The interaction of international trade and Foreign Direct Investment (FDI) under decisive Institutional Reforms in Bulgaria

A. Bitzenis*

University of Macedonia,
156 Egnatia Street,
540 06 Thessaloniki, Greece
Fax: +302310891498   E-mail: bitzenis@uom.gr
*Corresponding author

J. Marangos

Department of Economics,
Colorado State University,
Fort Collins, CO, USA
E-mail: jmarango@lamar.colostate.edu
Website: http://lamar.colostate.edu/~jmarango/

A. Andronikidis

University of Macedonia,
156 Egnatia Street,
540 06 Thessaloniki, Greece
Fax: +302310891544   E-mail: andro@uom.gr

Abstract: The paper examines the interaction between FDI and International Trade in Bulgaria on the basis of successful structural and institutional reforms. After 1989, major changes took place in the political and economical scene in Bulgaria. The country has managed to successfully reform institutions and as a result liberalisation policies became effective in the transition to a market economy. This is evident in the entrance of Bulgaria into the EU, the increased FDI inflows and the re-orientation of trade activities towards the EU member countries. Our empirical research suggests that FDI and international trade are both complements and substitutes in the case of Bulgaria.

Keywords: trade; foreign direct investment; institutionalism.

Biographical notes: A. Bitzenis, PhD is an Assistant Professor in the Department of International and European, Economic and Social Sciences at the University of Macedonia in Thessaloniki (Greece) and a Visiting Professor at the Open University of Patras (Greece). His main research is in the areas of foreign direct investment, privatisation, globalisation, international banking,

entrepreneurship, European business environment and corporate restructuring in South East Europe (SEE). He has published extensively and participated in various conferences in his research field.

John Marangos is an Associate Professor at the Department of Economics at Colorado State University. His main research interests are Transition Economics, Political Economy and Teaching Economics. He has recently been appointed as an Editor of the *Forum of Social Economics*, a journal sponsored by the Association for Social Economics. His latest book titled *Alternative Economic Models of Transition* is published Ashgate.

Andreas Andronikidis is a Lecturer in International Marketing at the University of Macedonia, Greece. Previously, he taught at the Sheffield University Management School and he is member of the Psychographic Marketing Research Group. His current research interests are in the areas of Consumer Psychology and International Business. His research is primarily into self-image and bank-image congruence, and the implications of this for policy and strategy. A constant theme of his research is the Interaction of Ethnodimensions in shaping consumer cognition.

1 Introduction

In this section, we first attempt to discuss the relationship between FDI, international trade and institutionalism. We propose to examine the interaction between FDI and international trade in Bulgaria on the basis of successful structural and institutional reforms. Initially, we describe the current political and economical situation in Bulgaria. This is characterised by:

- the collapse of the communist system

- the openness of borders

- the transition to a market economy.

The transition to a market economy is related to:

- macroeconomic stability

- market liberalisation

- structural and institutional reform

- privatisation and restructuring.

Accepting that structural and institutional reform is the most significant factor for a successful transition to a market economy, the next section examines the role of institutions; how they relate to trade and FDI, Section 2 discusses alternative strategies for institutional development (see also Marangos, 2001a, 2002), and Section 3 presents empirical findings to support the interaction between trade and FDI.

The paper examines the interaction between FDI and International Trade in Bulgaria, a South East European country that has attained success through the prism of well-planned and sound structural and institutional reforms. After the fall of communism in 1989, Bulgaria aimed to achieve economic collaboration in the frame of commercial

and investment relations, ensure the safety of its borders, and protect the consumers and the environment.

In the frame of a common objective, that is the passage from a planned economy into a market economy on the one hand, and the potential integration of the country with the EU on the other hand, many initiatives and stabilisation programmes were introduced in order to confront negative events and the subsequent necessity for the reconstruction of states that follow a war. This includes the establishment of institutions in order for integration to be facilitated and improvements of communications and transportation infrastructure with the purpose to increase trade mobility (Bergsten, 1997; Baldwin and Venables, 1995; Edwards, 1998). Institutions facilitated countries in adopting measures prior to their membership to the EU, and in proceeding with reforms that lead to a market economy. Hence, the successful establishment of institutions assisted in the European Union (EU) membership of Bulgaria in 2007, providing for FDI and trade inflows, too.

Given the common goal of the transition countries to move to a market economy and, therefore, to promote enhanced economic efficiency and high growth rates, there was a widespread agreement that the crucial elements of the transition process are macroeconomic stabilisation, price, foreign exchange, and trade liberalisation, institutional reform, and restructuring and privatisation (Lipton and Sachs, 1990; Fischer et al., 1996; Gomulka, 2000).

Successful liberalisation needs successful establishment and sound institutions in order to facilitate and promote the liberalisation of prices, trade, capital flows and the whole market, in general (Marangos, 2001b). The above dimensions of the transition reform are interrelated and progress should be made in all of them (sequence of reforms). Otherwise, distortions, negative effects and the risk of a breakdown of the pursued market economy might appear.

Decisive factors for the success that each country achieves in the transition process are the different reform models, the different transition strategies, policies, the sequence and speed of reforms, which each country goes along, and the different adverse initial economic conditions along with other external facts each country had faced or started with. Transition is a massive and complex task and very few of the transition countries are close to the completion of the transformation process. The aims of the transition were clear from the beginning: the establishment of political pluralism similar to Western Europe's and the substitution of the administrative planning system with market-based decision-making, and the facilitation of speedy integration into the world economy and thus, participation in the globalisation procedure.

Many authors highlight the importance of institutional reforms (Meyer, 1998; Lissowska, 2005; Kregel and Matzner, 1992; Hodgson, 1995). Without institutional support, there is no chance for the creation of a market economy.

In Bulgaria, customs reform was one of the most important priorities for the government of the National Movement Simeon II. The main objective was the handling of corruption, which increased during the government of Kostov (1997–2001). At first, attempts were proven to be inadequate, since the result was the decrease of customs revenues and not the elimination of corruption. This fact indicates the difficulties that countries have met when trying to implement institutional reforms. In the same context, Bulgaria made further efforts to achieve customs reforms. Some of the measures taken were the determination of customs bureaus responsible for handling risk goods, the introduction of the Road Traffic Law, which empowered employees of customs to stop vehicles and make relevant controls, the introduction of the Bulgarian Integrated

Customs Information System and the design of a new system for controls over liquid products (Todorov et al., 2002). The government also stressed the necessity of introducing ethics standard and reducing smuggling into the country. This enables the unfolding of anti-corruption reforms, in particular, in the two institutions (the Customs Agency and the Ministry of Interior), which play the largest role both in countering smuggling, and in the corrupt partnership between state officials and smugglers (Todorov et al., 2002, p.68).

Similar reforms have been made in the field of agriculture/land. The transformation of the sector began in 1991 when the Law for Agricultural Land Ownership and Land Use was introduced. Bulgaria managed to obtain the first stage of reforms related to the principles of ownership of land. Adoption of the Cadastre and Property Register Law (CPRA, April 2000) was another step towards land reform, as well as the introduction of a relevant information system (Margaris et al., 2001). Along with that law a new Cadastre Agency was created on January 1, 2001. Furthermore, the acquisition of real estate under Bulgarian law is regulated mainly by the Constitution of the Republic of Bulgaria, the Ownership Act, the Ownership and Use of Agricultural Land Act and the Civil Procedure Code.

Other institutional reforms refer to the banking sector, which in Bulgaria has undergone great changes. For example, the Law on Bank Bankruptcy (September 2002) had the goal of the bankruptcy proceedings for a bank to secure in the shortest time practicable a fair satisfaction of the bank's depositors and other creditors; it also had the goal of increased confidence of the public, and the stability of the banking system. Furthermore, the introduction of the new Law on the Bulgarian National (BNB), and the Law on Banks, both issued in June 1997 (just before the establishment of the currency board – July 1997) has altered the banking situation, providing numerous incentives to foreign investors, and stability to the whole system. Still, in order for institutional reforms to be successful, strategic planning should in place, and long periods of time are necessary to achieve the desired results (http://www.bnb.bg/bnb/home.nsf/vPages/ Laws_Banks/).

In Central and East European (CEE) countries, the EU accession process had a significant effect on Foreign Direct Investments (FDI) inflows, which, in turn, substantially affected trade flows. Institutions play a key role in FDI development, too. If they are able to establish stability and certainty in economic relations, more FDI will be achieved and thus, the country will exhibit greater economic growth.

A relationship between FDI increase and successful implementation of institutional reform has been recognised (Tridico, 2003). There is a relationship between cross-national trade volume and the volume of inward FDI of a host country (Gopinath et al., 1999; Munirathinam et al., 1998; Blonigen, 2001; Fontagne, 1999; Lipsey et al., 2000; Markusen and Venables, 1999). First, this relationship derives from the fact that most companies aiming to undertake foreign investment projects, consider whether the marginal profit between trading and operating through FDI is positive (Helpman, 1984). Moreover, the economic opening of the borders and the capital mobility in most countries had positive effects on both trade and FDI development, and also served to help the evolution of MNEs, which are vehicles of both FDI and trade (Rugman and Verbeke, 2004). MNEs handle 75–85% of world trade (EBRD *Transition Report*, 2000). Even from the theorists' point of view, there is a recognised relationship, since many trade theories have been modified to fit FDI. The kind of relationship between trade and FDI differs depending on the function and the utility of the product

derived from the investment and the intentions of the company (whether the FDI's aim is to merely serve the local market or to serve more than one market) (Blonigen, 2001).

2 The role of institutions in the transition to a market economy and in the interrelation and facilitation of trade and FDI flows

Many companies undertake FDI with the purpose of only serving the local market, responding to unfavourable conditions for trade and/or favourable conditions for FDI. Conditions unfavourable for trade are either set by governments (high tariffs, ceilings to quantity, etc., (EBRD, 2000)) or the geographical distance (transportation costs, etc.). In the latter case, since the capital mobility has made FDI easier and more profitable, companies prefer FDI to exports (Blonigen, 2001). Moreover, FDI is more profitable if the resources costs in the host country are low in order to minimise the cost of production and make it more profitable for the firm to produce and trade within the host country rather than produce in the home country and export to the host country. FDI became easier also because of the fact that governments realised the positive effect of FDI on the economy. This led them to provide a favourable environment for FDI through lower taxation and subsidies. Although FDI that aims in this direction has a negative effect on the host country's imports, it has a positive effect on the trade balance. In this case, FDI is a 'substitute' for cross-national trade (Gopinath et al., 1999; Bayoumi and Lipworth, 1997).

On the other hand, companies may invest in a foreign country with the objective of exporting the products derived from their investment. The company may decide to exploit a unique or a highly exportable product of the host country by processing it there and then exporting it (Rugman, 1986). The company may also decide to take advantage of some favourable conditions of the host country, e.g., trade agreements with neighbouring countries or free trade zones, in order to create an export base (Horst, 1971, 1972). Other advantages of the host country that the company may utilise are the low costs of labour and/or raw materials. If the company utilises them either by shifting its operations to the host country or by vertical integration, it may prove more cost efficient to produce in the host country and re-export to the home country. In this case, FDI has a positive effect on the exports of the host country and therefore, a positive effect on the trade balance, indicating that FDI is 'complement or supplement' to the cross-national trade (McCorriston, 2000; Rugman, 1986; Horst, 1971; Fukao et al., 2003; Fontagne, 1999). In the case that FDI is targeted at exploiting both the local market and the export opportunities, then again, it has positive effects on the trade balance. Finally, there are cases where FDI is 'unrelated' to the cross-national trade of the host country (Goldberg and Kein, 1999; Nakamura and Oyama, 1998). This is the case when the company that undertakes the FDI aims to serve only the local market, had no prior trade relationships with the host country or even if it had, the product they aim to trade after the FDI establishment is original and does not affect the demand for the product they were trading before (Feinberg et al., 1998). The same happens if the product is not exportable (e.g., mobile-phone services) or if the investment is done for strategic reasons, with no intent for export and no prior import history (Egger, 2001). In some cases, countries impose restrictions on imported goods either in order to protect local producers or to encourage FDI projects in the country. Theorists doubt whether companies would

undertake FDI based on those restrictions. However, there are cases where companies decided to produce in a country after the imposition of such restrictions (Meyer, 2001).

Some products can not be efficiently exported to distant countries due to immense transportation costs (Daniels and Radebaugh, 1992) that raise the unit price to a non-competitive level, offering a certain advantage to local producers. To the transportation costs, one may add the custom taxes that raise the unit price to even higher levels. If the transportation costs are such as not to discourage exports or the price of the product is manipulated as being competitive, then, most companies are known to avoid direct investment. If the demand in a foreign market grows so much as to exceed the capacity of the local production unit (Lecraw, 1991), the company may undertake FDI after having gained certain knowledge of the given foreign market, and the confidence that the outcomes of the potential investment would be sufficiently absorbed by the foreign market (Brainard, 1993, 1997; Horstman and Markusen, 1992).

A radical change, such as moving towards a market economy, required reform in the institutional structure consistent with the institutional arrangements that were fundamental for the proper functioning of a market economy (Chang and Rowthorn, 1995; Clague, 1997; Ostrom et al., 1993; Swedberg, 1992). The role of economic institutions is to render individuals responsive to the economic environment and make the economic environment responsive to individual actions. The institutional structure determines the rules of the game in a society (Murrell, 1996), and identifies the constraints within which rational economic actors comprehend, plan and use to achieve their goals (Greif and Kandel, 1995). In addition, institutions encourage competitive or cooperative behaviour, reduce or increase transaction costs, and provide the organisational foundation for production and exchange (Hay and Shleifer, 1998).

> "Indeed, the market cannot properly be understood separately from the economic, social and political institutions necessary for its functioning and its legitimacy." (Stilwell, 1996, p.95)

Institutional development in transition economies did not only involve the development of formal, but also of informal, institutions (North, 1990). Those are extensions, elaborations, and qualifications of rules that 'solve' innumerable exchange problems not completely covered by formal rules and, in consequence, have tenacious survival ability. Routines, customs, traditions and culture are words we use to denote the persistence of informal constraints. The development of informal institutions could only be gradual.

Governments had an important role in supporting the ever-changing market with the appropriate institutional structure. Otherwise "trade relations are destroyed by the absence of market institutions" (Kornai, 1994, p.47) and "laissez faire is not optimal" (Thomas and Wang, 1997, p.218). Essentially, the success of the privatisation process depended on how rapidly the market legal frameworks and supervisory institutions developed, how promptly the bankruptcy proceedings and liquidation processes were in place, and finally, on the reliability of the free transfer of property rights. Institutional change was imperative for divorce tax collection by various levels of government from the ownership of firms. The transition economies that relied on the spontaneous appearance of the necessary institutional structure, without any government initiation, were unable to manage adequately the transition process. Nevertheless, governments should not have been expected to replace the spontaneous, decentralised, organic growth processes of institutions, as often, social arrangements might have been more powerful

than government in establishing the rules. Fewer rules usually have advantages over more regulation.

Most of the institutional literature on transition suggests that the creation of guaranteed property rights was the only ultimate goal consistent with the neoclassical approach to transition (Aghion and Blanchard, 1994; Southern, 1993; Kovács et al., 1996; Neff, 1992).

3 Empirical evidence on trade and FDI interaction: the case of Bulgaria

Our basic argument is that institutional reform in Bulgaria encouraged FDI inflows and re-orientation of trade activities towards EU member countries. First, institutions are essential for the efficiency of trade liberalisation. Second, successful institutional reform is related to FDI increase and further, cross-national trade volume is related to the volume of inward FDI of the host country. This section presents empirical evidence for the interaction of FDI and International Trade by examining the cases of Greece and Bulgaria in order to support the relationship of institutional reforms, international trade, and FDI.

This investigation relates to the motives behind FDI development in Bulgaria. A questionnaire was designed to obtain information regarding the determinants of FDI in Bulgaria during the post-communist decade of the 1990s. The purpose was to identify the type of motivations for inward FDI considered by foreign MNEs while investing in Bulgaria. The questionnaire was based on Dunning's theory (1988, 1993) regarding the possible reasons and entry barriers for foreign investment. A descriptive/analytical type of research was adopted as it best suited the research objectives. The sample was determined on a quota basis (non random selection) involving the selection of subjects based on the identification of specific characteristics with the purpose of increasing representativeness.

In quota sampling, the target population is divided into subgroups on the basis of different characteristics. In the case of this study, taking into consideration companies from different types of industries, the volume of investments, and the number of employees, we then determined the quota for each subgroup. Based on the criterion of the largest investment deals in Bulgaria, a quota has been developed with the help of an official document, which was retrieved from the Bulgarian Foreign Investment Agency (BFIA), resulting in a list of nearly 131 foreign companies. The response rate was around 50%, with 64/131 foreign companies participating in our survey.

In the next paragraphs, we present the findings of the research on a case scenario highlighting the relationship of trade and FDI. Opinions regarding FDI development in Bulgaria differ relative to the enterprise type. In particular, 69.6% of companies operating in the production sector and 47.8% in the trade sector perceive Bulgaria as an export base with the purpose of taking advantage of additional links with other neighbour countries. On the other hand, enterprises in the service sector and especially banks are not interested in links with other countries, implying a trend towards deeper integration (Table 1). The Pearson Chi-Square test (Table 2) confirms the findings (p-value is 0 and thus <0.01). Therefore, we accept the Ha hypothesis at 1% level of significance, suggesting that there is a strong association between the two variables (the motive of FDI- using Bulgaria as a link to other neighbour countries- and the sector that each company belongs to).

Table 1   A link to other neighbour countries and the sector that an MNE belongs to

			Kind of business			
			Productive/Industry + Textiles	Services/banks	Trade/food	Total
ax7	No	Count	7	18	12	37
		% within ax7	18.9%	48.6%	32.4%	100.0%
		% within kind of business	30.4%	100.0%	52.2%	57.8%
		% of total	10.9%	28.1%	18.8%	57.8%
	Yes	Count	16	0	11	27
		% within ax7	59.3%	0%	40.7%	100.0%
		% within kind of business	69.6%	0%	47.8%	42.2%
		% of total	25.0%	0%	17.2%	42.2%
Total		Count	23	18	23	64
		% within ax7	35.9%	28.1%	35.9%	100.0%
		% within kind of business	100.0%	100.0%	100.0%	100.0%
		% of total	35.9%	28.1%	35.9%	100.0%

Table 2   Chi-Square tests for Table 1

	Value	df	Asymp. sig. (2-sided)
Pearson chi-square	20.503[a]	2	0.000
Likelihood ratio	27.045	2	0.000
Linear-by-linear association	2.193	1	0.139
No. of valid cases	64		

[a]0 cells (0%) have expected count less than 5. The minimum expected count is 7.59.

In this respect, an important motive (27/64 = 42%) hidden behind FDI development was to use Bulgaria as a link in order to serve other neighbour countries (Tables 3 and 4). Companies view Bulgaria as an export base for neighbour countries. With this in mind, FDI can be considered as an export oriented FDI and this could improve the Bulgarian trade balance when the exports increase. Thus, trade and FDI can be complementary, especially for textile companies, and companies that belong to the trade/food sector.

Furthermore, 54.1% of Greek enterprises operating in Bulgaria show a great interest in serving other markets, using Bulgaria as a bridge destination country. On the other hand, only 25.9% of companies from Europe or other regions think of Bulgaria as an intermediary in their geographical expansion. Since Greece is geographically close to Bulgaria, it is interested in trade liberalisation with other neighbouring countries, while companies from more distant countries do not pay attention to other links.

Table 3 A link to other neighbour countries and the origin of MNEs

			Origin of MNEs		Total
			Greece	Europe and other	
ax7	No	Count	17	20	37
		% within ax7	45.9%	54.1%	100.0%
		% within Origin of MNEs	45.9%	74.1%	57.8%
		% of Total	26.6%	31.3%	57.8%
	Yes	Count	20	7	27
		% within ax7	74.1%	25.9%	100.0%
		% within Origin of MNEs	54.1%	25.9%	42.2%
		% of Total	31.3%	10.9%	42.2%
Total		Count	37	27	64
		% within ax7	57.8%	42.2%	100.0%
		% within Origin of MNEs	100.0%	100.0%	100.0%
		% of Total	57.8%	42.2%	100.0%

Table 4 Chi-Square tests for Table 3

	Value	df	Asymp. sig. (2-sided)	Exact sig. (2-sided)	Exact sig. (1-sided)
Pearson Chi-Square	5.064[b]	1	0.024		
Continuity correction[a]	3.976	1	0.046		
Likelihood ratio	5.201	1	0.023		
Fisher's exact test				0.040	0.022
Linear-by-linear association	4.985	1	0.026		
No. of valid cases	64				

[a]Computed only for a 2 × 2 table.
[b]0 cells (0%) have expected count less than 5. The minimum expected count is 11.39.

The Continuity Correction Test (2 × 2 Table) confirms the above findings (*p*-value 0.046 and thus <0.05). Therefore, we accept the Ha hypothesis at 5% level of significance indicating that there is an association between the two variables (the motive of FDI – using Bulgaria as a link to other neighbour countries, and the origin of each company). Accordingly, companies coming from a neighbouring country such as Greece significantly prefer the investment climate of Bulgaria and make use of the company as a bridge for further investments in other neighbouring countries. In this way, the FDI and trade are also complements, especially for the case of Greek multinationals when most of them have established export bases in Bulgaria. They produce their products abroad and return them to the home country in order to exploit the low labour cost. Thus, the low production cost, together with the low transportation cost due to geographical proximity.

Almost 1/3 of Greek companies (32.4%) considered the avoidance (absence) of trade barriers as a motive in order to invest in Bulgaria (Table 5). At the same time, 8/27 (29.6%) of foreign companies other than Greek MNEs have similar thoughts. Thus, the origin of MNEs did not play a decisive role in the consideration of this motive as significant. Moreover, this lack of trade barriers indicated that the specific MNEs have considered FDI and trade as substitutes for each other, since they moved from their export activities to FDI in order to overcome the resulting trade quotas and tariffs and minimising the product cost.

Table 5   To avoid trade barriers and the origin of MNEs

			Origin of MNEs		Total
			Greece	Europe and other	
CX33	No	Count	25	19	44
		%	56.8%	43.2%	100.0%
		%	67.6%	70.4%	68.8%
	Yes	Count	12	8	20
		%	60.0%	40.0%	100.0%
		%	32.4%	29.6%	31.3%
Total		Count	37	27	64
		%	57.8%	42.2%	100.0%
		%	100.0%	100.0%	100.0%

The Continuity Correction Test (2×2 Table) confirms the above findings (Table 6) (*p*-value 1, thus >0.10). Therefore, we neglect the Ha hypothesis and we accept the Ho hypothesis, suggesting that there is no association between the two variables (the absence of trade barriers as an FDI motive, and the origin of each company).

Table 6   Chi-Square tests for Table 5

	Value	df	Asymp. sig. (2-sided)	Exact sig. (2-sided)	Exact sig. (1-sided)
Pearson Chi-Square	0.057[b]	1	0.811		
Continuity correction[a]	0.000	1	1000		
Likelihood ratio	0.057	1	0.811		
Fisher's exact test				1.000	0.516
Linear-by-linear association	0.056	1	0.813		
No. of valid cases	64				

[a]Computed only for a 2×2 table.

[b]Cells (0%) have expected count less than 5. The minimum expected count is 8.44.

From Table 7, it is suggested that the avoidance of trade barriers was decisive for the trade/food companies in 69.6% (16/23) of the cases, for textile and productive companies in only 17.4% (4/23) of the cases, and totally insignificant for the services sector.

Table 7 To avoid trade barriers and the sector that an MNE belongs to

			Kind of business			
			Productive/industry + textiles Greece	*Services/banks*	*Trade/food*	*Total*
CX33	No	Count	19	18	7	44
		%	43.2%	40.9%	15.9%	100.0%
		%	82.6%	100.0%	30.4%	68.8%
	Yes	Count	4		16	20
		%	20.0%		80.0%	100.0%
		%	17.4%		69.6%	31.3%
Total		Count	23	18	23	64
		%	35.9%	28.1%	35.9%	100.0%
		%	100.0%	100.0%	100.0%	100.0%

The Pearson Chi-Square test also confirms the findings (Table 8) (*p*-value is 0 and thus <0.01). Therefore, we accept the Ha hypothesis at 1% level of significance, indicating that there is a strong association between the two variables (the absence of trade barriers as an FDI motive, and the sector that each company belongs to).

Table 8 Chi-Square tests for Table 7

	Value	*df*	*Asymp. sig. (2-sided)*
Pearson Chi-Square	25.954[a]	2	0.000
Likelihood ratio	29.978	2	0.000
Linear-by-linear association	14.343	1	0.000
No of valid cases	64		

[a]0 cells (0%) have expected count less than 5. The minimum expected count is 5.63.

Table 9 designates that only 7/37 (18.9%) of the Greek MNEs and 7/27 (25.9%) of other foreign MNEs have used their existing business links such as the use of network, a representative office, prior trade relations, a past trade or business activity, distribution channels, etc. to undertake an FDI project. Thus, these companies unrelated to country origin had moved from their past trade activity to FDI activity. Even in this case, we have trade and FDI as substitutes.

The Continuity Correction Test (Table 10, 2×2 Table) confirms the above findings (*p*-value 0.716 and thus >0.10). Therefore, we neglect the Ha hypothesis and we accept the Ho hypothesis, suggesting that there is no association between the two variables (the use of MNEs existing business links by the MNEs as an FDI motive, and the origin of each company).

Table 9   Existing business links and the origin of MNEs

			Origin of MNEs		Total
			Greece	Europe and other	
CX33	No	Count	30	20	50
		%	60.0%	40.0%	100.0%
		%	81.1%	74.1%	78.1%
	Yes	Count	7	7	14
		%	50.0%	50.0%	100.0%
		%	18.9%	25.9%	21.9%
Total		Count	37	27	64
		%	57.8%	42.2%	100.0%
		%	100.0%	100.0%	100.0%

Table 10   Chi-Square tests for Table 9

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	448[b]	1	0.503		
Continuity correction[a]	132	1	0.716		
Likelihood ratio	0.445	1	0.505		
Fisher's exact test				0.551	0.356
Linear-by-linear association	0.441	1	0.506		
No. of valid cases	64				

[a]Computed only for a 2×2 table.

[b]0 cells (0%) have expected count less than 5. The minimum expected count is 5.91.

Based on the data from Table 11, it is suggested that the sector plays a significant role in considering the prior business links and the sector that each MNE belongs to. This is common practice in business (pilot test), especially for the trade/food sector. Thus, as expected, 12/23 companies (52.2%) from the trade/food sector but only 2/23 (8.7%) from the textiles and the industrial/productive sector mentioned the use of business links as a motive for undertaking an FDI project in Bulgaria. None of the companies from the services sector utilised the above motive. However, the use of such a motive means that these companies recognise trade and FDI as substitutes.

Table 11   Existing business links and the sector that an MNE belongs to

			Kind of business			
			Productive/industry + textiles Greece	*Services/banks*	*Trade/food*	*Total*
CX33	No	Count	21	18	11	50
		%	42.0%	36.0%	22.0%	100.0%
		%	91.3%	100.0%	47.8%	78.1%
	Yes	Count	2		12	14
		%	14.3%		85.7%	100.0%
		%	8.7%		52.2%	21.9%
Total		Count	23	18	23	64
		%	35.9%	28.1%	35.9%	100.0%
		%	100.0%	100.0%	100.0%	100.0%

The Pearson Chi-Square test also confirms the findings (Table 12, *p*-value is 0 and thus <0.01). Therefore, we accept the Ha hypothesis at 1% level of significance, suggesting that there is a strong association between the two variables (the use of existing business links as an FDI motive, and the sector that each company belongs to).

Table 12   Chi-Square test for Table 11

	Value	*df*	*Asymp. sig.* (*2-sided*)
Pearson Chi-Square	19.733[a]	2	0.000
Likelihood ratio	21.810	2	0.000
Linear-by-linear association	12.522	1	0.000
No. of valid cases	64		

[a]1 cells (16.7%) have expected count less than 5. The minimum expected count is 3.94.

Finally, Tables 13 and 14 feature Greek FDI inflow in Bulgaria and volume trade between Greece and Bulgaria to further support our evidence that FDI and trade are complement. Greek FDI inflow in Bulgaria has significantly increased over the last decade (Table 13). The total trade volume between Greece and Bulgaria has increased significantly, 410% in the period 1995-2005 (Table 14). Thus, we could support the argument that trade and FDI are complementary for the case of Greece and Bulgaria when the exports from Bulgaria to Greece and the Bulgarian imports from Greece have both increased.

In particular, Bulgarian exports to Greece have increased by 357% during the period 1995–2005. The reasons behind this may be that Bulgarian products became more competitive and/or the Greek companies with FDI projects in Bulgaria re-export their products back to Greece. The latter is also supported by Bitzenis (2006) who argued that Greek FDI outflows to Bulgaria are mainly export oriented FDIs. The Bulgarian imports from Greece in the same time period increased by 501%. This is either because the Greek companies engaged in FDI projects in Bulgaria imported raw materials and/or semi-final products or the attractiveness of the local Bulgarian market has increased (e.g., increased consumer needs, increased per capita income) for Greek companies to export final

products. In the latter case, prior trade relationships could be considered as a step before FDI realisation suggesting that the FDI and trade will become substitutes in the future.

Table 13   Greek foreign direct investment inflows in Bulgaria by years in million of USD$

Country	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total by country
Austria	13.0	1.0	14.7	1.4	12.1	12.5	46.9	74.6	70.5	93.6	160.6	238.4	927.3	849.7	2516.1
Greece	0.2	6.1	3.0	29.8	14.6	16.1	3.2	2.3	99.1	240.2	293.3	224.6	156.9	222.6	1267.1
Germany	0.1	56.6	111.0	16.2	53.1	31.4	55.7	40.4	39.0	67.4	85.4	108.5	251.6	79.6	996.0
Italy		0.2	5.2	2.3	1.2	0.4	2.1	6.9	338.3	146.5	45.2	100.5	67.1	86.1	802.1
Netherlands	0.1	0.5	37.9	0.9	46.3	10.8	41.3	105.6	-10.2	80.3	30.9	242.6	340.7	-136.2	792.6

Source: Bulgarian Foreign Investment Agency (2006)

Table 14   Volume of trade between Bulgaria and Greece

Fields\dates	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Bulgarian exports to Greece (million EUR)	249.3	261.4	361.8	330.2	322.2	409.6	501.2	557.9	691.4	794	891.2
Bulgarian imports from Greece (million EUR)	146.6	144.4	174.3	257.9	289.6	345.4	460.6	507.9	639.2	667.7	735
Trade balance for Bulgaria (million EUR)	102.7	117	187.5	72.3	32.6	64.2	40.6	50	52.2	126.3	156.2
Total trade volume (million EUR)	395.9	405.8	536.1	588.1	611.8	755	961.8	1065.8	1330.6	1461.7	1626.2

Source: Customs declarations data, supplemented with NSI data and processed by the BNB. Data are co-ordinated with the NSI. 2006

4   Conclusions

Bulgaria has managed to successfully reform institutions so that liberalisation policies be effective and market success be achieved. Liberalisation policies and successful institutional reforms were the basis for significant FDI inflows and re-orientation of trade activities with EU members. The participation in the European Union suggests trade liberalisation aiming at economic improvement (McCorriston, 2000). Indeed, trade liberalisation can cause not only trade expansion but also the increase of foreign direct investment (Dritsaki et al., 2004). In this context, institutions play a key role in the efficiency of trade liberalisation. As Harriss et al. (1997) indicated, institutions are crucial for the operation of a market economy and facilitate business operations. Bulgaria is an emerging market in terms of its level of institutional infrastructure (Meyer, 2001), a situation that affects trade and FDI interaction. North (1990) states that institutions are the rules of the game in a society, thus determining the importance of institutional reform in transition to a market economy. Furthermore, institutions, by imposing restrictions and offering various incentives, shift the playing field, favouring some deals and opportunities while disadvantaging others. They force the investing firms to think strategically about how to avoid the limits imposed by domestic laws as well as how to reap the benefits that the law and particular circumstances are capable of providing (Spar, 2001).

Our paper developed on three points. First, alternative strategies for institutional development were discussed. The analysis revealed contrasting results for the Post Keynesians and shock therapists. Essentially, the choice of the most appropriate method depended on what was considered to be efficient: a market mechanism providing market-produced institutions, or state intervention providing state-produced market institutions. Governments, as in the case of Bulgaria, had an important role in supporting the ever-changing market with the appropriate institutional structure.

Second, the discussion evolved around the proposition that institutional reforms could assist in the realisation of trade and FDI improvements. We recognised a strong relationship between FDI increase and successful implementation of institutional reform. Furthermore, there is a relationship between cross-national trade volume and the volume of inward FDI of a host country. The establishment of institutions facilitates the integration as well as the improvements of communications and transportations infrastructure in order to increase trade mobility. Hence, institutions facilitated countries in adopting measures prior to the membership in the EU and proceed in reforms that lead to the market economy. Furthermore, the successful establishment of institutions had as an outcome the EU membership of Bulgaria in 2007, resulting in improved FDI and trade flows. Successful liberalisation calls for establishment of sound institutions in order to facilitate and promote the liberalisation of prices, trade, capital flows and the whole market in general. In the CEE countries, the EU accession process had a major effect on FDI, which significantly affected trade. The economic opening of the borders, and the capital mobility in most countries had positive effects on both trade and FDI development, and also rendered the evolution of MNEs, which are vehicles of both FDI and trade. Institutions play a key role in FDI development, too. If they are able to establish stability and certainty in economic relations, more FDI will be achieved and the country will realise greater economic growth.

Also, empirical evidence was presented to support the argument that trade and FDI are correlated. In fact, trade theories have been modified to fit FDI; correspondingly, to account for the interrelationship of FDI and trade. Many researchers support that trade and FDI are not complements (Ma et al., 2000; Bayoumi and Lipworth, 1997; Graham, 1999). However, at the same time, substantial variance exists regarding this relationship (Fontagne, 1999; Lipsey et al., 2000). Empirical research in Bulgaria suggests that FDI and trade are both complementary, and substitute for each other, as traditional theory indicates. The same opinion is shared by Blonigen (2001) in an attempt to examine FDI effects on trade between the USA and Japan. Trade effects from both exports and imports indicate whether FDI and trade are complementary or substitutes. In particular, past evidence indicates that FDI abroad stimulates the growth of exports for originating countries (investing countries) thus, substituting trade. At the same time, FDI increases exports from host countries, thus, complementing trade. From the perspective of the investor country, FDI can be seen as substituting for trade, as exports are replaced by local sales on foreign markets. This could be detrimental to the investing country's domestic industry, hurting production and employment. Ma et al. (2000) have also found a substitute relationship between trade and FDI. The same opinion is shared by Bayoumi and Lipworth (1997), too.

On the other hand, FDI and trade can be seen as complementary, since investing abroad leads to greater competitiveness in foreign markets and trade in intermediate goods (inputs) and complementary final products to affiliates. Pfaffermayr (1996) finds a significant complementary relationship between FDI and trade. For host countries, the relationship between FDI and trade can be seen to be symmetrical to that of the investing country. Foreign affiliates' local sales and local procurement substitute for imports from the investing country, thus improving the current account, domestic production and employment. If inward FDI results in the import of inputs, this might imply a weakening of the host country's current account, a conclusion reached by some studies. The main findings from the present research suggest the presence of both substitute and complementary relationships. Blonigen (2001), Goldberg and Kein (1999) and Nakumara and Oyama (1998) arrive at the same conclusions, too.

References

Aghion, P. and Blanchard, O.J. (1994) 'On the speed of transition in central Europe', *NBER Macroeconomics Annual*, Vol. 9, pp.283–320.

Baldwin, R.E. and Venables, A.J. (1995) 'Regional economic integration', in Grossman, G. and Rogoff, K. (Eds.): *Handbook of International Economics*, Elsevier, North Holland, Vol. 3, Chapter 31, pp.1597–1644.

Bayoumi, T. and Lipworth, G. (1997) *Japanese Foreign Direct Investments and Regional Trade*, IMF Working Paper No. WP/97/103.

Bergsten, C.F. (Ed.) (1997) 'Open regionalism', *Whither APEC: The Progress to Date and Agenda for the Future*, Institute of International Economics, Washington.

Bitzenis, A. (2006) 'Determinants of Greek FDI outflows in the Balkan region: the case of Greek SMEs in Bulgaria', *Eastern European Economics*, Vol. 44, No. 3, May–June, pp.79–109.

Blonigen, B. (2001) 'In search of substitution between foreign production and exports', *Journal of International Economics*, Vol. 53, pp.81–104.

Brainard, S.L. (1993) *A Simple Theory of Multinational Corporations and Trade with a Trade Off between Proximity and Concentration*, NBER Working Paper No 4269, February.

Brainard, S.L. (1997) 'An empirical assessment of the proximity concentration trade-off between multinationals sales and trade', *American Economic Review*, Vol. 8, pp.520–544.

Chang, H.J. and Rowthorn, R. (1995) *Role of the State in Economic Change*, Oxford University Press, Oxford.

Clague, C. (1997) *Institutions and Economic Development: Growth and Governance in Less-Developed and Post-Socialist Countries in Johns Hopkins Studies in Development*, John Hopkins University Press, Baltimore and London.

Daniels, J.D. and Radebaugh, L.H. (1992) *International Dimensions of Contemporary Business*, The Kent International Dimensions of Business Series, PWS Pub Co., PWS-Kent Pub. Co., Boston, Mass.

Dritsaki, M., Dritsaki, C. and Adamopoulos, A. (2004) 'A causal relationship between trade, foreign direct investment and economic growth for Greece', *American Journal of Applied Sciences*, Vol. 1, No. 3, pp.230–235.

Dunning, J.H. (1988) *Explaining International Production*, Unwin Hyman, London.

Dunning, J.H. (1993) *Globalisation of Business*, Routledge, New York.

EBRD (2000) *Transition Report Update May 2000*, European Bank for Reconstruction and Development, London.

Edwards, S. (1998) 'Openness, productivity and growth: What do we really know?', *Economic Journal*, Vol. 108, pp.383–398.

Egger, P. (2001) 'European exports and outward foreign direct investment: a dynamic panel data approach', *Weltwirtschaftliches Archiv*, Vol. 137, No. 3, pp.427–444.

Feinberg, S.E., Keane, M.P. and Bognanno, M.F. (1998) 'Trade liberalization and 'delocalization': new evidence from firm-level panel data', *Canadian Journal of Economics*, Vol. 31, No. 4, pp.749–777.

Fischer, S., Sahay, R. and Vegh, C. (1996) 'Stabilization and growth in transition economies: the early experience', *Journal of Economic Perspectives*, Vol. 10, No. 2, pp.45–66.

Fontagne, L. (1999) 'Foreign direct investment and international trade: complements or substitutes', *OECD, Directorate for Science, Technology and Industry*, Working Paper 3.

Fukao, K., Ishido, H. and Ito, K. (2003) 'Vertical intra-industry trade and foreign direct investment in East Asia', *Journal of Japanese and International Economics*, Vol. 17, No. 4, pp.468–506.

Goldberg, L.S. and Klein, M. (1999) *International Trade and Factor Mobility: An Empirical Investigation*, NBER Working Paper No. W7196.

Gomulka, E. (2000) *Pension Problems and Reforms in the Czech Republic, Hungary, Poland and Romania*, CEP Discussion Papers 0480, Centre for Economic Performance, LSE.

Gopinath, M., Pick, D. and Vasavada, U. (1999) 'The economics of foreign direct investment and trade with an application to the US food processing industry', *American Journal of Agricultural Economics*, Vol. 81, No. 2, pp.442–542.

Graham, E. (1999) *On the Relationship among Direct Investment and International Trade in the Manufacturing Sector: Empirical Results from the US and Japan*, Working Paper, Institute of International Economics, Washington DC.

Greif, A. and Kandel, E. (1995) 'Contract enforcement institutions: historical perspective and current status in Russia', in Lazear, E. (Ed.): *Economic Transition in Eastern Europe and Russia: Realities of Reform*, Hoover Institution Press, Stanford, CA, pp.291–321.

Harriss, J., Hunter, J. and Lewis, C.J. (1997) *The New Institutional Economics and Third World Development*, Routledge, London.

Hay, J.R. and Shleifer, A. (1998) 'Private enforcement of public laws: a theory of legal reform', *American Economic Review Papers and Proceedings*, Vol. 88, pp.398–403.

Helpman, E. (1984) 'A simple theory of international trade with multinational', *Journal of Political Economy*, Vol. 93, No. 2, pp.451–471.

Hodgson, G., (1995) 'The evolution of evolutionary economics, scottish', *Journal of Political Economy*, Vol. 42, No. 4, pp.469–488.

Horst, T. (1971) 'The theory of the multinational firm: optimal behavior under different tariff and tax rates', *Journal of Political Economy*, Vol. 79, No. 5, pp.1059–1072.

Horst, T. (1972) 'Firm and industry determinants to invest abroad: an empirical study', *Review of Economics and Statistics*, Vol. 54, pp.258–266.

Horstmann, I.J. and Markusen, J.R. (1992) 'Endogenous market structures in international trade' *Journal of International Economic*, Vol. 32, pp.109–129.

Kornai, J. (1994) 'Transformational recession: the main causes', *Journal of Comparative Economics*, Vol. 19, No. 1, pp.39–63.

Kovács, K., Bihari, Z. and Váradi, M. (1996) 'The transition in Hungarian agriculture 1990–1993: general tendencies, background factors and the case of 'Golden Age'', in Abrahams, R. (Ed.): *After Socialism: Land Reform and Social Change in Eastern Europe*, Berghahn Books, Providence, Oxford, pp.51–85.

Kregel, J.A. and Matzner, E. (1992) 'Agenda for the reconstruction of central and Eastern Europe', *Challenge*, Vol. 35, No. 5, pp.33–40.

Lecraw, D. (1991) 'Factors influencing FDI by TNCs in host developing countries: a preliminary report', in Buckley, P.J. and Clegg, J. (Eds.): *Multinational Enterprises in Less Developed Countries*, Macmillan Press, London, pp.163–180.

Lipsey, R.E., Ramstatter, E.D. and Blomstrom, M. (2000) *Outward FDI and Parent Exports and Employment: Japan, the United States and Sweden*, No. 7623, National Bureau of Economic Research, Cambridge.

Lipton, D. and Sachs, J. (1990) 'Creating a market economy in Eastern Europe', *Brookings Papers on Economic Activity*, Vol. 1990, No. 1, pp.75–147.

Lissowska, M., (2005) 'Interest groups and institutions of market economy in transition countries: the case of Poland', *Conference Theme: Transition: Which Relationships Between Market Economy And Political Democracy?*, Université de Paris I Panthéon-Sorbonne, 30–31 May.

Ma, Y., Morikawa, K. and Shone, R. (2000) 'A macroeconomic model of direct investment in foreign affiliates of Japanese firms', *Japan and the World Economy*, Vol. 12, pp.953–973.

Marangos, J. (2001a) 'A post Keynesian approach to institutional development in transition economies', *Journal of Economics and Social Policy*, Vol. 5, No. 2, pp.58–71.

Marangos, J. (2001b) 'International trade policies for transition economies: the post Keynesian alternative', *Journal of Post Keynesian Economics*, Vol. 23, No. 4, pp.689–704.

Marangos, J. (2002) 'Alternative methods of institutional development for transition economies', *Journal of Institutional and Theoretical Economics*, Vol. 158, No. 3, pp.483–513.

Margaris, S., Kainadas, E. and Koytsidou, E. (2001) 'Agricultural transformation in Bulgaria', Paper presented to the *International Conference on: Restructuring, Stability and Development in Southeastern Europe*, 1–3 June, Volos, SEED.

Markusen, J.R. and Venables, A.J. (1999) 'Foreign direct investment as a catalyst for industrial development', *European Economic Review*, Vol. 43, No. 2, pp.335–356.

McCorriston, S. (2000) *Recent Developments on the Links between Foreign Direct Investment and Trade*, University of Exeter, Exeter, mimeo.

Meyer, K.E. (1998) *Direct Investment in Economies in Transition*, Aldershot, Elgar.

Meyer, K.E. (2001) 'International business research on transition economies', in Rugman, A. and Brewer, T. (Eds.): *Oxford Handbook of International Business*, Oxford University Press, Oxford, pp.716–759.

Munirathinam, R., Reed, M. and Marchant, M. (1998) 'Effects of the Canada-US trade agreement on US agricultural exports', *International Food and Agribusiness Management Review*, Vol. 3, No. 1, pp.405–415.

Murrell, P. (1996) 'How far has the transition progressed?', *Journal of Economic Perspectives*, Vol. 10, No. 2, pp.25–44.

Nakamura, S. and Oyama, T. (1998) *The Determinants of Foreign Direct Investment from Japan and the United States to East Asian Countries, and the Linkage between FDI and Trade*, Bank of Japan Working Paper, pp.98–11.

Neff, M.L. (1992) 'Eastern Europe's policy of restitution of property in the 1990's', *Dickinson Journal of International Law*, Vol. 10, pp.357–381.

North, D.C. (1990) *Institutions, Institutional Change and Economic Performance*, Cambridge University Press, Cambridge.

Ostrom, E., Schroeder, L. and Wynne, S. (1993) *Institutional Incentives and Sustainable Development, Infrastructure Policies in Perspective*, Westview Press, Boulder, Colorado, USA.

Pfaffermayr, R. (1996) 'Foreign outward direct investment and exports in Austrian manufacturing: Substitutes or complements?', *Welwirtschaftliches*, Vol. 132, No. 3, pp.501–522.

Rugman, A. (1986) 'New theories of the multinational enterprise: an assessment of internalization theory', *Bulletin of Economic Research*, Vol. 38, pp.101–118.

Rugman, A. and Verbeke, A. (2004) 'A perspective on regional and global strategies of multinational enterprises', *Journal of International Business Studies*, Vol. 35, No. 1, pp.3–18.

Southern, D. (1993) 'Restitution or compensation: the open property question', *German Politics*, Vol. 2, No. 3, pp.436–449.

Spar, D. (2001) 'National policies and domestic politics', in Rugman, A.M., Thomas, L. and Brewer (Eds.): *The Oxford Handbook of International Business*, Oxford University Press, Oxford, Chapter 8, pp.206–231.

Stilwell, F. (1996) 'Neoclassical economics a long cul-de-sac', in Argyrous, G. and Stilwell, F. (Eds.): *Economics as a Social Science*, Pluto Press, Annandale.

Swedberg, R. (1992) 'Can capitalism survive? Schumpeter's answer and its relevance for new institutional economics', *Archives Européennes de Sociologie*, Vol. 33, No. 2, pp.350–380.

Thomas, V. and Wang, Y. (1997) 'East Asian lessons from economic reforms', in Woo, W.T., Parker, S. and Sachs, J.D. (Eds.): *Economies in Transition. Comparing Asia and Europe*, MIT Press, Cambridge, pp.217–242.

Todorov, B., Shentov, O. and Stoyanov, A. (2002) *Corruption, Trafficking and Institutional Reform. Prevention of Trans-Border Crime in Bulgaria*, Centre for the Study of Democracy, Sofia.

Tridico, P. (2003) *The Transition of CEECs. Between Institutional Settlement and Economic Growth: The Case of Poland, The Information Society – Understanding its Institutions Interdisciplinary*, November 7–10, Maastricht, The Netherlands.