46 | -0.11 | -8.07 | -1.19 | -2.38 | -0.76 |
| 275 | -2.72 | 0.01 | -6.98 | -0.92 | -2.39 | -0.90 |
| 296 | -0.94 | 0.25 | -7.94 | -1.07 | -2.70 | -1.06 |
| 318 | -2.88 | -0.03 | -6.11 | -0.75 | -2.40 | -0.88 |
| 340 | -6.57 | -0.39 | -7.61 | -0.94 | -3.41 | -1.16 |
| 361 | -5.05 | -0.23 | -8.86 | -1.01 | -3.28 | -1.09 |
| 382 | -5.77 | -0.33 | -7.94 | -0.80 | -3.72 | -1.14 |
| 403 | -4.68 | -0.18 | -7.17 | -0.68 | -3.89 | -1.06 |
| 424 | -4.98 | -0.15 | -8.84 | -0.88 | -2.53 | -0.59 |
| 445 | -4.01 | -0.06 | -5.80 | -0.44 | -3.28 | -0.84 |
| 466 | -5.18 | -0.20 | -5.44 | -0.29 | -2.59 | -0.66 |
| 487 | -1.68 | 0.06 | -6.67 | -0.44 | -1.73 | -0.43 |
| 508 | 2.12 | 0.36 | -5.79 | -0.28 | 0.14 | -0.08 |
| 529 | 2.98 | 0.36 | -6.11 | -0.28 | 0.68 | 0.04 |
| 550 | 1.06 | 0.22 | -8.52 | -0.46 | 0.67 | 0.06 |
| 571 | 3.49 | 0.36 | -6.84 | -0.27 | 2.93 | 0.52 |
| 592 | 3.35 | 0.29 | -6.91 | -0.25 | 2.99 | 0.55 |
| 613 | 1.86 | 0.27 | -6.58 | -0.22 | 5.56 | 0.97 |
| 635 | 4.21 | 0.42 | -5.25 | -0.08 | 4.43 | 0.76 |
| 656 | 4.95 | 0.39 | -4.81 | -0.05 | 5.99 | 1.06 |
| 677 | 9.03 | 0.65 | -3.71 | 0.08 | 7.24 | 1.21 |
| 698 | 11.76 | 0.72 | -0.33 | 0.35 | 6.62 | 1.14 |
| 719 | 11.67 | 0.74 | -0.74 | 0.37 | 6.61 | 1.22 |
| 740 | 14.19 | 0.80 | 2.11 | 0.53 | 8.80 | 1.49 * |
| 762 | 14.83 | 0.83 | 3.34 | 0.64 | 7.88 | 1.33 * |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 39

**Daily Mean Differences of Average Abnormal Returns between Highly Developed, Developed, and Less-Developed Countries for the Period -5 Days before to +5 Days after the Announcement Date
Joint Venture Sample**

| DAY | Daily Mean Differences, Z-values Highly Developed (N=140) vs Developed (N=35) Countries | | Daily Mean Differences, Z-values Highly Developed (N=140) vs Less- Developed (N=120) Countries | |
|-----|---|----------------------|--|----------------------|
| | DAR ^a (%) | Z-value ^b | DAR ^a (%) | Z-value ^b |
| -5 | 0.06 | 0.00 | -0.05 | -0.62 |
| -4 | -0.28 | -0.09 | -0.24 | -0.85 |
| -3 | -0.01 | 0.40 | -0.11 | -0.59 |
| -2 | -0.07 | 0.36 | 0.03 | 0.48 |
| -1 | 0.04 | 0.22 | 0.01 | 0.55 |
| 0 | -0.10 | 0.05 | 0.13 | 0.74 |
| +1 | -0.14 | -0.13 | -0.42 | -1.44 * |
| +2 | 0.17 | 0.31 | 0.49 | 2.06 ** |
| +3 | 0.39 | 1.21 | 0.11 | 0.57 |
| +4 | 0.32 | 0.98 | 0.26 | 1.06 |
| +5 | -0.13 | 0.13 | -0.12 | -0.55 |

a DAR=AAR₁ -AAR₂, where 1 represents firms in group 1 and 2 represents firms in group 2.

b Z-value= (ASAR₁ - ASAR₂) / $\sqrt{(1/N_1 + 1/N_2)}$, where N₁ and N₂ represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 40

**Differences of Compounded Abnormal Returns (DCMAR) and Z-values of
U.S. FDI Firms for Periods up to Three Years.
Joint Venture Sample by Economic Development**

| Year | Highly Developed Countries (N=63) vs Developed Countries (N=19) | | Highly Developed Countries (N=63) vs Less-Developed Countries (N=73) | |
|--------|---|----------------------|--|-----------------------|
| | DCMAR ^a (%) | Z-value ^b | DCMAR ^a (%) | Z-values ^b |
| 1 year | 7.46 | 0.16 | - 0.33 | - 0.60 |
| 2 year | 35.84 | 0.91 | 22.07 | 0.10 |
| 3 year | 43.05 | 0.97 | 29.95 | 0.30 |

a DCMAR=CMAR₁-CMAR₂, where 1 represents firms in group 1 and 2 represents firms in group 2.

b Z-value= (ASAR₁ - ASAR₂) / $\sqrt{(1/N_1 + 1/N_2)}$, where N₁ and N₂ represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 41

Daily Average Abnormal Returns (AR) from the Market Model and Z-values for U.S. FDI Firms from Five Days before and Five Days after the Announcement Date
Joint Venture Sample by Economic Development

| Day | Less-Developed Countries (N=120) | | Developed Countries (N=35) | | Highly Developed Countries (N=140) | |
|-----|-------------------------------------|---------|-------------------------------|---------|--|---------|
| | AR (%) | Z-value | AR (%) | Z-value | AR (%) | Z-value |
| -5 | 0.03 | 0.1 | -0.08 | -0.4 | -0.02 | -0.8 |
| -4 | 0.11 | 0.6 | 0.15 | -0.2 | -0.13 | -0.6 |
| -3 | 0.10 | 0.9 | 0.00 | -0.4 | -0.01 | 0.1 |
| -2 | -0.23 | -1.4 * | -0.13 | -0.8 | -0.20 | -0.8 |
| -1 | 0.08 | -0.1 | 0.05 | 0.1 | 0.09 | 0.7 |
| 0 | 0.12 | 0.2 | 0.35 | 0.6 | 0.25 | 1.3 * |
| +1 | 0.09 | 0.2 | -0.19 | -0.8 | -0.33 | -1.9 ** |
| +2 | -0.27 | -1.6 * | 0.05 | 0.3 | 0.22 | 1.3 * |
| +3 | -0.09 | -0.5 | -0.37 | -1.2 | 0.02 | 0.3 |
| +4 | -0.09 | -0.7 | -0.15 | -0.7 | 0.17 | 0.8 |
| +5 | 0.01 | 0.1 | 0.02 | -0.5 | -0.11 | -0.7 |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 42

**Compounded Abnormal Returns (CMAR) and Z-values of
U.S. FDI Firms for Periods up to Three Years.
Joint Venture Sample by Economic Development**

| Day | Less-Developed Countries (N=73) | | Developed Countries (N=19) | | Highly Developed Countries (N=63) | |
|-----|------------------------------------|----------|-------------------------------|---------|--------------------------------------|----------|
| | CMAR % | Z-value | CMAR % | Z-value | CMAR % | Z-value |
| 0 | 0.21 | 1.14 | 0.32 | 0.12 | 0.02 | -0.05 |
| 21 | 1.15 | 1.22 | 1.93 | 1.65 | -0.18 | -0.74 |
| 42 | 1.83 | 1.85 ** | 1.05 | 0.87 | 1.25 | 0.54 |
| 63 | 2.87 | 2.02 ** | -1.21 | -0.02 | 0.15 | 0.13 |
| 85 | 2.73 | 1.64 * | -4.31 | -0.71 | -0.82 | -0.40 |
| 106 | 4.70 | 2.40 *** | -3.83 | -0.38 | 0.68 | 0.24 |
| 127 | 5.33 | 2.31 *** | -7.34 | -1.04 | -0.07 | 0.14 |
| 148 | 4.48 | 1.80 ** | -5.39 | -0.63 | 0.24 | 0.32 |
| 170 | 3.53 | 1.46 * | -7.30 | -0.76 | -0.82 | -0.23 |
| 191 | 1.59 | 1.05 | -7.73 | -0.69 | 0.27 | -0.03 |
| 212 | 1.90 | 1.10 | -8.49 | -0.67 | 0.15 | 0.03 |
| 233 | 2.99 | 1.34 * | -4.58 | -0.16 | 1.27 | 0.08 |
| 254 | 3.22 | 1.19 | -4.57 | -0.02 | 2.89 | 0.29 |
| 275 | 3.05 | 1.13 | -5.57 | -0.06 | 3.56 | 0.37 |
| 296 | 2.67 | 1.08 | -6.83 | -0.15 | 5.98 | 0.54 |
| 318 | 1.70 | 0.93 | -8.65 | -0.32 | 9.32 | 0.80 |
| 340 | 1.25 | 0.82 | -8.02 | -0.21 | 10.84 | 0.80 |
| 361 | 3.80 | 1.15 | -6.47 | -0.05 | 12.09 | 1.04 |
| 382 | 3.70 | 1.11 | -7.48 | -0.16 | 15.16 | 1.16 |
| 403 | 4.00 | 1.16 | -9.64 | -0.26 | 16.63 | 1.24 |
| 424 | 3.13 | 1.07 | -6.88 | -0.05 | 17.50 | 1.08 |
| 445 | 3.92 | 1.14 | -6.41 | -0.00 | 18.44 | 1.27 |
| 466 | 4.68 | 1.23 | -7.30 | -0.21 | 17.52 | 1.08 |
| 487 | 5.31 | 1.35 * | -9.90 | -0.35 | 23.97 | 1.27 |
| 508 | 6.40 | 1.56 * | -7.37 | -0.17 | 28.47 | 1.59 * |
| 529 | 6.84 | 1.55 * | -4.50 | -0.02 | 29.27 | 1.55 * |
| 550 | 7.81 | 1.69 ** | -2.96 | -0.04 | 27.88 | 1.52 * |
| 571 | 11.20 | 2.12 *** | -2.57 | -0.01 | 37.19 | 1.92 ** |
| 592 | 10.83 | 2.06 ** | -2.73 | 0.01 | 36.23 | 1.95 ** |
| 613 | 9.58 | 1.89 ** | -2.25 | 0.08 | 35.56 | 1.99 ** |
| 635 | 9.53 | 1.90 ** | 1.76 | 0.31 | 38.06 | 2.24 *** |
| 656 | 10.43 | 1.91 ** | 1.55 | 0.28 | 38.57 | 2.21 *** |
| 677 | 11.79 | 1.87 ** | 2.14 | 0.26 | 41.88 | 2.35 *** |
| 698 | 12.48 | 1.93 ** | 2.98 | 0.27 | 43.79 | 2.47 *** |
| 719 | 14.60 | 2.07 ** | 2.02 | 0.17 | 45.68 | 2.39 *** |
| 740 | 15.75 | 2.12 *** | 3.65 | 0.23 | 44.21 | 2.34 *** |
| 762 | 16.21 | 2.13 *** | 3.11 | 0.21 | 46.16 | 2.39 *** |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 43

**Daily Mean Differences of Average Abnormal Returns (DAR) between Related and Unrelated Investments for the Period -5 Days before to +5 Days after the Announcement Date
Joint Venture Sample**

| Daily Mean Differences (DAR) and Z-values Related Investments (N=268) vs Unrelated Investments (N=27) | | |
|--|----------------------------|----------------------------|
| Day | DAR^a (%) | Z-value^b |
| -5 | 0.07 | 0.93 |
| -4 | -0.21 | -0.03 |
| -3 | 0.05 | -0.48 |
| -2 | -0.78 | -0.64 |
| -1 | -0.78 | -1.94 ** |
| 0 | 0.23 | 0.52 |
| +1 | 0.17 | 0.49 |
| +2 | 0.38 | 0.73 |
| +3 | -0.20 | -0.28 |
| +4 | -0.30 | -1.20 |
| +5 | 0.88 | 2.31 *** |

a $DAR = AAR_1 - AAR_2$, where 1 represents firms in group 1 and 2 represents firms in group 2.

b $Z\text{-value} = (ASAR_1 - ASAR_2) / \sqrt{(1/N_1 + 1/N_2)}$, where N_1 and N_2 represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 44

**Differences of Compounded Abnormal Returns (DCMAR) and Z-values of
U.S. FDI Firms for Periods up to Three Years.
Joint Venture Sample by Industry Diversification**

| Differences of Compounded Abnormal Returns (DCMAR) between Z-values of Related Investments (N=136) and Unrelated Investments (N=18) | | |
|--|------------------------------|----------------------------|
| Year | DCMAR^a (%) | Z-value^b |
| 1 year | 6.73 | - 0.19 |
| 2 year | 23.42 | 0.33 |
| 3 year | 29.53 | 0.26 |

a $DCMAR = CMAR_1 - CMAR_2$, where 1 represents firms in group 1 and 2 represents firms in group 2.

b $Z\text{-value} = (ASAR_1 - ASAR_2) / \sqrt{(1/N_1 + 1/N_2)}$, where N_1 and N_2 represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 45

Daily Average Abnormal Returns (AR) from the Market Model and Z-values for U.S. FDI Firms
from Five Days before and Five Days after the Announcement Date
Joint Venture Sample by Industry Diversification

| Day | Unrelated Investments (N=27) | | Related Investments (N=268) | |
|-----|---------------------------------|----------|--------------------------------|---------|
| | AR (%) | Z-value | AR (%) | Z-value |
| -5 | -0.07 | -1.1 | 0.00 | -0.4 |
| -4 | 0.20 | -0.0 | -0.01 | -0.1 |
| -3 | -0.01 | 0.6 | 0.04 | 0.3 |
| -2 | 0.51 | 0.1 | -0.27 | -1.8 ** |
| -1 | 0.79 | 2.0 ** | 0.01 | -0.1 |
| 0 | -0.00 | -0.1 | 0.23 | 1.4 * |
| +1 | -0.29 | -0.9 | -0.12 | -1.2 |
| +2 | -0.35 | -0.7 | 0.03 | 0.2 |
| +3 | 0.12 | 0.1 | -0.08 | -0.6 |
| +4 | 0.30 | 1.1 | -0.00 | -0.5 |
| +5 | -0.85 | -2.4 *** | 0.03 | 0.1 |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 46

Compounded Abnormal Returns (CMAR) and Z-values of
U.S. FDI Firms for Periods up to Three Years.
Joint Venture Sample by Industry Diversification

| Day | Unrelated Investments (N=18) | | Related Investments (N=136) | |
|-----|---------------------------------|---------|--------------------------------|----------|
| | CMAR (%) | Z-value | CMAR (%) | Z-value |
| 0 | 1.39 | 1.15 | -0.02 | -0.13 |
| 21 | 2.91 | 1.76 ** | 0.42 | 0.36 |
| 42 | 2.99 | 1.49 * | 1.39 | 1.60 * |
| 63 | 0.94 | 0.60 | 1.44 | 1.46 * |
| 85 | -2.47 | -0.17 | 0.94 | 0.83 |
| 106 | -3.12 | 0.03 | 2.85 | 1.86 ** |
| 127 | -5.72 | -0.42 | 2.73 | 1.65 ** |
| 148 | -6.48 | -0.49 | 2.85 | 1.61 ** |
| 170 | -8.76 | -0.75 | 1.94 | 1.04 |
| 191 | -4.79 | 0.08 | 0.78 | 0.56 |
| 212 | -5.02 | 0.25 | 0.80 | 0.58 |
| 233 | -3.97 | 0.45 | 2.33 | 0.91 |
| 254 | -3.55 | 0.55 | 3.18 | 0.96 |
| 275 | -0.39 | 1.02 | 2.83 | 0.78 |
| 296 | -0.52 | 1.04 | 3.61 | 0.82 |
| 318 | -0.53 | 1.00 | 4.38 | 0.83 |
| 340 | 0.13 | 1.12 | 4.93 | 0.77 |
| 361 | 0.45 | 1.16 | 7.06 | 1.21 |
| 382 | -0.20 | 1.05 | 8.39 | 1.26 |
| 403 | -2.56 | 0.78 | 9.23 | 1.41 * |
| 424 | -5.12 | 0.48 | 9.92 | 1.43 * |
| 445 | -3.94 | 0.64 | 10.68 | 1.56 * |
| 466 | -3.29 | 0.63 | 10.45 | 1.42 * |
| 487 | -5.73 | 0.39 | 13.74 | 1.67 ** |
| 508 | -6.57 | 0.41 | 16.85 | 2.09 ** |
| 529 | -7.58 | 0.25 | 18.03 | 2.17 *** |
| 550 | -4.92 | 0.52 | 17.78 | 2.15 *** |
| 571 | 6.42 | 1.21 | 22.44 | 2.49 *** |
| 592 | 2.45 | 1.05 | 22.33 | 2.53 *** |
| 613 | 2.54 | 1.03 | 21.41 | 2.47 *** |
| 635 | 0.80 | 0.94 | 23.36 | 2.78 *** |
| 656 | -1.31 | 0.73 | 24.34 | 2.82 *** |
| 677 | -1.31 | 0.70 | 26.69 | 2.89 *** |
| 698 | 1.82 | 0.87 | 27.64 | 2.95 *** |
| 719 | 4.09 | 0.98 | 29.24 | 2.93 *** |
| 740 | 1.97 | 0.89 | 29.70 | 2.99 *** |
| 762 | 1.33 | 0.83 | 30.86 | 3.03 *** |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 47

**Daily Mean Differences of Average Abnormal Returns (DAR) between Experience Levels
in the Host Country for the Period -5 Days before to +5 Days
after the Announcement Date
Joint Venture Sample**

| Daily Mean Differences (DAR) and Z-values between Operating in Host Countries (N=98) and Not Operating in Host Countries (N=184) | | |
|---|----------------------------|----------------------------|
| Day | DAR^a (%) | Z-value^b |
| -5 | -0.26 | -1.27 |
| -4 | -0.15 | -1.07 |
| -3 | -0.03 | 0.02 |
| -2 | 0.05 | -0.36 |
| -1 | 0.10 | 0.67 |
| 0 | 0.08 | 0.26 |
| +1 | -0.22 | -0.14 |
| +2 | 0.26 | 0.79 |
| +3 | -0.26 | -1.29 |
| +4 | 0.09 | 0.40 |
| +5 | -0.10 | -0.39 |

a $DAR = AAR_1 - AAR_2$, where 1 represents firms in group 1 and 2 represents firms in group 2.

b $Z\text{-value} = (ASAR_1 - ASAR_2) / \sqrt{(1/N_1 + 1/N_2)}$, where N_1 and N_2 represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 48

**Differences of Compounded Abnormal Returns (DCMAR) and Z-values of
U.S. FDI Firms for Periods up to Three Years.
Joint Venture Sample by Experience in Host Country**

| DCMARs and Z-values between Experienced in Partner Firm's Country (N=229) and Not Experienced in Partner Firm's Country (N=131) ^c | | |
|---|-------------------------------|-----------------------------|
| Year | DCMAR ^a (%) | Z-value ^b |
| 1 year | 6.88 | 1.54 * |
| 2 year | 17.15 | 1.53 * |
| 3 year | 53.82 | 2.61 *** |

a DCMAR=CMAR₁-CMAR₂, where 1 represents firms in group 1 and 2 represents firms in group 2.

b Z-value= (ASAR₁ - ASAR₂) / $\sqrt{(1/N_1 + 1/N_2)}$, where N₁ and N₂ represents the numbers of the firms in each group.

c The group of going abroad for the first time dropped because the number of observation left is only one.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 49

**Daily Average Abnormal Returns (AR) from the Market Model and Z-values for U.S. FDI Firms
from Five Days before and Five Days after the Announcement Date
Joint Venture Sample by Host Country Experience**

| Day | Operating in Host Countries (N=98) | | Not Operating in Host Countries (N=184) | |
|-----|---------------------------------------|---------|--|---------|
| | AR (%) | Z-value | AR (%) | Z-value |
| -5 | -0.19 | -1.5 * | 0.07 | 0.1 |
| -4 | -0.12 | -1.1 | 0.03 | 0.3 |
| -3 | -0.03 | 0.1 | -0.00 | 0.1 |
| -2 | -0.21 | -1.4 * | -0.26 | -1.3 * |
| -1 | 0.18 | 0.9 | 0.08 | 0.1 |
| 0 | 0.23 | 0.9 | 0.15 | 0.8 |
| +1 | -0.28 | -0.9 | -0.06 | -1.0 |
| +2 | 0.12 | 0.4 | -0.14 | -0.8 |
| +3 | -0.23 | -1.3 * | 0.03 | 0.4 |
| +4 | 0.07 | 0.2 | -0.02 | -0.4 |
| +5 | -0.13 | -0.7 | -0.03 | -0.3 |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 50

**Compounded Abnormal Returns (CMAR) and Z-values of
U.S. FDI Firms for Periods up to Three Years.
Joint Venture Sample by Host Country Experience**

| Day | Operating in Host Countries (N=54) | | Not Operating in Host Countries (N=100) | |
|-----|---------------------------------------|----------|--|---------|
| | CMAR(%) | Z-value | CMAR (%) | Z-value |
| 0 | 0.16 | 0.41 | 0.12 | 0.61 |
| 21 | 0.74 | 0.56 | 0.74 | 0.83 |
| 42 | 2.18 | 1.80 ** | 1.15 | 1.07 |
| 63 | 1.75 | 1.35 * | 1.02 | 0.82 |
| 85 | 1.75 | 1.41 * | -0.29 | -0.27 |
| 106 | 4.56 | 2.57 *** | 0.66 | 0.18 |
| 127 | 4.21 | 2.22 *** | 0.28 | 0.04 |
| 148 | 5.32 | 2.29 *** | -0.28 | -0.08 |
| 170 | 3.55 | 1.58 * | -1.03 | -0.34 |
| 191 | 4.18 | 1.60 * | -2.15 | -0.53 |
| 212 | 4.21 | 1.67 ** | -2.13 | -0.47 |
| 233 | 5.44 | 1.76 ** | -0.60 | -0.09 |
| 254 | 6.78 | 1.87 ** | -0.10 | -0.07 |
| 275 | 8.45 | 2.03 ** | -0.87 | -0.18 |
| 296 | 9.23 | 1.96 ** | -0.19 | -0.06 |
| 318 | 8.41 | 1.77 ** | 1.29 | 0.07 |
| 340 | 9.56 | 1.85 ** | 1.41 | -0.02 |
| 361 | 10.57 | 1.98 ** | 3.83 | 0.41 |
| 382 | 12.68 | 1.97 ** | 4.43 | 0.44 |
| 403 | 14.95 | 2.01 ** | 3.96 | 0.47 |
| 424 | 14.62 | 1.88 ** | 4.59 | 0.45 |
| 445 | 15.75 | 2.02 ** | 5.29 | 0.59 |
| 466 | 17.46 | 2.05 ** | 4.16 | 0.40 |
| 487 | 22.26 | 2.19 *** | 5.72 | 0.50 |
| 508 | 25.41 | 2.49 *** | 8.26 | 0.81 |
| 529 | 29.86 | 2.62 *** | 7.24 | 0.73 |
| 550 | 28.39 | 2.51 *** | 8.19 | 0.91 |
| 571 | 30.94 | 2.52 *** | 15.21 | 1.59 * |
| 592 | 35.85 | 2.84 *** | 11.69 | 1.34 * |
| 613 | 37.46 | 2.91 *** | 9.60 | 1.19 |
| 635 | 41.68 | 3.29 *** | 9.60 | 1.23 |
| 656 | 44.26 | 3.24 *** | 9.16 | 1.23 |
| 677 | 52.53 | 3.49 *** | 7.89 | 1.12 |
| 698 | 53.51 | 3.51 *** | 9.21 | 1.24 |
| 719 | 54.93 | 3.59 *** | 11.01 | 1.19 |
| 740 | 56.56 | 3.70 *** | 10.39 | 1.14 |
| 762 | 62.48 | 3.97 *** | 8.66 | 0.99 |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 51

**Daily Mean Differences of Average Abnormal Returns (DARs) and Z-values between Control Levels in Joint Venture for the Period -5 Days before to +5 Days after the Announcement Date
Joint Venture Sample**

| Day | Daily Mean Differences (DARs) and Z-values between Minority Control in Joint Venture (N=53) and Equal Control in Joint Venture (N=46) | | Daily Mean Differences (DARs) and Z-values between Minority Control in Joint Venture (N=53) and Majority Control in Joint Venture (N=34) | |
|-----|---|----------------------|--|----------------------|
| | DAR ^a (%) | Z-value ^b | DAR ^a (%) | Z-value ^b |
| -5 | -0.42 | -0.51 | -0.69 | -0.84 |
| -4 | 0.13 | 0.19 | -0.43 | -1.20 |
| -3 | -0.53 | -1.77 ** | -0.59 | -1.78 ** |
| -2 | -0.18 | -0.44 | -0.15 | -0.63 |
| -1 | -0.16 | -0.88 | -0.34 | -0.39 |
| 0 | -0.15 | -0.32 | -0.15 | -0.16 |
| +1 | 0.03 | -0.23 | -0.13 | -0.42 |
| +2 | 0.11 | 0.41 | 0.70 | 1.23 |
| +3 | 0.12 | -0.11 | 0.56 | 1.12 |
| +4 | 0.29 | 0.91 | 0.50 | 0.95 |
| +5 | 0.08 | 0.51 | 0.26 | 0.62 |

a DAR=AAR₁ -AAR₂, where 1 represents firms in group 1 and 2 represents firms in group 2.

b Z-value= (ASAR₁ - ASAR₂) / $\sqrt{(1/N_1 + 1/N_2)}$, where N₁ and N₂ represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 52

**Differences of Compounded Abnormal Returns (DCMAR) and Z-values of
U.S. FDI Firms for Periods up to Three Years.
Joint Venture Sample by Control Level**

| Year | DCMARs and Z-values between Minority Control in Joint Venture (N=33) and Equal Control in Joint Venture (N=25) | | DCMARs and Z-values between Minority Control in Joint Venture (N=33) and Majority Control in Joint Venture (N=12) | |
|--------|---|----------------------|--|-----------------------|
| | DCMAR ^a (%) | Z-value ^b | DCMAR ^a (%) | Z-values ^b |
| 1 year | - 32.08 | - 2.56 *** | 13.78 | 0.50 |
| 2 year | - 68.74 | - 2.74 *** | - 0.55 | 0.20 |
| 3 year | - 52.57 | - 1.57 * | - 28.93 | - 0.06 |

a DCMAR=CMAR₁-CMAR₂, where 1 represents firms in group 1 and 2 represents firms in group 2.

b Z-value= (ASAR₁ - ASAR₂) / $\sqrt{(1/N_1 + 1/N_2)}$, where N₁ and N₂ represents the numbers of the firms in each group.

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 53

**Daily Average Abnormal Returns (AR) from the Market Model and Z-values for U.S. FDI Firms
from Five Days before and Five Days after the Announcement Date
Joint Venture Sample by Control Level**

| Day | Minority Control in Joint Venture (N=53) | | Equal Control in Joint Venture (N=46) | | Majority Control in Joint Venture (N=34) | |
|-----|---|---------|--|---------|---|---------|
| | AR (%) | Z-value | AR (%) | Z-value | AR (%) | Z-value |
| -5 | -0.11 | -0.1 | 0.31 | 0.6 | 0.58 | 1.0 |
| -4 | -0.12 | -0.8 | -0.25 | -1.0 | 0.31 | 0.9 |
| -3 | -0.20 | -1.1 | 0.33 | 1.4 * | 0.39 | 1.4 * |
| -2 | -0.30 | -1.5 * | -0.12 | -0.8 | -0.15 | -0.4 |
| -1 | -0.00 | -0.0 | 0.16 | 1.2 | 0.34 | 0.5 |
| 0 | 0.24 | 0.5 | 0.39 | 0.9 | 0.39 | 0.6 |
| +1 | -0.30 | -1.3 * | -0.33 | -0.9 | -0.17 | -0.5 |
| +2 | 0.13 | 0.6 | 0.02 | 0.0 | -0.57 | -1.1 |
| +3 | 0.17 | 0.8 | 0.05 | 0.9 | -0.39 | -0.8 |
| +4 | 0.32 | 0.9 | 0.03 | -0.4 | -0.18 | -0.5 |
| +5 | -0.10 | -0.0 | -0.18 | -0.7 | -0.36 | -0.8 |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 54

**Compounded Abnormal Returns (CMAR) and Z-values of
U.S. FDI Firms for Periods up to Three Years.
Joint Venture Sample by Control Level**

| Day | Minority Control in Joint Venture (N=33) | | Equal Control in Joint Venture (N=25) | | Majority Control in Joint Venture (N=12) | |
|-----|---|---------|--|----------|---|----------|
| | CMAR(%) | Z-value | CMAR (%) | Z-value | CMAR (%) | Z-value |
| 0 | -0.00 | -0.20 | 0.64 | 1.31 * | -0.56 | -0.92 |
| 21 | 0.04 | -0.01 | 2.60 | 1.75 ** | -2.18 | -0.82 |
| 42 | 2.80 | 1.58 * | 7.57 | 3.46 *** | -5.12 | -1.38 * |
| 63 | 2.80 | 1.07 | 7.18 | 2.52 *** | -3.43 | -0.41 |
| 85 | 0.51 | 0.32 | 10.88 | 3.09 *** | -7.06 | -1.00 |
| 106 | 3.47 | 1.27 | 14.18 | 3.18 *** | -5.85 | -0.56 |
| 127 | 1.11 | 0.71 | 14.90 | 3.21 *** | -5.80 | -0.64 |
| 148 | -0.11 | 0.42 | 15.15 | 2.87 *** | -4.94 | -0.45 |
| 170 | -2.26 | 0.05 | 16.31 | 2.37 *** | -7.30 | -0.62 |
| 191 | -4.56 | -0.31 | 20.03 | 2.81 *** | -12.61 | -1.27 |
| 212 | -7.67 | -0.59 | 22.02 | 3.08 *** | -13.28 | -1.37 * |
| 233 | -5.80 | -0.20 | 23.51 | 2.96 *** | -14.12 | -1.23 |
| 254 | -5.57 | -0.06 | 26.51 | 3.34 *** | -19.35 | -1.76 ** |
| 275 | -5.74 | -0.07 | 29.89 | 3.60 *** | -21.60 | -1.82 ** |
| 296 | -6.48 | -0.14 | 35.24 | 3.81 *** | -23.70 | -1.96 ** |
| 318 | -7.27 | -0.17 | 38.88 | 3.74 *** | -22.80 | -1.82 ** |
| 340 | -7.98 | -0.18 | 40.96 | 3.54 *** | -22.01 | -1.75 ** |
| 361 | -7.02 | -0.03 | 43.80 | 3.75 *** | -21.49 | -1.67 ** |
| 382 | -8.72 | -0.24 | 47.39 | 3.81 *** | -21.13 | -1.55 * |
| 403 | -9.78 | -0.33 | 44.22 | 3.47 *** | -16.52 | -1.31 * |
| 424 | -9.43 | -0.20 | 50.40 | 3.57 *** | -16.72 | -1.24 |
| 445 | -8.45 | -0.07 | 54.49 | 3.83 *** | -18.45 | -1.32 * |
| 466 | -10.66 | -0.35 | 46.81 | 3.34 *** | -16.07 | -1.22 |
| 487 | -10.95 | -0.34 | 52.65 | 3.19 *** | -14.77 | -1.07 |
| 508 | -9.48 | -0.17 | 59.26 | 3.48 *** | -8.93 | -0.78 |
| 529 | -8.95 | -0.14 | 51.06 | 3.01 *** | -3.42 | -0.56 |
| 550 | -9.56 | -0.21 | 54.14 | 3.32 *** | -12.49 | -0.91 |
| 571 | -10.26 | -0.27 | 68.02 | 3.52 *** | -5.15 | -0.63 |
| 592 | -10.50 | -0.21 | 57.60 | 3.06 *** | -1.11 | -0.40 |
| 613 | -9.41 | -0.13 | 52.20 | 2.86 *** | -4.53 | -0.51 |
| 635 | -6.94 | 0.14 | 56.38 | 3.09 *** | 1.10 | -0.34 |
| 656 | -7.11 | 0.09 | 50.66 | 2.72 *** | -0.37 | -0.36 |
| 677 | -3.60 | 0.29 | 47.81 | 2.59 *** | 2.54 | -0.34 |
| 698 | -2.01 | 0.40 | 51.59 | 2.63 *** | 7.82 | -0.15 |
| 719 | -4.01 | 0.19 | 58.68 | 2.70 *** | 16.15 | 0.13 |
| 740 | -2.88 | 0.27 | 56.23 | 2.61 *** | 19.29 | 0.22 |
| 762 | -1.51 | 0.35 | 51.06 | 2.38 *** | 27.42 | 0.42 |

* Significant at the 0.10 level.

** Significant at the 0.05 level.

*** Significant at the 0.01 level.

Table 55

Estimated Coefficients and t-Statistics (in Parentheses) from Regressing the Two-Day Cumulative Abnormal Returns, $CAR_{(-1,0)}$ and the Three Year Compounded Abnormal Returns, $CMAR$ (1 Year, 2 Year, 3 Year)

$$CAR_{j(-1,0)} = a_0 + a_1 EXP + a_2 DEV + a_3 REL + e$$

$$CMAR_j(1 \text{ year, } 2 \text{ year, } 3 \text{ year}) = a_0 + a_1 EXP + a_2 DEV + a_3 REL + e$$

OVERALL SAMPLE

Short-Term Announcement Effects $CAR(-1,0)$

| a0 | a1 | a2 | a3 | F | Prob > F |
|--------|------------|--------|--------|-------|----------|
| 0.004 | -0.004 | 0.001 | 0.001 | 1.736 | 0.16 |
| (0.98) | (-2.09 **) | (0.86) | (0.78) | | |

Long-Term Announcement Effects $CMAR$ (1 year, 2 year, 3 year)

| | a0 | a1 | a2 | a3 | F | Prob > F |
|--------|---------|------------|---------|---------|-------|----------|
| 1 year | -0.044 | 0.079 | -0.021 | -0.018 | 2.17 | 0.09 * |
| | (-0.68) | (2.43 **) | (-1.09) | (-0.73) | | |
| 2 year | -0.24 | 0.408 | -0.10 | -0.051 | 2.65 | 0.05 ** |
| | (-0.82) | (2.77 ***) | (-1.11) | (-0.47) | | |
| 3 year | 0.04 | 0.034 | 0.011 | 0.056 | 0.212 | 0.89 |
| | (0.19) | (0.33) | (0.16) | (0.71) | | |

EXP = Dummy variable for the degree of experience in host country (EXP=0 for operating in host country, 1, otherwise)

DEV = Dummy variable for degree of economic development of host country (DEV=0 for developed countries, 1, otherwise)

REL = Dummy variable for the degree of industrial relatedness (REL= 0 for related diversification, 1, otherwise)

* Significant at the 0.1 level, ** Significant at the 0.05 level, *** significant at the 0.01 level

Table 56

Estimated Coefficients and t-Statistics (in Parentheses) from Regressing the Two-Day Cumulative Abnormal Returns, $CAR_{j(-1,0)}$ and the Three Year Compounded Abnormal Returns, $CMAR$ (1 Year, 2 Year, 3 Year)

$$CAR_{j(-1,0)} = a_0 + a_1 EXP + a_2 DEV + a_3 REL + e$$

$$CMAR_j(1 \text{ year, } 2 \text{ year, } 3 \text{ year}) = a_0 + a_1 EXP + a_2 DEV + a_3 REL + e$$

ACQUISITION SAMPLE

Short-Term Announcement Effects $CAR(-1,0)$

| | a0 | a1 | a2 | a3 | F | Prob > F |
|--|------------------|----------------------|-----------------|-----------------|-----|----------|
| | 0.008 (1.63*) | -0.006 (-2.43 **) | 0.001 (0.42) | 0.001 (0.27) | 2.0 | 0.1 * |

Long-Term Announcement Effects $CMAR$ (1 year, 2 year, 3 year)

| 1 year | a0 | a1 | a2 | a3 | F | Prob > F |
|--------|------------------|-----------------|-----------------|-------------------|-------|----------|
| | -0.036 (-0.6) | 0.002 (0.07) | 0.016 (0.77) | -0.006 (-0.28) | 0.263 | 0.852 |

| 2 year | a0 | a1 | a2 | a3 | F | Prob > F |
|--------|-------------------|------------------|---------------------|-----------------|-------|----------|
| | -0.226 (-1.49) | -0.022 (-0.3) | 0.134 (2.49 ***) | 0.045 (0.89) | 2.194 | 0.008 * |

| 3 year | a0 | a1 | a2 | a3 | F | Prob > F |
|--------|-------------------|-----------------|-----------------|-----------------|-----|----------|
| | -0.215 (-0.97) | 0.029 (0.27) | 0.109 (1.38) | 0.091 (1.22) | 1.1 | 0.35 |

EXP = Dummy variable for the degree of experience in host country (EXP=0 for operating in host country, 1, otherwise)

DEV = Dummy variable for degree of economic development of host country (DEV=0 for developed countries, 1, otherwise)

REL = Dummy variable for the degree of industrial relatedness (REL= 0 for related diversification, 1, otherwise)

* Significant at the 0.1 level, ** Significant at the 0.05 level, *** significant at the 0.01 level

Table 57

Estimated Coefficients and t-Statistics (in Parentheses) from Regressing the Two-Day Cumulative Abnormal Returns, $CAR_{(-1,0)}$ and the Three Year Compounded Abnormal Returns, $CMAR$ (1 Year, 2 Year, 3 Year)

$$CAR_{j(-1,0)} = a_0 + a_1 EXP + a_2 DEV + a_3 REL + e$$

$$CMAR_j(1 \text{ year, 2 year, 3 year}) = a_0 + a_1 EXP + a_2 DEV + a_3 REL + e$$

JOINT VENTURES SAMPLE

Short-Term Announcement Effects $CAR(-1,0)$

| | a0 | a1 | a2 | a3 | F | Prob > F |
|--|---------|---------|--------|--------|-------|----------|
| | -0.005 | -0.001 | 0.000 | 0.007 | 0.659 | 0.58 |
| | (-0.58) | (-0.43) | (0.05) | (1.31) | | |

Long-Term Announcement Effects $CMAR$ (1 year, 2 year, 3 year)

| | a0 | a1 | a2 | a3 | F | Prob > F |
|--------|---------|------------|------------|---------|-------|----------|
| 1 year | -0.137 | 0.181 | -0.104 | 0.113 | 2.452 | 0.064 * |
| | (-0.57) | (2.01 **) | (-2.27 **) | (0.65) | | |
| 2 year | -0.828 | 1.447 | -0.62 | 0.001 | 3.002 | 0.032 ** |
| | (-0.58) | (2.64 ***) | (-2.28 **) | (0.001) | | |
| 3 year | 0.688 | -0.177 | -0.19 | 0.292 | 1.252 | 0.293 |
| | (1.03) | (-0.64) | (-1.37) | (0.62) | | |

EXP = Dummy variable for the degree of experience in host country (EXP=0 for operating in host country, 1, otherwise)

DEV = Dummy variable for degree of economic development of host country (DEV=0 for developed countries, 1, otherwise)

REL = Dummy variable for the degree of industrial relatedness (REL= 0 for related diversification, 1, otherwise)

*** Significant at the 0.1 level, ** Significant at the 0.05 level, *** significant at the 0.01 level**

Table 58

Summary of Results
Overall Sample

| Hypotheses | Sub-Class | Short-Term | Long-Term |
|---------------------------------------|--------------------|--------------------|---------------------|
| FDI as a Value Creating Hypothesis | Combined Sample | <i>Positive</i> ** | <i>Positive</i> *** |
| | Differences | H<D, H<LD | H>D, H<LD** |
| Country | Highly Developed | Positive | <i>Positive</i> *** |
| Diversification | Developed w/o G 7 | Positive | Positive |
| Hypothesis | Less-Developed | Positive | <i>Positive</i> * |
| Industry | Differences | Re < Un | Re < Un |
| Diversification | Related Industry | <i>Positive</i> * | <i>Positive</i> *** |
| Hypothesis | Unrelated Industry | Positive | <i>Positive</i> *** |
| | Differences | O>N **, O>G | O>N **, O>G |
| Country | Operating | <i>Positive</i> ** | <i>Positive</i> *** |
| Experience | Not Operating | Negative | Positive |
| Hypothesis | Going Abroad First | Positive | Positive |

* Significant at the 0.1 level, ** Significant at the 0.05 level, *** Significant at the 0.01 level

H: Highly developed country, D: Developed country, LD: Less-developed country

Re: Related investment, Un: Unrelated Investment

O: Operating in host country, N: Not operating in host country, G: Going abroad for the first time

Table 59

Summary of Results
Acquisition Sample

| Hypotheses | Sub-Class | Short-Term | Long-Term |
|---------------------------------------|--------------------|--|--------------------------------------|
| FDI as a Value Creating Hypothesis | Acquisitions | <i>Positive *</i> | <i>Positive **</i> |
| | Differences | H<D, H<L | H<D, H<L * |
| Country | Highly Developed | Positive | Negative |
| Diversification | Developed | Positive | Positive |
| Hypothesis | Less-Developed | <i>Positive *</i> | <i>Positive **</i> |
| | Differences | <i>Re > Un *</i> | <i>Re < Un *</i> |
| Industry | Related Industry | <i>Positive **</i> | Positive |
| Diversification | Unrelated Industry | Positive | <i>Positive ***</i> |
| | Differences | <i>O>N **</i> , <i>O<G</i> | <i>O>N</i> , <i>O<G</i> |
| Country | Operating | <i>Positive **</i> | <i>Positive **</i> |
| Experience | Not Operating | Negative | Positive |
| Hypothesis | Going Abroad First | <i>Positive *</i> | Positive |
| | Differences | <i>Mi<Hm ***</i> , <i>Mi<Ma ***</i> | <i>Mi<Hm</i> , <i>Mi<Ma</i> |
| Control Level | Minority Control | <i>Negative ***</i> | Positive |
| Hypothesis | Higher Min Control | Positive | Positive |
| | Majority Control | <i>Positive **</i> | <i>Positive *</i> |

* Significant at the 0.1 level, ** Significant at the 0.05 level, *** Significant at the 0.01 level

H: Highly developed country, D: Developed country, LD: Less-developed country

Re: Related investment, Un: Unrelated Investment

O: Operating in host country, N: Not operating in host country, G: Going abroad for the first time

Mi: Minority control, Hm: Higher minority control, Ma: Majority control

Table 60

Summary of Results
Joint Ventures

| Hypotheses | Sub-Class | Short -Term | Long-Term |
|---------------------------------------|--------------------|-------------------|-----------------------------|
| FDI as a Value Creating Hypothesis | Joint Ventures | <i>Positive *</i> | <i>Positive ***</i> |
| | Differences | H<D, H>L | H>D, H>L |
| Country | Highly Developed | <i>Positive *</i> | <i>Positive ***</i> |
| Diversification | Developed | Positive | Positive |
| Hypothesis | Less-Developed | Positive | <i>Positive ***</i> |
| Industry | Differences | Re>Un | Re>Un |
| Diversification | Related Industry | <i>Positive *</i> | <i>Positive ***</i> |
| Hypothesis | Unrelated Industry | Zero | Positive |
| Country | Differences | O>N | O>N *** |
| Experience | Operating | Positive | <i>Positive ***</i> |
| Hypothesis | Not Operating | Positive | Positive |
| Control Level | Differences | Mi<Eq, Mi<Ma | <i>Mi<Eq ***</i> , Mi<Ma |
| Hypothesis | Minority Control | Positive | Negative |
| | Equal Control | Positive | <i>Positive ***</i> |
| | Majority Control | Positive | Positive |

* Significant at the 0.1 level, ** Significant at the 0.05 level, *** Significant at the 0.01 level

H: Highly developed country, D: Developed country, LD: Less-developed country

Re: Related investment, Un: Unrelated Investment

O: Operating in host country, N: Not operating in host country

Mi: Minority control, Eq: Equal control, Ma: Majority control

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