
Foreign Direct Investment: The Case of Eastern Europe

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Abstract

The purpose of this study is to examine the market's reaction to the announcement foreign direct investment in Eastern Europe for firms from various Western European countries and from Japan during the first merge wave after the Berlin Wall removal. The results indicated that there is either an insignificant negative reaction, or no consistent significant reaction to the announcements of joint ventures or direct foreign investment. U.S.S.R. seems to be the most risky of the target countries. The present conditions of uncertainty and high political economic risk appear to offset any favourable effects. The results may be period specific since there was an unusually high level of uncertainty surrounding the removal of the Wall.

1. Introduction

During the 1990's markets and economies have become increasingly integrated. The elimination of the Berlin Wall in November 1989 and the integration of the European Union in 1992 signalled the formation of a new Europe, where both the East and the West are trying to joint forces.

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The EU integration has motivated many US and Japanese companies to seek entry into the European countries, not only to sell their products, but also to seek the acquisition of real assets and financial assets. Thus, merger and foreign direct investment (FDI) activity has been observed in recent years, with the target being Europe and especially the member countries of the European Union. The opening of the borders of the Eastern bloc in November 1989 has led to another stream of foreign direct investments and speculation from countries of the Western world to the countries of the East. Russia, Hungary, Poland, Czechia, Slovakia, the former East Germany and the Balkan countries are forming economic ties with the West to attract western capital and align their economies to western standards whenever is possible. The western world looks at the East as a new area of economic opportunities.

There have been a limited number of joint venture activities between U.S., Japanese and Western European companies with various companies of the Eastern countries even before the new map of Eastern Europe. However, since the barriers do not exist any more, joint ventures and foreign direct investment are expected to have increased considerably. The benefits of joint ventures in Eastern Europe may vary with the firm's home country. Some Western European firms have already business ties with East Europe and therefore, may not benefit as much as Japanese or U.S. firms that venture for the first time into a new market. On the other hand, Western European companies have cultural and historical similarities and relationships with Eastern Europe and may face fewer problems entering this new market, compared to Japanese or U.S. firms. Therefore, the costs for Western European firms might be lower than the costs other firms outside Europe might face. Furthermore, the European Unification in 1992 and the expansion of the EU have opened new opportunities and have changed the economic environment in Europe even further. These changing conditions are expected to have influenced the investment decisions of

the businesses worldwide and consequently, the decisions concerning FDIs in Eastern Europe.

This paper is the first part of a broader research on FDI during the last decade in Europe. Examining the literature on FDI we observe that numerous researches have tried to measure the expected and/or actual performance of international investment. However, most of these studies have examined the valuation effects of international investment from the U.S. multinational corporations' perspective. Therefore, we focus our broader study in European Companies, to access the effects of FDI in Europe during the last decade 1989–1999 of the twentieth century, where so many radical changes have occurred. This decade can be partitioned into sub periods, depending on the short-term economic and political events that change the existing status-quo.

We anticipate that the evaluation and the analysis of FDI in Europe during each sub period will give us better insights to determine the most efficient policies and strategies for successful FDIs. We will be able to estimate the market's reaction at the announcement of FDI under different political and economic regimes which will help us make comparisons and determine the major factors that influence international investments in Europe. Given this framework, the present study is the first step in order to achieve our broader objective. We focus on the first sub period, from November 1989 till March 1990, just after the collapse of the Berlin Wall and we aim to investigate the valuation effects on the shareholders' wealth of Western European and Japanese firms that were involved in FDI in Eastern Europe during this time period.

This sub period characterizes the first merger wave in Eastern Europe and is crucial for the evolvement of FDI in the following years. It involves the time period after the Wall collapse and before the European Unification, which signifies its importance. It is obvious that at this time zone, there are several potential international investments that will reshape the European business environment.

The European governments take new measures to adjust in the new conditions of globalization. Many investors dare to be the pioneers in entering the new markets that opened in the East (of Europe), to take advantage of the existing opportunities. Many others are more conservative and wait till the situation in the East becomes more stabilized, and less risky.

Some studies, as the one by Madura and Picon (1990) have examined the market's reaction to the announcement of FDI in Eastern Europe for US multinationals and for former West German firms, which had more ties with the East. Our study is unique, since it examines this market reaction for firms from various western European countries and from Japan, which has not been done in the literature before. We also examine this market reaction from the perspective of the target country, since there are significant differences among the various Eastern European countries, culturally, legally, politically, technologically, etc., which might affect the parent company's wealth.

The rest of the paper is structured as follows: The next section reviews the literature on the issue of foreign direct investment in general and the valuation effects on the investing firm's common stock. The third section presents the data and methodology that is used for the empirical analysis of this study while the fourth section presents and interprets the results. A summary and a conclusion follow.

2. Review of the Literature

Kindleberger (1969), Hymer (1976), Calvet (1981), Errunza and Senbet (1981) and O' Sullivan (1985), take an industrial organization approach on the issue of foreign direct investment. According to Calvet (1981), involvement in international operations can stem from two basic reasons: when the firm possesses some valuable assets which can be used outside of the national barriers and when the host or target country owns resources attractive to the foreign

firms. In addition, according to Errunza and Senbet (1981), the benefits of international operations evolve from imperfections in the product and factor markets, from differences in international taxation as well as from imperfections in the financial markets. If markets are imperfect, multinational firms provide capital, technology and entrepreneurial or managerial skills to the foreign economies that domestic firms cannot acquire themselves. The existence of these imperfections in the product and factor markets per se is not adequate to explain FDI. Yet, if theoretically these imperfections must offer special advantages to multinationals, such advantages should be reflected in the market value of the investing firm. Different taxation and government policies, such as wage policies, regulating the migration of labor policies, trade barriers as tariffs and quotas, can be regarded as a major cause of FDI.

Errunza and Senbet (1981) tested empirically the effects of international operations on the firms market value. They found that international diversification was more beneficial to the multinational firm when there were financial barriers to overcome, than when there were only monopolistic advantages because of imperfections in the product and factor markets. In another study, Hisey and Caves (1985) argue that geographical and product diversification, result in greater benefits for the diversifying firm than export diversification and reduces risk more. Further research undertaken by O' Sullivan (1985) found that the relationship of FDI with domestic capital formation is positive, that subsidies cannot explain FDI inflows and that market size, labor costs and exchange rates are important variables in determining the selection of the target country. Finally, Tan and Vertisky (1996) examined some micro aspects of FDI, such as the time of entry that a parent firm chooses, the possession of specific assets by the parent, the special characteristics of the host country, the threats and the market opportunities. Their results indicated that a firm can decide to enter a foreign country through FDI earlier when it possesses greater experience

in operating in foreign markets, when it has a certain size and financial capabilities and when it has some knowledge-based, firm-specific strategic assets.

On the other hand, by taking an international diversification approach on the issue of FDI, several studies show that investors can reduce the total risk of their portfolio by holding an internationally diversified portfolio [Adler and Dumas (1975), Lessard (1976)]. Scepticism on the validity of the latter is expressed by Brewer (1981) who argues that, it may not be always possible for individual investors to achieve efficient international diversification, if certain official or legal restrictions or inhibitions on the investor's part exist, if adequate information about foreign securities is not available and if high political risk result in fear of exposure. However, the individual investors can still participate in international diversification indirectly, by investing in securities of multinational corporations. In another interesting study, Hughes, Logue and Sweeney (1975) have found that multinational firms have lower systematic and unsystematic risk because of greater debt capacity or synergistic effects compared to domestic firms while, Ragazzi (1973) and Rugman (1976) also support this view. The study of Agmon and Lessard (1977) found that multinational corporations have an advantage relative to domestic firms because of imperfections in real goods and factor markets that cause barriers to portfolio capital flows. In addition, they argue that multinational firms can overcome these barriers better than domestic ones and that stock price movements reflect investors' recognition of the firm's diversification and investors' expectations of future cash flows that will be capitalized in the market. Therefore, it is suggested that if individuals want to reduce their portfolio risk without decreasing their expected return, they should invest in multinational securities.

Jacquillat and Solnik (1978) studied the stock price behaviour of multinational American firms that undertook foreign activities, and found that this behaviour is much like the stock price behaviour of

domestic firms. Similarly, Brewer (1981) found no statistical difference in the risk-adjusted performance of multinational and domestic common stocks. In view of this he argued that there is no significant advantage of multinational corporations over the national firms with respect to risk/return benefits of international portfolio diversification. Senchack and Beedles (1980) provided further evidence in the controversy of whether investment in the stocks of multinational firms results in diversification benefits to the investors. The results of their study indicated that domestic firms appear to have less total and unsystematic risk.

Miller and Pras (1980) have taken a mean-variance approach to examine diversification. They argue that investing in a single country causes more instability in the firm's return, because of the exposure to the same political and economic environment. Their investigation showed that multinational diversification has a stronger effect in stabilising corporate profits than do export and product diversification. Their results are consistent with the theoretical view that overall profit stability of the firm is enhanced by FDI diversification.

Fatemi (1984) examined empirically the rates of return realised by stockholders of multinational firms versus the rates of return realized by stockholders of domestic firms. He found that corporate international diversification results in a lower degree of systematic risk and that the higher the degree of foreign involvement, the lower the degree of riskiness. However, the results indicate that the risk-adjusted returns realized by stockholders are identical for the two groups. The only exception is when the multinational corporations operate in competitive foreign markets. Under this case, stockholders of multinational companies experience negative abnormal returns. Fatemi concludes that the higher profits associated with foreign operations are offset by the disadvantages that such operations carry, such as higher monitoring and bonding costs and higher agency costs.

Doukas and Travlos (1988) examined whether FDI is a wealth increasing corporate decision, by examining the effect of international acquisitions on shareholders' wealth. Their study revealed that shareholders of multinational corporations not operating in the target firm's country experience significant positive abnormal returns at the announcement date, when the firm expands into a new industry and geographic market. Shareholders of U.S. firms that expand for the first time abroad experience insignificant positive abnormal returns while shareholders of multinationals that are already operating in the target firm's country, experience insignificant negative abnormal returns. Finally, shareholders of multinational firms benefit the most when their firm expands in less developed countries.

Pfaffermayr (1994) examined the overall effect of FDI on exports and vice versa, using the Granger causality tests, for a sample of Austrian firms. He found that FDIs cause exports or else, that there is a positive impact of FDIs on exports. Further investigation by Rivoli and Salorio (1996) on FDI timing, concluded that given high uncertainty, if the investment is irreversible, then FDI will be delayed, until more information is known. On the contrary, if the investment is easy to reverse, then FDI will be undertaken immediately. Furthermore, if there is high instability and high reversibility, then the firm should undertake the FDI and as early as possible, to establish access to the host country.

Turning to the literature on the investments in Eastern Europe, we must invoke La Follette (1990) study, which examined the business environment of Eastern Europe in general and for each individual country. He cautions to potential investors that the business environment is very different from the one they are used to. As he argues, the methodologies and the evaluation strategies applied in the western world cannot be applied to the Eastern Europe, or in case they are applicable, they give inaccurate estimates of asset values, while, laws on foreign ownership in Eastern Europe are still

fuzzy and contradictory. In Poland, for example, foreign firms are able to own a majority of a Polish company but they cannot own land.

At the same time, a study by Madura and Picou (1990) has examined the impact of joint ventures in Eastern Europe on the wealth of shareholders of U.S. and West German companies. The authors expected that for a multinational corporation with larger European presence the market reaction would be positive, since such a firm is better positioned to capitalize on opportunities in Central and Eastern Europe. Furthermore, the political appeal of the business opportunities caused by the Berlin Wall removal is a greater driving force for German than for U.S. companies. However, the results have indicated that the market reaction for both groups of firms was negative. U.S. companies compared to West German ones had less of a negative reaction to the events in Central and Eastern Europe. The best performing U.S. companies were those having lower European presence but a larger international orientation. The authors concluded that in Europe, the far off rising interest rates, the inflationary pressures and the bureaucratic differences that delay business negotiations between West and East might explain the negative abnormal returns.

Another investigation by Hooley, Cox, Shipley (1996) examined the impact of FDI on the marketing resources, the capabilities and the financial performance of firms in Hungary. They concluded that host firms seek resources from their parent investors, which then they deploy to create competitive advantage over rivals in the domestic market. Finally, Brouters and Bamossy (1997) explored the role of Central and Eastern European transitional governments as key stakeholders and how they influence the international investment negotiations. They found that these governments, intervene at different stages of the negotiations process, they have direct and indirect influences on the process and the ability to change the

balance of power in the negotiations, increasing the risk of the FDIs.

In an overall evaluation of the theoretical approaches, the empirical results and the findings from comparative research offered in the above literature, one may conclude that the degree of stock price reaction depends on the degree of international diversification. The larger this degree is, the lower the negative market reaction. In addition, and based on worth mentioning evidence, one may argue that an initial entry into a market is associated with positive abnormal returns, though they are not always significant. However, and as further research has shown, if domestic capital markets are efficient, the announcement of a foreign acquisition should have no positive effect on the acquiring firm's common stock. Furthermore, the firm's goal of investing abroad also seems to play a role. If the firm's announcement to expand internationally results in negative abnormal returns, it is a signal that the firm's expansion is a matter of survival and not for further diversification. In such case, the firm has obviously limited capacity to extract additional benefits from its domestic operations and therefore is forced to venture abroad. Similarly, negative abnormal returns might result from an announcement of an international acquisition for the acquiring firm because of high agency, bonding and monitoring costs. Finally, since markets are internationally segmented and the degree is different across countries, or industries, the effects on the shareholders' wealth of the parent firm may depend on the target firm's country and industry.

3. Data and Methodology

The focus of this study is on firms from the EU countries and Japan that have been involved in direct foreign investment in Eastern European countries, after November 1989 until March 1990. The sample contains 34 and 6 firms from the EU and Japan, respectively, that announced their intentions of a direct foreign in-

vestment with firms in the former Soviet Union, Hungary, Poland, Czechia, Slovakia, East Germany, Yugoslavia and Bulgaria.

Based on the academic research on FDI, there are positive and negative factors that affect each investment, hence it is hard to say a priori what would be the expected results on the parent company's shareholders. Some of the benefits that are valid for the sample firms of this study are the non-competitiveness of the target markets and the imperfections in the factor, product and financial markets of the Eastern European economies. Some of the disadvantages are higher monitoring, bonding and agency costs, higher information costs, higher political and economic risk. Furthermore, since it is the first time the barriers between the Western and the eastern bloc are totally lifted, the possible consequences and implications of such events as FDIs are still uncertain.

Another issue involved here is whether the results will be the same for European and Japanese firms that invest in Europe. As we saw in the literature, the effect on the shareholder's wealth depends among other factors on the firm's goal of undertaking FDI and the existing degree of internationalization.

Table 6 in the Appendix presents a list of all the firms and the target countries. The announcement dates were taken from PREDICASTS for the period of November 1989 to March 1990. The daily stock prices for the investing firms, as well as the market indices for each foreign stock exchange market were taken from the *Financial Times* of London. Other studies, Roll (1988) and Jacquillat and Solnik (1976) have found that the markets among countries are positively correlated. However, markets continue to be somewhat segmented as each country has its own special characteristics and the stock markets are affected by the country-specific government policies. Therefore, a single world market proxy would not be appropriate, since it would not incorporate all the special characteristics of each individual country. Europe is not united yet to a single market and economy, with a single monetary and fiscal policy. On

the other hand, Japan is a unique market and faces the situation of different time trading. In order to avoid these problems, since markets are segmented, the proxies for each market should be different hence, we utilize separate market indices for each stock exchange market.

The market model is estimated with data on each company's daily stock returns for an examination period ranging from day -90 to day -11 to measure the return generating process

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

where:

R_{jt} = daily return of the j th company on day t .

R_{mt} = daily return of the market on day t .

a_j = intercept of the market model.

B_j = $\text{COV}(R_{jt}, R_{mt}) / \text{VAR}(R_{mt})$, slope of the market model.

e_{jt} = error term, assumed to be normally distributed, with zero mean and constant variance.

After the market model is estimated by Ordinary Least Squares (OLS), the parameters estimated over the examination period are used to derive the expected returns for each security over an estimation period of 20 days, from day -10 to day +10, around the event date (day 0)

$$E(R_{jt}) = a_j + b_j R_{mt} \quad (2)$$

The difference between the actual return and the expected return for each stock for the period from day -10 to day +10 gives the abnormal returns for each firm in the sample for each day of the examination period. These are defined as

$$AR_{jt} = R_{jt} - E(R_{jt}) \quad t = -10, \dots, +10 \quad (3)$$

or

$$AR_{jt} = R_{jt} - (a_j + b_j R_{mt}) \quad (4)$$

The portfolio abnormal return for each day is

$$AR_{pt} = \left(\sum_{j=1}^n AR_{jt} \right) / n \quad t = -10, \dots, +10 \quad (5)$$

This portfolio abnormal return is tested for significance with the following t-statistic

$$t = AR_{pt} / \text{STD} (AR_{pt}) \quad (6)$$

where, $\text{STD} (AR_{pt})$ is the standard deviation of AR_{pt} for the period from day -90 to day -11.

Cumulative abnormal returns of each specified portfolio (CAR_p) are estimated for specified intervals and the t-statistic used to test for significance is

$$t = CAR_p / \text{STD} (CAR_p) \quad (7)$$

where, $\text{STD} (CAR_p)$ represents the standard deviation of CAR_p and is estimated as

$$\text{STD} (CAR_p) = \text{STD} (AR_{pt}) * T^{1/2} \quad (8)$$

where, T represents the number of trading days in the interval examined.

4. Results and Analysis

According to the abnormal returns of the total portfolio presented in Table 1, the overall portfolio experienced a significant positive reaction on day 4 and a significant negative reaction on day 3 and day 5 after the announcement date. The results of this empirical study for the portfolio of all 41 stocks indicate that there is no consistent reaction at the announcement of a foreign direct investment by a Western European or Japanese firm in the Eastern bloc countries. Examining the cumulative abnormal returns for further insights, we observe that there is a consistent negative reaction, but not significant (Table 1).

In order to examine in depth the behaviour of the abnormal returns, the main portfolio was divided into six partial portfolios, each consisting of stocks from the same country. Separate portfo-

lios are created for France, Japan, West Germany, Italy, Netherlands and Great Britain. As the results disclosed in Table 2 indicate, the abnormal returns of the French companies portfolio are sometimes significant after the announcement date, but they are not consistent. There are positive abnormal returns on day 2 and day 4 and negative abnormal returns on day 3 and day 5. The pattern is similar to the one followed by the whole portfolio. The cumulative returns (Table 4) are also negative but not significant. The abnormal returns for the Japanese companies portfolio are generally negative but not significant, as well as the cumulative returns. The same pattern almost occurs for the Dutch and British companies. The abnormal returns for the West Germany companies are positive with the exception of days 1 and 3, but none is statistically significant, even the cumulative returns. Finally, the abnormal returns for the Italian companies are inconsistent. There is a positive non-significant reaction on day 2, day 3 and day 4 and a negative non-significant reaction in day 1, day 5 and day 6. However, the cumulative returns for this portfolio are all positive, but not significant.

These results are not consistent with the statements and inferences of Errunza and Senbet (1981). According to them, because of imperfections in the product, in the factor and in the financial markets, the investing firm should experience positive abnormal returns. In our study, the target markets have imperfections in the product, the factor and the financial markets but the abnormal returns were insignificant and negative or significant but inconsistent.

Similarly, our results contradict those of Fatemi (1984). He argued that the stockholders of firms investing abroad would realise significant negative abnormal returns *only* if the target foreign markets are competitive. Otherwise there will be no significant reaction. In the present study, where the target markets are not at all competitive, any significant negative reaction is obviously inconsistent with Fatemi's view.

Yet, our findings do not confirm those of Fatemi and Furtado (1985) and Doukas and Travlos (1988) who found that there is a positive reaction in the case where a firm tries to enter for the first time a foreign market, otherwise there are no significant wealth effects. In this study, although most of the firms are entering for the first time in the former Eastern bloc markets, there was no consistent positive reaction. This can be explained by the fact that the target's environment was almost completely "unknown territory", being under the socialistic system.

The abnormal returns and the relevant statistics of portfolios that were constructed based on the target countries are presented in Table 3. There are six target countries Yugoslavia, U.S.S.R., Hungary, East Germany, Bulgaria and Poland. Since only one firm announced a foreign direct investment with Yugoslavia and one other with Bulgaria, we thought safer to disregard these two portfolios. Firms that announced a foreign direct investment with the U.S.S.R. experience negative abnormal returns, insignificant for days 1, 2, 3 and day 6 and significant in day 5, with a significant positive return in day 4. However, the cumulative returns are negative but not significant (Table 5). According to La Follette (1990), the effort of the U.S.S.R. to build a market oriented economy on the one side and the use of central planning methods on the other, increase the instability of the political and economic environment, making the specific market a very risky investment zone. Indeed, the severe problems faced by the U.S.S.R. make foreign investment very risky and this condition is revealed in the acquired results by the negative abnormal returns of the U.S.S.R. portfolio. Finally, the reaction in the other portfolios is not consistent, changing from positive to negative significant and insignificant abnormal returns, like the pattern of the total portfolio.

Doukas and Travlos (1988) found that the target country and the target industry play a significant role also to the wealth of the investing firm's shareholders. Our results for each target country

were not much different from the results of the total portfolio. All the target firms of this sample belonged to the former Eastern bloc and due to the political changes that are taking place in these countries, as a first step analysis, they may be perceived to be homogeneous.

A future step of our research project is to investigate the FDI in Eastern Europe in the following years up to date, where we expect to see an amelioration of the investment environment in Poland, especially since France and Germany have expressed a strong interest for FDI there.

Poland has attempted to join the former European Economic Community, but at the time this study investigates, it faces high instability. It has one of the poorest infrastructures in the Eastern bloc and high unemployment. The issue of currency convertibility remains uncertain, and creates problems in the availability of foreign capital. There is high government bureaucracy, which impedes the business negotiations. However, Poland has taken major steps to facilitate the business relationships with the western world. Poland established investor protection treats, tried to adopt western style accounting rules and has special tax treatment for joint ventures with western companies, such as tax exemption on joint venture profits for the first three years. These conditions reduce the riskiness of the environment, but the advantages might be offset by the disadvantages leading to an insignificant market reaction.

The results for the portfolio of investing in Hungary reveal negative reaction. The market reaction fluctuates between significant positive and negative, after the announcement date. However, the cumulative abnormal returns are negative. Hungary has strong infrastructure, is ahead of the other Eastern bloc countries in privatising its industries and has the most liberalised joint venture laws, allowing 100 percent ownership of business and repatriation of profits. These conditions could make Hungary a very attractive

target. However, the country faced problems with western banks, at the time of the present study, because of a substantial amount of outstanding debt, and because true currency convertibility still does not exist. These later factors could account for the negative reaction. It will be also interesting to see what happens to the market reaction on FDI announcements in the subsequent years.

The market reaction for former Eastern Germany was not significant and fluctuated between positive and negative. The cumulative abnormal returns are negative but not significant (Table 5). Eastern Germany presented the most attractive environment. The Reunification makes the economic reform to seem more stable. The currency became fully convertible in July of 1990. The banks of Western Germany are willing to support the region and although the infrastructure is very poor and the environment highly polluted from the industries, western companies perceive Eastern Germany as an attractive target in the intermediate and long run, when it is united with former Western Germany.

According to Rivoli and Salorio (1996), we can explain the market reaction for each partial portfolio based on the degree of reversibility of each investment, and the degree of instability in the host country. The market reaction for the firms that expressed their intention of establishing FDI in the former USSR and Hungary was negative, in these host countries. On the other hand, the market reaction for Poland was positive and significant in day 1 ($t=2.571$), implying a low degree of instability.

In general, a possible explanation for the observed inconsistency of the pattern of the abnormal returns might be that the significant positive wealth effects due to the benefits of foreign direct investment are offset by the negative wealth effects due to the disadvantages of foreign investment, in economies just entering the world of a free market economy, from a previous totally controlled economic system. We should take into consideration the fact that these results correspond to the first period just after the collapse

of the Berlin Wall. It was an area of high uncertainty and risk and this environment has its impact on shareholders behaviour.

5. Summary and Conclusion

This study, investigated the effects a decision of joint ventures and foreign direct investment in Eastern Europe have on the shareholders' wealth of the investing company. The investing companies were from Western Europe and Japan. Announcements of joint ventures and foreign direct investment were assessed from November 1989 to March 1990.

The results indicated that there is either an insignificant negative reaction, or no consistent significant reaction to the announcements of joint ventures or direct foreign investment. U. S. S. R. seems to be the most risky of the target countries. The present conditions of uncertainty and high political and economic risk appear to offset any favourable effects. The results may be period specific since there was an unusually high level of uncertainty surrounding the removal of the Wall.

Future economic conditions were not easy to be forecasted because of political turmoil. To the extent that the political dynamics of each Eastern European country stabilize, the investors may have more confidence in joint ventures in Eastern Europe. If some of the uncertainties about barriers such as maximum proportion of an investment owned by the investing country are resolved in the future, the market may respond more favourably.

The next step of our future research will investigate the market's response of FDI in Eastern Europe during the later years 1991–2000, which followed the Berlin wall removal. We expect that as the previously mentioned problems will be gradually being resolved, the market's response to FDI announcements targeting the same region will improve.

APPENDIX

Table 1: *Abnormal Returns for Entire Sample*

Days	AR	t-value	CAR	t-value
-10	0.00024	0.081	0.00024	0.081
-9	-	-1.463	-	-0.098
	0.00439		0.00415	
-8	-	-0.406	-	-1.030
	0.00122		0.00537	
-7	-	-0.081	-	-0.935
	0.00024		0.00561	
-6	0.00073	0.244	-	-0.729
			0.00488	
-5	0.00488	1.696	-	0.000
			0.00000	
-4	-	-0.976	-	-0.369
	0.00293		0.00293	
-3	-	-0.732	-	-0.603
	0.00219		0.00512	
-2	-	-0.650	-	-0.785
	0.00195		0.00707	
-1	0.00219	0.722	-	-0.514
			0.00488	
0	0.00000	0.000	-	-0.489
			0.00488	
1	-	-0.081	-	-0.493
	0.00024		0.00512	
2	0.00487	1.626	-	-0.023
			0.00025	
3	-	-3.984*	-	-1.087
	0.01195		0.01220	
4	0.00634	2.114*	-	-0.504

			0.00586	
5	-	-4.715*	-	-1.663
	0.01410		0.01996	
6	-	-0.163	-	-1.654
	0.00049		0.02045	
7	0.00561	1.869	-	-1.167
			0.01484	
8	0.00098	0.325	-	-1.059
			0.01386	
9	0.00122	0.406	-	-0.942
			0.01264	
10	0.00195	0.650	-	-0.778
			0.01069	

*Significant at the 0.01 level.

Table 2: *Abnormal Returns Partitioned by Investing Country*

Days	FRANCE		JAPAN		W. GERMANY	
	AR	t-value	AR	t-value	AR	t-value
-10	0.0033	0.476	0.0067	0.952	-	-0.235
					0.0011	
					7	

-9	-	-0.952	0.0000	0.000	-	-1.402
	0.0007				0.0070	
					8	
-8	0.0000	0.000	-	-2.143**	0.0017	0.353
			0.0150		8	
-7	0.0067	0.952	0.0067	0.952	-	-0.708
					0.0035	
					3	
-6	0.0100	1.428	-	-2.143**	0.0041	0.824
			0.0150		2	
-5	-	1.904	0.0133	1.904	0.0023	0.470
	0.0133				5	
-4	-	-0.476	-	-1.667	-	-0.118
	0.0033		0.0012		0.0005	
					8	
-3	0.0000	0.000	-	-0.238	-	-1.176
			0.0017		0.0058	
					0	
-2	-	-1.190	-	-0.714	0.0017	0.353
	0.0083		0.0050		8	
-1	0.0033	0.478	0.0083	1.190	0.0017	0.353
					8	
0	-	-0.952	0.0067	0.952	0.0011	0.235
	0.0067				8	
1	0.0100	1.428	-	-0.238	-	-0.235
			0.0017		0.0011	
					8	
2	0.0450	8.428	-	-0.714	0.0000	0.000
			0.0050		0	
3	-	-9.288*	-	-1.428	-	-0.588
	0.0650		0.0100		0.0029	
					4	

4	0.0567	8.095*	-	-0.714	0.0000	0.000
			0.0050		0	
5	-	-	-	-0.714	0.0035	0.705
	0.1000	14.285*	0.0050		3	
6	-	-0.238	-	-0.476	0.0005	0.118
	0.0017		0.0033		8	
7	0.0083	1.190	0.0117	1.667	0.0047	0.941
					1	
8	-	-0.238	-	-0.238	0.0029	0.588
	0.9017		0.0017		4	
9	0.0067	0.952	-	-0.476	0.0017	0.353
			0.0033		6	
10	0.0033	0.476	0.0133	1.904	0.0005	0.118
					8	

**Significant at the 0.01 level. **Significant at the 0.05 level*

Table 2: *Abnormal Returns Partitioned by Investing Country (Cont)*

Days	ITALY		NETHERLANDS		UNITED KINGDOM	
	AR	t-value	AR	t-value	AR	t-value
-10	0.002	0.333				
			0.0025	-0.531	0.0033	0.476
-9	0.000	0.000	0.0025	0.522	-	-0.476
					0.0033	
-8	0.004	0.687	0.0000	0.001	-	-0.476
					0.0033	
-7	0.000	0.000	-	-1.002	-	-0.476
			0.0050		0.0033	
-6	0.006	1.000	-	-1.031	-	-0.952
			0.0050		0.0087	
-5	0.006	1.000	-	-0.507	-	-0.952
			0.0025		0.0087	
-4	-0.008	-1.333	0.0050	1.027	-	-1.428
					0.0100	
-3	0.002	0.333	-	-1.031	0.0100	1.428
			0.0050			
-2	0.004	-0.667	0.0025	0.533	-	-0.476
					0.0033	
-1	-0.004	-0.667	0.0025	0.525	0.0000	0.000
0	0.002	0.333	-	-0.554	-	-0.952
			0.0025		0.0067	
1	-0.000	-0.000	-	-1.563	0.0000	0.000
			0.0075			
2	0.000	0.000	-	-0.571	-	-0.952
			0.0025		0.0067	
3	0.002	0.333	0.0000	0.000	0.0000	0.000
4	0.002	0.333	-	-0.503	-	-1.905
			0.0025		0.0130	
5	-0.000	-0.000	0.0000	0.000	0.0067	-0.952

6	-0.000	-0.000	0.0000	0.000	-	-0.476
					0.0033	
7	0.002	0.333	-	-0.504	0.0130	1.905
			0.0020			
8	0.000	0.000	-	-1.028	0.0100	1.428
			0.0050			
9	-0.008	-1.333	0.0110	2.036**	0.0000	0.000
10	-0.002	-0.333	-	-1.501	0.0033	0.476
			0.0075			

Table 3: *Abnormal Returns Partitioned by Country Target*

Days	U.S.S.R.		HUNGARY		E. GERMANY		POLAND	
	AR	t-value	AR	t-value	AR	t-value	AR	t-value
-10	0.001	0.468	-	-	0.001	0.30	-	-
	9		0.002	0.43	8	3	0.001	0.28
				1			4	5
-9	0.000	0.000	-	-	-	-	0.004	0.85
	0		0.008	1.65	0.013	2.272**	2	7
				3		6		
-8	0.000	0.158	-	-	-	-	-	-
	6		0.008	1.65	0.002	0.45	0.007	1.42
				2	7	4	1	8
-7	0.001	0.312	-	-	0.000	0.15	-	-
	3		0.002	0.41	9	1	0.002	0.57
				1			8	1
-6	0.000	0.000	0.002	0.41	0.000	0.15	-	-
	0			1	9	1	0.001	0.28
							4	5
-5	0.014	3.593*	0.002	0.42	-	-	0.008	1.71
	3			1	0.008	1.36	6	4
					9	4		
-4	-	-	-	-	0.000	0.15	-	-
	0.001	0.312	0.004	0.83	9	1	0.011	2.285**
	3			7			4	
-3	-	-	0.002	0.43	0.000	0.15	-	-
	0.003	0.938		2	9	1	0.007	1.42
	8						1	8
-2	-	-	-	-	-	-	0.000	0.00
	0.002	0.625	0.002	0.42	0.004	0.75	0	0
	5			5	5	7		
-1	0.006	1.563	0.000	0.00	-	-	0.005	1.14
	3			0	0.004	0.75	7	2
					5	7		
0	-	-	0.004	0.82	0.001	0.30	-	-
	0.000	0.156		5	8	3	0.001	0.28
	6						4	5
1	-	-	-	-	-	-	0.012	2.571**

*, **, significant at 0.01 and 0.05 level, respectively.

Table 4: *Cumulative Abnormal Returns Partitioned by Investing Firm*

Investing Firms from:	CAR_{10,0}	t-value	CAR_{10,+5}	t-value	CAR_{10,+10}	t-value
All Countries	-0.005	-0.51	-0.012	-1.66	-0.011	-0.77
France	0.002	0.50	-0.042	-1.49	-0.027	-0.83
Japan	-0.007	-0.28	-0.033	-1.18	-0.017	-0.58
W. Germany	-0.005	-0.31	-0.006	-0.29	0.005	0.21
Italy	0.006	0.30	0.001	0.42	0.002	0.07
Netherlands	-0.010	-0.60	-0.022	-1.09	-0.028	-1.20
U.Kingdom	-0.030	-1.29	-0.059	-2.07**	0.033	-1.04

**, significant at 0.05 level

Table 5: *Cumulative Abnormal Returns Partitioned by Target Firm*

Target Firms From:	CAR_{10,0}	t-value	CAR_{10,+6}	t-value	CAR_{10,+10}	t-value
All countries	-0.005	-0.51	-0.012	-1.66	-0.011	-0.77
USSR	0.016	1.22	-0.014	-0.86	-0.008	-0.06

Hungary	-0.016	-0.96	-0.060	-3.00**	-0.050	-2.73**
East many Poland	Ger- -0.026	-1.32	-0.022	-0.92	-0.018	-0.58
	-0.014	-0.85	-0.008	-0.42	0.011	0.50

***, significant at 0.05 level*

Table 6: *List of Firms and Target Countries*

FIRM	TARGET COUNTRY
St. Gobain	Yugoslavia
Thomson Consumer Electron	U.S.S.R.
Spie-Batignolles	U.S.S.R.
Hachette	U.S.S.R.
Boygues	Hungary
Accor	U.S.S.R.
Commerzbank	East Germany
Asko	Bulgaria
Siemens	Poland
Deutsch Bank	Poland

Siemens	East Germany
Allianz	Poland
Brown Boveri	U.S.S.R.
Brown Boveri	Poland
Henkel	Poland
Volkswagen	East Germany
BASF	Poland
Lufthansa	East Germany
Metallgesellschaft	East Germany
Daimler Benz	East Germany
Wella	U.S.S.R.
Springer	East Germany
Deutsch Babcock	East Germany
Pirelli	U.S.S.R
Fiat	U.S.S.R
Fiat	Poland
Banca Commerciale	U.S.S.R
Montedison	U.S.S.R
Royal Dutch/Shell	U.S.S.R
Philips	Hungary
Akzo	Hungary
British Telecom	U.S.S.R
British Petroleum	East Germany
Thorn EMI	East Germany
Suzuki Motors	Hungary
Sanyo Electric	U.S.S.R
Mitsubishi	U.S.S.R
Mitsui	U.S.S.R
Onoda Cement	Poland
Bank of Tokyo	East Germany

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