

Determinants of the Outward US FDI in the European Union Countries: A Panel Data Analysis

Lucyna Kornecki* and Ekanyake E. Ekanyake**

The United States is the largest recipient of foreign direct investment (FDI) in the world and the largest investor abroad. The significance of this study relates to the fact, that it will enhance the knowledge of the factors affecting USFDI and might have policy-making implications. It identifies literature related to the factors determining US FDI outflows and generates database that will be benefiting researchers. The goal of this research is to illustrate the impact of the following variables on outward US FDI in the European Union countries: the financial variables include: the real interest differential and real exchange rate; the economic variables are represented by: GDP per capita and GDP growth rate, the globalization process includes openness and is measured as total trade as a percentage of GDP; structural and location variables focus on education, infrastructure, telecommunication, civil liberty, perception of corruption, business environment; the labor quality variable incorporates labor productivity, unemployment rate, and the labor cost. The other factors integrate; inflation, tax on capital, Research and Development and corporate business tax. In order to test the implications of our models, we collected a panel of aggregate data on the outward US FDI to all 28 member countries of the European Union for which FDI and all other relevant variables are reported over the 2000–2013 period. The results of this research identified major statistically significant determinants influencing positively outward US FDI in the EU countries. These determinants include: real GDP per capita, the openness of the economy, railway mileage, labor quality, unemployment rate and inflation rate. The panel data regression analyses proved as well negative and statistically significant impact of several determinants on outward US FDI in Europe, such as: corporate tax rate, the labor cost, tax on capital, the growth rate of real GDP, research and development and literacy rate.

Key Terms: Foreign Direct Investment, American Investments in Europe, Corporate Players, Panel Data Analysis.

1. Introduction

The United States continues to be the leading destination for foreign direct investment (FDI) and the leading investor in the world. A.T. Kearney's FDI Confidence Index measures investor sentiment and ranks present and future prospects for FDI flows to different economies with respect to the factors that drive corporate decisions to invest abroad (Kearney, 2012). The FDI Confidence Index Report of 2013 ranked the United States and China and as the most attractive FDI locations in the world, recording unprecedented levels of investor confidence.

*Lucyna Kornecki, Ph.D., Embry-Riddle Aeronautical University, College of Business, Department of Economics, Finance and Information Systems, Daytona Beach, FL., USA, kornecki@erau.edu, phone: (386) 226-496

**Ekanyake E. Ekanyake, Ph.D., Bethune-Cookman University, Department of Business Administration, Daytona Beach, FL., USA, ekanayake@cookman.edu, phone: (386) 481-2819

Kornecki & Ekanyake

The United States remains a strongest magnet for FDI in the world economy, followed by China, Brazil, Canada, India, Australia, Germany, U.K., Mexico, Singapore ([/www.atkearney.com/gbpc/foreign-direct-investment-confidence-index](http://www.atkearney.com/gbpc/foreign-direct-investment-confidence-index)).

Foreign direct investment plays an extraordinary and growing role in the global markets and represents an integral part of the U.S. economy. As the world's largest economy, the United States is well positioned to participate in the increasingly competitive international environment. The United States is the largest recipient of foreign direct in the world and the leading investor and upholds its longstanding open investment policy, recognizing that the free movement of capital across borders is at the heart of today's global economy. It strengthens attractiveness of the United States as a destination for foreign direct investment, and reinforces competitiveness of the United States with respect to investing abroad (Pasha, 2013).

Increased economic activity of American Multinational Corporations (MNC's) abroad relative to that in the United States increased overseas affiliate employment in some industries, including manufacturing. The hesitation about the US-based MNC's investment abroad relates to the fact, that they drain away capital, reallocate production of goods and exports that might be undertaken at US MNC's at home. However, the empirical study of the Peterson Institute for International Economics finds, that foreign activity of US-based corporations brings more production, greater employment, higher export and more R&D in the United States.

Presented research relates to outward US FDI determinants and contributes to deeper understanding of the factors determining investing abroad. All discussed in the model variables were empirically tested and results of this study contribute to better understanding of American motivation to invest in the European Union countries. The significance of this study relates to the fact, that it will identify the factors affecting USFDI and enhance the knowledge of the factors affecting U.S. investing in EU countries. The significance of this study relates to the fact, that it will identify the factors affecting USFDI.

This research will answer the question why investing abroad is more attractive for American companies than investing at home, what factors are statistically significant when taking overseas invest decisions and how to create more favorable setting for American multinational investors to locate their best jobs, most beneficial operations and most dynamic activities in the United States rather than abroad.

This research is unique, as it has broad character and includes 18 variables determining outward USFDI in European Union countries, while available empirical literature related to this research topic is limited to individual or few factors impacting outward USFDI. Therefore this research findings support existing in literature results and increase the list of factors influencing American investment abroad.

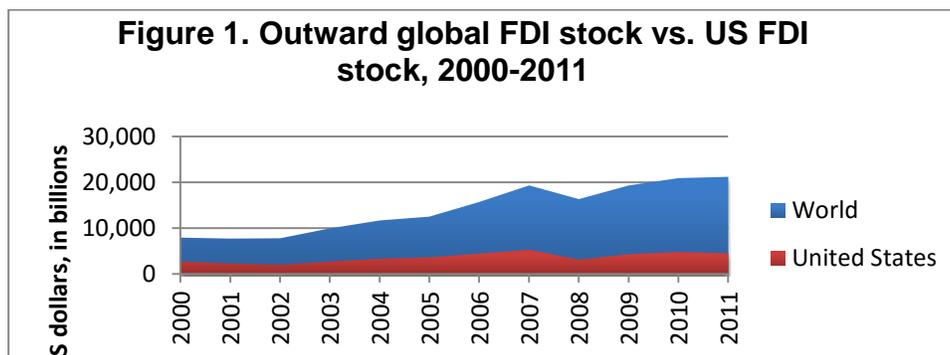
This manuscript is organized as follows: the introductory part of this research includes the global aspects of outward US FDI, followed by analysis of corporate players, while the empirical part focuses on literature related to outward US FDI determinants, research methodology and model specification, expected outcomes, adequacy of the resources, empirical results and conclusions.

2. Global Aspect of Outward US FDI and Corporate Players

The contribution of the United States to the world outward FDI stock is tremendous. The outward US FDI stock accounted for 25% of the total world FDI stock between 2000 and 2011 (Figure 1). The outward US FDI stock outperforms inward US FDI stock be (Figure 2). The last economic recession resulted in a substantial reduction in global and U.S. foreign direct investment stock. The outward US FDI stock decreased by 41%, from US \$ 5,275 billion to US\$ 3,102 billion between 2007 and 2008 (Figure 2), while outward US FDI flows decreased by 32% from US\$ 394billion to US\$ 308 billion during this time, decreasing further in 2009 to US\$ 267 billion by14% (Figure 3). It is imperative to mention that over 57% of outward US FDI flows (2000 -2011) enter the European Union countries (Netherlands 15%, United Kingdom 12%, Luxemburg 8%, Switzerland 4%, and Ireland 3%).

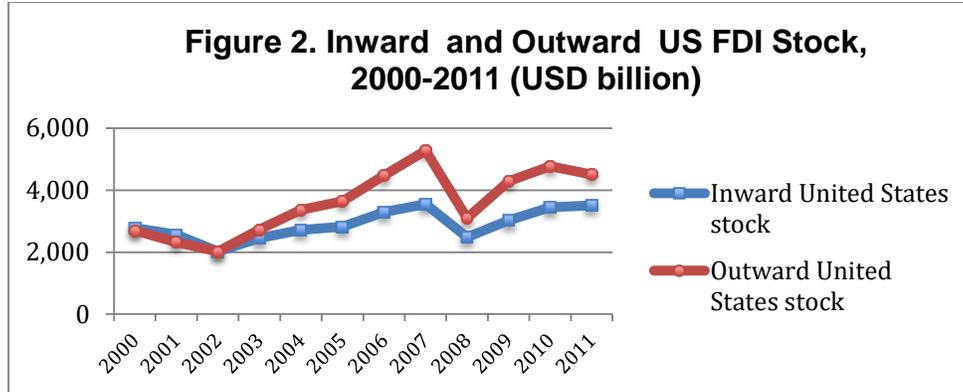
The U.S. hosts the largest FDI stock among the world's economies and is the largest investor abroad (Table 1). In 2008, along with the last financial crisis, global and US FDI stock declined substantially. The *outward global FDI stock* decreased between 2007 and 2008 by 15% from USD 19,273 billion to USD 16,343 billion (www.unctad.org/fdistatistics). The *outward US FDI stock* decreased by 41%, from USD 5,275 billion to USD 3,102 billion between 2007 and 2008. In 2011, outward US FDI stock (USD 4,500 billion) exceeded by far the outward FDI stock of other large developed economies, such as: the United Kingdom (USD 1,731 billion), Germany (USD 1,442 billion), France (USD 1,373 billion) and individuals contributors, such as: Hong Kong (USD 1,046 billion), Japan (USD 962 billion) and Canada (USD 670 billion) (www.unctad.org/fdistatistics).

It is crucial to mention, that during last financial crises the share of reinvested earnings trended upward through 2008, indicating that parent firms were still choosing to invest in their foreign affiliates rather than remit their earnings to the United States. Despite weak economic conditions, U.S. multinationals have continued to expand their investments in newly emerging markets at a more rapid rate than in advanced economies. The outward US FDI reinvested earnings increased between 2009 and 2010 from USD 207 billion to USD 292 billion, (beyond the pre-crisis level) increasing farther to USD 326 billion in 2011.

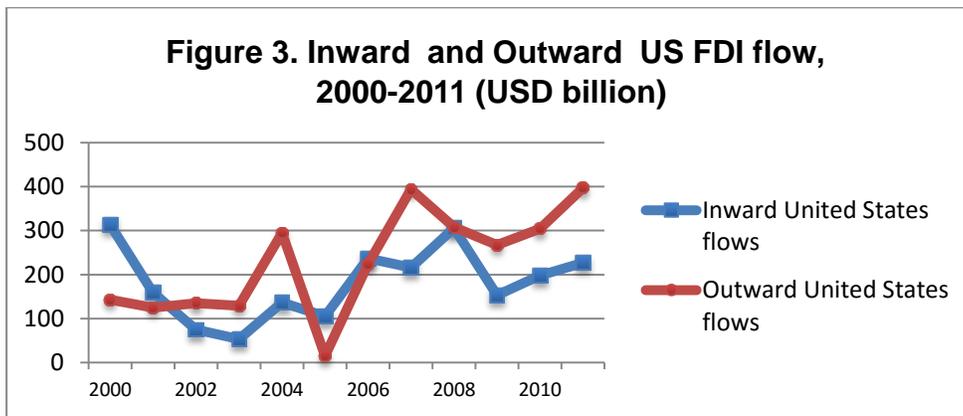


Source: UNCTAD's FDI/TNC database, available at: www.unctad.org/fdistatistics

Kornecki & Ekanyake



Source: UNCTAD's FDI/TNC database, available at: www.unctad.org/fdistatistics



Source: UNCTAD's FDI/TNC database, available at: www.unctad.org/fdistatistics

The outward US FDI is raising questions about the effects of such investment on the U.S. economy and the global markets. These questions seem pertinent since American Multinational Corporations (MNC's) lost shares of U.S. gross domestic product (GDP) over the last decade and their domestic employment had declined starting in the mid-1990s. Escape from the home country through outward FDI represents an important but under-explored phenomenon in the international business literature and has received relatively little systematic research exploration in the field (Witt and Lewin, 2007).

The empirical study of the Peterson Institute for International Economics finds, that foreign activity of US-based corporations brings more production, greater employment, higher export and more R&D in the United States. The policy challenge with respect to FDI in the years ahead will be to create a more favorable setting for multinational investors to locate their best jobs, most beneficial operations and most dynamic activities, here in the United States (Hufbauer, Moran, Oldenski, 2013). The recommendations relate to upgrading infrastructure, reforming immigration, improvements in education, reduction in corporate tax rate.

According to the U.S. Bureau of Economic Analysis the U.S. parents (2009) accounted for more than two-thirds, and foreign affiliates for less than one-third of MNCs' combined value added, employment, capital expenditures, and R&D expenditures. Most U.S. based foreign

Kornecki & Ekanyake

affiliates continued to be located in high-income countries and tend to be very large companies (more than 10,000 employees). The worldwide operations of U.S. multinationals are highly concentrated in America in their U.S. parents, not abroad in their foreign affiliates. Based on the United States Council for International Business (USCIB) reports, the U.S. multinationals continue to enhance the nation's economy by their capital investment, research and development, and continued support of good-paying American jobs. U.S. Bureau of Economic Analysis (BEA) provided a fact-based analysis of the many contributions of U.S. based multinationals to the overall U.S. economy including productivity growth and raising standard of living for Americans (Slaughter, 2010).

The operations of U.S. multinational companies (MNCs) grew in 2010, reflecting continued growth in their operations abroad and renewed growth in their operations in the United States. In 2010, value added of U.S. MNCs increased both in the United States and abroad, partly reflecting the global economic recovery (Barefoot, 2012). In 2012, both outbound and inbound U.S. foreign direct investment continued to grow (Ibarra-Caton and Barefoot, 2013).

Table #1 below includes the multinational companies headquartered in the United States operating abroad, *ranked by revenue (2011)*. They are dominated by petroleum refining industry with Exxon Mobil on the top of the list followed by Chevron, ConocoPhillips and Valero Energy. Among the multinational corporations operating abroad, general merchandize industry with Wal-Mart Stores Inc. is ranked number two. The manufacturing companies include: General Motors (ranked 5) and Ford Motor (ranked 8). In the list of the top twenty-five foreign affiliates, by revenue are the affiliates of four commercial banks: Bank of America Corp., (ranked 12), J.P. Morgan Chase & Co., (ranked 15), Citigroup (ranked 18) and Wells Fargo (ranked 22). Among the top twenty-five, the electronic- manufacturing companies include: Hewlett-Packard and Apple (ranked 9 and 16 respectively) (www.unctad.org/fdistatistics).

The ranking based on the foreign assets indicates that, the leading U.S. multinational corporations are the companies manufacturing electrical and electronic equipment, petroleum products and pharmaceuticals. The top four leading MNCs ranked by assets include: General Electric (electrical and electronic equipment), Exxon Mobil and Chevron (petroleum products) and Pfizer Inc.(pharmaceuticals) (Kornecki,2013).

Kornecki & Ekanyake

Table 1. Top 25 US multinational corporations (MNCs), ranked by revenue (USD billions, current prices, current exchange rates)

Rank 2011	Rank 2010	Rank 2000	MNC Name	Industry	Revenues US \$ billion	Profits US \$ billion
1	2	3	Exxon Mobil	Petroleum Refining	453	41
2	1	2	Wal-Mart Stores	General Merchandisers	447	16
3	3	35	Chevron	Petroleum Refining	246	27
4	4	74	ConocoPhillips	Petroleum Refining	237	12
5	8	1	General Motors	Motor Vehicles and Parts	150	9
6	6	5	General Electric	Diversified Financials	148	14
7	7	64	Berkshire Hathaway	Insurance	144	10
8	10	4	Ford Motor	Motor Vehicles and Parts	136	20
9	11	13	Hewlett-Packard	Computers	127	7
10	12	8	AT&T	Telecommunications	126	4
11	24	229	Valero Energy	Petroleum Refining	125	2
12	9	11	Bank of America Corp.	Commercial Banks	115	1.4
13	15	38	McKesson	Health Care	112	1.2
14	16	-	Verizon Communications	Telecommunications	111	2.4
15	13	92	J.P. Morgan Chase & Co	Commercial Banks	110	19
16	35	285	Apple	Computers	108	26
17	18	6	International Business Machines	Information Technology Services	106	16
18	14	7	Citigroup	Commercial Banks	103	11
19	19	59	Cardinal Health	Health Care	102	0.9
20	22	86	UnitedHealth Group	Health Care (Insurance)	101	5
21	28	44	Costco Wholesale	Specialty Retailers	89	1
22	23	68	Wells Fargo	Commercial Banks	88	16
23	26	23	Procter & Gamble	Household	83	12
24	39	120	Archer Daniels Midland	Food Production	81	2
25	51	-	INTL FCStone	Diversified Financials	75	0.04

Source: Fortune magazine, available at:

<http://money.cnn.com/magazines/fortune/fortune500/2012/snapshots/387.html>

As far as the MNCs employment abroad (2011) Wal-Mart's is the leading corporation with 800,000 foreign employees in retail and trade, followed by electrical and electronic equipment industries, such as: International Business Machines Corporation (308,287 employees), Hewlett-Packard (228,392 employees) and General Electric Co., (170,000 employees). Motor vehicles industry represented by General Motors and Ford Motor employed respectively 106,000 and 85,000 employees. The next industries with quite high number of foreign

Kornecki & Ekanyake

employment are food, beverages and tobacco companies such as: Kraft Foods Inc. (90,000 employees) and The Coca-Cola Company (78,800 employees) and pharmaceutical companies such as: Johnson & Johnson (69,230 employees), Pfizer Inc. (64,420 employees), Merck & Co (52,900 employees) and Abbott Laboratories (51,450 employees). (www.unctad.org/fdistatistics).

The outward US FDI, directly or indirectly, create jobs abroad. The most of the jobs created abroad by U.S. foreign affiliates are in manufacturing industry, retail trade, wholesale trade, food services and management industries (Kornecki, 2013). Based on the current research, outward US FDI employment, between 2000 and 2010, outperformed inward US FDI employment (Kornecki, 2013). The last one brings billions of investment dollars into the United States, create thousands of in-sourced American jobs, and highlight the importance of the U.S. market for foreign companies.

The majority of U.S. direct investment abroad is in developed countries where wages, markets, industries, and consumers' tastes are similar to those in the United States. The outward FDI in developed countries is oriented toward serving the local markets rather than producing goods to export back to the United States. Some firms do establish overseas operations to replace U.S. exports or production, or to gain access to raw materials, cheap labor, or other markets (<http://www.fas.org/sgp/crs/misc/RS21118.pdf>).

3. Outward US FDI: Empirical Literature Review

The empirical studies on outward US FDI determinants identified an array of location factors that improve a country's attractiveness to foreign investors (Dunning's, 1988). Location advantages range from the availability of cheap labor, natural resources, skilled labor, and large and rapidly expanding local market, to the existence of stable economic and political systems. One of the primary motives in which domestic firms invest abroad is to have better access to the markets of the host countries. Finding new markets for business growth was cited as one of the main reasons for the U.S. companies investing abroad. The presence of location advantages is a necessary condition for successful and profitable operation.

Some studies emphasize the importance of economic factors such as market size, market growth, inflation rates, and income levels (Root and Ahmed 1979; Grubert and Mutti, 1991). These studies suggest that FDI tends to be attracted mostly to countries with large and expanding domestic markets.

Other studies place emphasis on political risk as an important factor influencing investment decisions (Fatehi-Sedeh and Safizade, 1988; Oseghale, 1993). Cheng and Kwan (1999) suggest the primacy of the level of infrastructure development in the host country's as the crucial investment factor, while Guisinger et al. (1992), Rolfe and White (1992), and Brewer (1993) emphasize the important role of government policy in investment decision making process underling the importance of a host country's institutional framework. Kaufmann (1999) developed six indicators of quality of institutions: voice and accountability, political stability and lack of violence, government effectiveness, regulatory quality, rule of the law, and control and corruption (Oseghale and Nwachukwu, 2010).

Kornecki & Ekanyake

Wheeler and Mody (1992) were among the first researchers to explore, empirically, the linkage between institutional framework: bureaucratic red tape, political instability, corruption, quality of the legal system and the location of US foreign affiliates. Agiomirgianakis, Asteriou, and Papatoma examined panel data evidence concerning empirical relevance between FDI attraction and its determinative effects in the Organization for Economic Development (OECD) countries.

The significant explanatory factors relate to educated and trained workforce, large-scale investment in the physical infrastructure, the level of development and market size as well as the openness to trade and the spillover effects. All these factors are expected to enhance the attractiveness of host countries for foreign investors (Agiomirgianakis, Asteriou, and Papatoma, 2006).

Alfaro, Chanda, Kalemli-Ozcan and Sayek examined the various links among FDI, financial markets, and economic growth. Empirical analysis, used cross-country data between 1975-1995, and showed that countries with well-developed financial markets gain significantly from foreign investing (Alfaro, Chanda, Kalemli-Ozcan and Sayek, 2004). Cho is underlying the role of political stability, a legal framework, adequate infrastructure, good governance, an effective judicial system and respect for the rule of law as a key factor in attracting FDI (Cho, 1997).

Contessi and Weinberger indicate, that labor availability, cost, skills, managerial technical skills, access to inputs, physical infrastructure, supplier base and technology support as a part of economic conditions attracting FDI (Contessi and Weinberger, 2009).

The FDI literature evaluates the impact of outward foreign direct investment on home countries economy. The relevant studies on outward FDI from developed countries – has been undertaken by transnational corporations headquartered in developed countries. The studies focused on a wide range of potential economic impacts of outward FDI on domestic employment, wages, expenditures on research and development (R&D) and innovation, trade flows and tax revenues (Globerman and Shapiro, 2002).

To examine the impact of outward FDI on economic growth Herzer used cross-country regressions for a sample of 50 countries and time-series estimators for the USA. Results shows that the outward FDI is positively associated with growth (Herzer, 2009).

Lipsey, in his studies discussed exports and affiliate sales. The factors that raise affiliate sales relative to exports are: transport costs, trade barriers and nontariff barriers, per capita income similarities and sustained depreciation of destination market currency. The factors that reduce affiliate sales relative to exports are: plant scale economies, FDI barriers and corporate tax rate. Lipsey raises importance of multinationals as major force in international trade, facilitating as much as half of U.S. manufacturing trade (Lipsey, 1995, 2001).

Most of the factors impacting American investing abroad used in this study were addressed in relevant empirical FDI literature in the past. This study include financial factors which were examined by Alfaro, Chanda, Kalemli-Ozcan and Sayek (2004) and economic factors such as market size, market growth, inflation rates examined by Root and Ahmed (1979), Grubert and

Kornecki & Ekanyake

Mutti (1991) suggesting that FDI tends to be attracted mostly to countries with large and expanding domestic markets. Other variables included in this study related to globalization and openness were addressed previously by Agiomirgianakis, Asteriou, and Papathoma (2006). Analyzed political factors emphasizing political risk as an important factor influencing investment decisions were examined by Fatehi-Sedeh and Safizade (1988), Oseghale (1993) and Cho (1997). Similarly, corruption factor included in current research was used by Oseghale and Nwachukwu (2010) with the focus on political stability, lack of violence, government effectiveness, rule of the law, and corruption as important investment decision making factors. Included in this research structural variable factors, such as: education and infrastructure were discussed by Agiomirgianakis, Asteriou, and Papathoma (2006). The labor variable which incorporates labor productivity and the labor cost were explored in existing literature centering on the availability of cheap and skilled labor and natural resources, local market, stable economic and political systems (Dunning's, 1988).

The variables not explored in reviewed empirical literature include; corporate tax, business environment (ease of doing business), and research and development (R&D). Currently, policy makers have been debating about how to encourage investment at home as opposed to overseas. The merit of this discussion relates to *use of tax policy*. According to the International Peterson Institute of International Economics, to boost investment at home *reduction in corporate tax rate* will be recommended (Hufbauer, Moran, Oldenski, 2013). America should lower the corporate tax rate and switch to a territorial tax system. This would increase economic growth and allow corporations to compete on an equal footing with competitors abroad. The U.S. corporations face the highest statutory corporate income tax rate in the world at 39.1 percent. Corporations headquartered in the 33 other industrialized countries that make up the Organization for Economic Cooperation and Development (OECD), face an average rate of 25 percent. Even corporations in high-tax European countries such as Belgium (34 percent), France (34.4 percent), and Sweden (22 percent) face much lower rates than those in the United States. Our largest trading partners—Canada, Japan, and the United Kingdom—have each cut their corporate tax rates over the past few years to become more competitive (Pomerleau and Lundeen, 2014).

4. Methodology and Model Specification

In this study, we employ recently developed panel data techniques and closely follow empirical literature to identify the factors that determine U.S. FDI outflows to the European Union (EU) countries. Our panel data set includes 28 countries and covers 14 years period of time between 2000 and 2013. This study explores the importance and impact of a selected variables on outward US FDI to EU countries.

Kornecki & Ekanyake

Table 2. Outward USFDI: Research Variables and Expected Outcomes (Hypothesis)

Name	Description	Acronym	Sign Expected Outcomes	Rationale
Financial variables:				
Monetary	Real interest rate differential	IRD	+	Higher interest rate in the host country means higher returns on the capital of investing firms.
Exchange rate	Real exchange rate	RER	-	Lower exchange rate in the host country means higher purchasing power of investing country's currency in host country.
Economic variables/market size:				
Market potential	Real GDP per capita	PCGDP	+	Higher PCGDP means greater market potential.
Growth rate of real GDP	Real GDP growth rate of host country	GDPGR	+	Greater GDPGR means that host country's market is growing faster implying promising future market.
Globalization:				
Openness	Total trade as a percent of GDP	OPEN	+	Higher openness means greater potential for FDI flows.
Structural/location related variables:				
Education	Literacy rate	EDU	+	Higher literacy rate means greater productivity, thus higher returns to investment.
Physical infrastructure	Railway mileage	RAIL	+	Better roads means greater potential for FDI flows.
Telecommunication	Number of phone lines per 100 people	PHONE	+	Better communication structure means greater potential for FDI flows.
Political factor	Civil liberty	CL	-	Lower value represents more stable economic atmosphere, and thus, less investment risk.
Institutional quality	Perception of corruption index	CORR	+	Higher value of perception of corruption index represents more transparency.
Business environment	Ease of doing business index	EDB	+	Higher value encourages FDI
Labor quality and availability:				
Labor quality	Real output per worker	PROD	+	Higher labor productivity means higher returns to investment.
Labor availability	Rate of unemployment	UNEMP	+	Higher unemployment means the availability of workers is higher and more potential for FDI flows.
Labor cost	Real hourly wage rate.	RWAGE	-	Higher labor costs in host country means lower returns on investment.
Other factors:				
Price level	Inflation rate	INF	+/-	Effect of inflation on FDI is ambiguous.
Taxation	Tax on capital	CAPTAX	-	Higher taxes on capital discourage FDI.
Research and Development	R&D as a percent of GDP	R&D	+	Greater R&D activity leads to higher worker productivity and higher returns to investment.
Corporate taxes	Corporate tax rate	TAX	-	Higher corporate tax rates leads to lower return on investment and discourages foreign investment

The goal of this research is to illustrate the impact of the following variables on outward US FDI in this part of the world: the financial variables include the real interest differential and real exchange rate; the market size is represented by GDP, square of GDP and growth rate differential; the globalization process include openness measured as total trade as a percentage of GDP; structural and location related variable focus on education, infrastructure, telecommunication and civil liberty; the labor quality variables incorporate labor productivity, unemployment rate, and labor cost and the last variable integrates distance of host country from USA. The description of the variables, their expected relationship with outward US FDI and the rationale for the relationships are presented in the Table 2.

In order to test the implications of our models, we collected a panel of aggregate data on the U.S. foreign direct investment outflows. The used panel data set includes all 28 member countries of the European Union for which foreign direct investment and all other relevant variables are reported over the 2000–2013 period. In this study we employ recently developed

Kornecki & Ekanyake

panel data techniques and closely follow empirical literature to identify the factors that determine US FDI outflows to a selected group of countries. The following variable influencing outward US FDI will be included in the model: economic related variables include the real interest differential and real exchange rate; the market size is represented by real GDP per capita; the globalization process include openness measured as total trade as a percentage of GDP; structural and location related variable will focus on education, infrastructure, telecommunication and civil liberty; and the labor quality variable will incorporate labor productivity, unemployment rate, and labor cost. In order to test the implications of our models, we collected a panel of aggregate data on the U.S. foreign direct investment outflows

The data is compiled within a panel data framework in light of the relatively short time span of the data. Based on the variables identified, the estimated model can be written as:

$$\begin{aligned} FDI_{it} = & \beta_o + \alpha_i + \beta_1 IRD_{it} + \beta_2 RER_{it} + \beta_3 PCGDP_{it} + \beta_4 CAPTAX_{it} + \beta_5 GDPGR_{it} \\ & + \beta_6 OPEN_{it} + \beta_7 EDU_{it} + \beta_8 RAIL_{it} + \beta_9 PHONE_{it} + \beta_{10} CL_{it} + \beta_{11} PROD_{it} \\ & + \beta_{12} UNEMP_{it} + \beta_{13} RWAGE_{it} + \beta_{14} R\&D_{it} + \beta_{15} CORR_{it} + \beta_{16} INF_{it} \\ & + \beta_{17} EDB_{it} + \beta_{18} TAX_{it} + \varepsilon_{it} \end{aligned}$$

where $i = 1, 2, 3, \dots, 28$ for each country in the panel and $t = 1, 2, 3, \dots, 14$ refers to the time period. Our panel data set includes 28 countries and covers 14 years from 2000 to 2013. The parameter α_i allows for country-specific fixed effects while ε_{it} denote the estimated residuals which represent deviations from the long-run relationship. The dependent variable, FDI_{it} is measured as the ratio of the foreign direct investment (FDI) outflow of the U.S. to country i in year t to GDP of that country; IRD_{it} is the real interest rate differential between the U.S. and country i in year t ; RER_{it} is the real exchange rate between the U.S. and country i in year t ; $PCGDP_{it}$ is the real gross domestic product per capita of country i in year t ; $CAPTAX_{it}$ is the tax on capital in country i in year t ; $GDPGR_{it}$ is the growth rate of real GDP in country i in year t ; $OPEN_{it}$ is the openness of country i in year t ; EDU_{it} is the level of education as proxied by the literacy rate in country i in year t ; $RAIL_{it}$ is the railway mileage in country i in year t ; $PHONE_{it}$ is the number of phone lines per 100 people in country i in year t ; CL_{it} is the level of civil liberty in country i in year t ; $PROD_{it}$ is the labor productivity in country i in year t ; $UNEMP_{it}$ is the unemployment rate in country i in year t ; $R\&D_{it}$ is the research and development expenditure as a share of GDP in country i in year t ; $CORR_{it}$ is the perception of corruption in country i in year t ; and INF_{it} is the inflation rate in country i in year t ; EDB_{it} represents easy of doing business in country i in year t ; TAX_{it} is the corporate business tax in country i in year t .

5. Adequacy of Resources

In order to test the implications of our models, we collected a panel of aggregate data on the U.S. foreign direct investment outflows. The entire data set includes 28 countries of the European Union for which foreign direct investment and all other relevant variables are reported over the 2000–2013 period. The dependent variable in our model is expressed as the U.S. FDI outflows as a share of GDP in each country. The data on nominal outflow of FDI are from the U.S. Department of Commerce, *Bureau of Economic Analysis* (BEA). The information on GDP in each country is obtained from the International Monetary Fund, *International Financial Statistics Database*. The real interest rate differential is measured as the difference between the real interest rate of the host country and the U.S. The information on real interest

Kornecki & Ekanyake

rates is obtained from the International Monetary Fund, *International Financial Statistics Database*. The real exchange rate, RER_{it} , is constructed as:

$$RER_{it} = \left(\frac{ER_t^i \times P_t^i}{P_t^{US}} \right)$$

(2)

where RER_{it} is the real exchange rate for host country i , ER_t^i is the bilateral nominal exchange rate between the United States and host country i at time t , P_t^i is the consumer price index (2005=100) of host country i at time t , and P_t^{US} is the consumer price index (2005=100) of the U.S. at time t .

The data on nominal exchange rates are taken from the IMF, *International Financial Statistics database*. The real gross domestic product per capita and the GDP growth rates are from the United Nations, *UNCTAD STAT database*. Trade openness which is measured as (exports + imports)/GDP and is obtained from the United Nations, *UNCTAD STAT database*. The adult literacy rate which is used as a proxy for the level of education of host country is obtained from *Euromonitor International* that collects the original data from UNESCO/national statistics. The railway mileage and number of phone lines per 100 people are also from the World Bank, *World Development Indicators database*. The indicator of civil liberty is from the Freedom House, *Freedom of the World 2015 database*. The real output per worker which is a proxy for labor productivity, the rate of unemployment, and the unit labor cost are from the U.S. Department of Labor, *Bureau of Labor Statistics*. The Corruption Perceptions Index is obtained from *Transparency International*. The Ease of Doing Business ranking is obtained from World Bank, *World Development Indicators database*. All other relevant variables are from the Organization for Economic Co-operation and Development, *OECD. Stat database*.

6. Expected Outcomes and Empirical Results

The goal of this research was to identify the key determinants of outward US FDI in the European Union countries.

Kornecki & Ekanyake

**Table 3. Determinants of the U.S. FDI in the European Union (EU-28)
Panel Least Squares Estimates (Dependent variable: FDI Outflows as % of GDP)**

Variable	2000-2013		2005-2013	
	Coefficient	t-Statistic	Coefficient	t-Statistic
Constant	5.9383***	3.69	9.8857***	5.12
Interest Rate Differential	-0.1973	-0.81	-0.3487	-1.00
Real Exchange Rate	0.0031	0.38	0.0017	0.13
Real GDP Per Capita	0.0027***	9.16	0.0032***	8.86
Tax on Capital	-1.8559***	-5.30	-2.7973***	-6.28
Real GDP Growth Rate	-0.3558**	-2.29	-0.6370***	-3.22
Openness	0.2369***	11.39	0.3147***	11.60
Education	-1.9907***	-4.77	-4.1466***	-5.95
Railway Mileage	0.0004***	4.83	0.0009***	7.64
Number of Phone Lines	-0.0180	-0.99	0.0617*	1.91
Civil Liberty	4.7837***	3.49	0.2751	0.15
Labor Productivity	0.1577***	2.93	0.0913	1.02
Unemployment Rate	0.3379**	2.34	0.3336	1.58
Real Hourly Wage	-2.3524***	-5.89	-2.2997***	-4.70
Research and Development	-7.6181***	-6.09	-9.4173***	-7.49
Perception of Corruption	0.4223	0.65	0.4595	0.39
Inflation Rate	0.2122*	1.65	0.0820	0.24
Ease of Doing Business			0.0174	0.41
Corporate Tax Rate			-0.2496***	-3.92
Adjusted R ²	0.4680		0.6648	
Number of Periods	14		9	
Number of Cross-Sections	28		28	
Number of Observations	392		252	

Note: Figures in parentheses are t-statistics. ***, **, and * indicate the statistical significant at the 1%, 5%, and 10% level, respectively.

EU-28: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and United Kingdom.

The results of this study relate directly to eighteen analyzed variables and indicate how each variable is impacting American direct investment in the EU countries. All discussed in the model variables were empirically tested.

- The first two independent variables are *financial variables*. Of those, *the real interest rate ($IRD_{i,t}$)* is differential between the U.S. and the host country interest rate and was expected to be positive since higher interest rate in the host country means higher returns to the capital of investing firms. Therefore, *a priori*, we expected that $\beta_1 > 0$.
- The second variable, *the real exchange rate ($RER_{i,t}$)* was expected to have a negative effect on the U.S. FDI outflows since the lower exchange rate in the host country means higher purchasing power of investing country's currency in the host country; thus, we expected that $\beta_2 < 0$. *The empirical results for both variable were not statistically significant and the real interest rate got unexpected negative sign and the real exchange rate got positive sign.*
- *The real per capita GDP (PCGDP)* represents the market size. The real PCGDP was

Kornecki & Ekanyake

expected to have a positive effect on FDI outflows since higher PCGDP means greater market potential, higher purchasing power, better investment environment. Therefore, it was expected that $\beta_3 > 0$. *The empirical results confirm this expectation, as the real PCGDP has positive sign and is statistically significant at 1% level and has positive influence on outward FDI decisions.*

- *Tax on capital (CAPTAX)*, defined as the ratio between taxes on capital and aggregate capital and savings income - includes taxes levied on the income earned from savings and investments by households and corporations. The expected sign of β_4 was supposed to be negative. *The empirical results indicate that tax on capital is negatively correlated with outward FDI, as it has expected negative sign and is statistically significant at 1% level.*
- *The growth rate of real GDP (GDPGR_{it})* was expected to have a positive effect on FDI outflows since greater growth rate means that host country's market is growing faster thus implying promising future market. Therefore, *a priori*, we expected that $\beta_5 > 0$. *Unfortunately, the growth rate of real GDP variable has negative sign and is statistically significant at 5% (2000-2013) and 1% (2005-2013) level.* It can be related to the lower economic growth in Europe associated to the economic recession 2001-2003, the downturn in 2005 and financial crises in 2008. Additionally, during the analyzed period of time, several new members from the Central and Eastern Europe (post-communist countries) entered the EU.
- *The openness variable (OPEN_{it})* was expected to capture the effect of globalization. Higher openness means greater potential for FDI flows. Therefore, *a priori*, it was expected that $\beta_6 > 0$. It is important determinant of outward US FDI, as higher openness of the economy means weaker barriers to enter the market and the economy is more attractive to foreign investors. *The findings indicate that the openness variable has the positive sign and is important determinant at the 1% level of significance.*
- *The next four variables are structural variables and include: literacy rate (EDU), number of phone lines (PHONE), number of railway (RAIL), and the civil liberty (CL).*
The literacy rate (EDU) of the host country was expected to have a positive effect on FDI outflows since higher literacy rate means greater productivity, thus higher returns to investment. Thus, it was expected that $\beta_7 > 0$. *Unfortunately empirical results do not confirm this expectation, as EDU variable got negative sign and is significant at 1% level. The number of railway mileage (RAIL)* which is an indicator of the ease of transportation was expected to have a positive effect on foreign direct investment ($\beta_8 > 0$). *The railway variable represents infrastructure and got expected positive sign and is statistically significant at the 1%.*
The number of phone lines (PHONE) constitutes the important factor representing better communication structure and means greater potential for FDI flows. Therefore, this variable was expected to have a positive effect on FDI outflows ($\beta_9 > 0$). *This variable got expected positive sign and is statistically significant at 10% level for the period of time between 2005 and 2013, and is not significant and got unexpected negative sign for the period of time, between 2000 and 2013. The civil liberty (CL)* variable was expected to have a negative effect on FDI outflows, as lower value of this variable represents more stable economic conditions, and thus, less investment risk. Therefore, *a priori*, we expected that $\beta_{10} < 0$. *In this case, the findings are not consistent with expected outcomes. This factor has positive sign and is significant at 1% level*

Kornecki & Ekanyake

during 2000 and 2013 period of time.

- *The Labor variables: the quality, availability, and cost of labor*
Higher labor productivity (*PROD*) in the host country means higher returns on investment, it was expected that $\beta_{11} > 0$. The results confirm expectation, as *PROD* variable has positive sign and is significant at 1% level for the period of time between 2000 and 2013 and it has positive sign and is not significant for the period of time between 2005 and 2013.
Similarly, higher unemployment (*UNEMP*) represents a sign of the availability of workers and potential for FDI outflows. Therefore, unemployment rate was expected to have a positive effect on FDI outflows ($\beta_{12} > 0$). The results show, that unemployment rate is positive and statistically significant determinant of outward US FDI. It is consistent with expected outcomes and can be explained by higher unemployment rate in Europe, during analyzed period of time, in relation to economic recessions and downturns in the European countries.
The labor cost (*RWAGE*) variable of the host country is expected to have a negative effect on FDI outflows since higher cost of labor means lower returns on investment and discourages foreign investors from investing in the host country. Therefore, *a priori*, we expected that $\beta_{13} < 0$. The empirical results indicate that there is negative and significant relationship between labor cost and outward US FDI in Europe. Lower labor cost encourages investing abroad.
- *The Research and Development (RD)* as a share of GDP in the host country was expected to have a positive effect on FDI outflows since greater research and development activity leads to higher worker productivity and higher returns on investment. Therefore, *a priori*, we expected that $\beta_{14} > 0$. The findings are not consistent with expected outcomes, as *RD* variable has negative sign and is significant at 1% level.
- *The perception of corruption (CORP)* variable, was expected to have a positive effect on FDI outflows, as the higher value of perception of corruption index represents more transparency, and thus, less investment risk. Therefore, *a priori*, we expected that $\beta_{15} > 0$. Results confirmed expected outcome. The *CORP* variable is positively correlated with outward US FDI and appeared to be not significant variable.
- *The inflation rate (INFL)* in host country can have either a positive or a negative effect on FDI outflows. Therefore, the expected sign of β_{16} can either be positive or negative. The *INFL* variable came out positive, significant at 10% level for 2000-2013 and positive, not significant for 2005-2013.
- *The ease of doing business (EDB)* in the host country is an important factor attracting foreign direct investment. Therefore, the expected sign of *EDB* was positive. Results confirmed positive but not significant relationship between *EDB* and outward US FDI in the EU countries in the period of time, between 2005 and 2013.
- *The final variable represents, the corporate tax rate (TAX)*. The higher corporate tax rates lead to lower return on investment and discourage FDI. Therefore, the expected sign of the *TAX* variable was negative. The final results confirmed the negative and significant at 1% level relationship between the outward US FDI in the EU countries and corporate tax during the period of time, between 2005 and 2013.

7. Conclusions

Presented research relates to outward US FDI determinants and contributes to deeper understanding of the factors determining investing abroad. All discussed in the model variables were empirically tested and results of this study contribute to better understanding of American firms motivation to investing in the European Union countries. Policy makers have been debating about the merit of using tax policy, education, infrastructure investment and others to encourage investment at home as opposed to overseas. However, the research of the Peterson Institute for International Economics (PIIE) showed, that US MNC affiliates activities abroad are positively associated with growth of employment, sales, capital expenditure, and R&D in the United States and that, there is a complementary relationship between increases in overseas activity by US MNCs and comparable activity in the US home economy (Hufbauer, Moran, Oldenski, 2013).

This research has broad character and focuses on the determinants of outward US FDI and includes the following factors affecting American investment in the European Union countries: the financial variables (the real interest differential and real exchange rate), the economic variables (GDP per capita and GDP growth rate), the globalization process (openness), structural and location variables (education, infrastructure, telecommunication, civil liberty), perception of corruption, business environment, the labor variable (labor productivity, unemployment rate and the labor cost), and the other factors including inflation, tax on capital, Research and Development and corporate business tax.

There is evidence supporting the assumption of the positive and statistically significant impact of the several variables on outward US FDI in the European Union Countries. The results of this research identified major statistically significant determinants influencing positively outward US FDI in the EU countries, such as: real GDP per capita, the openness of the economy, infrastructure factor (railway mileage), labor quality, unemployment rate and inflation rate.

- The *real GDP per capita* has a positive and statistically significant effect on US FDI outflows, as higher GDP per capital represents higher market potential, higher purchasing power, and better investment environment and constitutes significant locational factor influencing investing decisions abroad.
- *The second important*, statistically significant variable is *the openness of the economy* as it captures the effect of globalization. Based on the obtained results this variable is positively impacting outward US FDI, as higher openness of the economy means greater potential for investors.
- The next, essential and statistically significant determinant of outward US FDI is *infrastructure factor* represented by the railway mileage (2005-2013). The better developed railway transportation, the higher level of foreign investments in the host country. This variable has expected positive sign and is statistically significant at 10% level (2005-2013).
- *The labor productivity* constitutes essential factor attracting American investments in the European Union countries. The high quality of labor constitutes positive, statistically significant component of investing in the EU countries.

Kornecki & Ekanyake

- Considering that higher *unemployment rate* is a signal of the availability of labor, it is statistically significant determinant at 5% level, positively correlated with outward US FDI.
- *The inflation rate* appears to be positively correlated with US FDI, and is significant at 10% level (2000-2013). It can be explained by the high inflation rates in the transforming Central and Eastern European economies entering the EU during analyzed period of time (New EU members).

The panel data regression analyses proved as well negative and statistically significant impact of several determinants on outward US FDI in Europe, such as: corporate tax rate, the labor cost, tax on capital, the growth rate of real GDP, research and development and literacy rate.

- The final results confirmed the negative and significant at 1% level relationship between *corporate tax rate* and outward US FDI in the EU countries. It indicates that lower corporate tax attracts foreign investments.
- The second essential factor relates to *the labor cost* in the host country. The lower labor costs in the host country encourages investing abroad.
- The empirical results indicate that *tax on capital* is negatively correlated with outward US FDI and constitutes statistically significant factor.
- The results showed *the growth rate of real GDP* in the host countries is negatively correlated with outward US FDI and is statistically significant at 5% level, during 2000 and 2013 and at 1% level, during 2005-2013. It can be related to the low economic growth in Europe during recessionary economy between 2001 and 2003, downturn in 2005 and the financial crises in 2008. Additionally the slow growth can be explain by the fact that several new members from the transforming Central and Eastern Europe entered the European Union.
- As far as *research and development* variable the findings are not consistent with expected outcomes, as it got negative sign and is significant at 1% level.
- Similarly, *literacy rate* variable does not confirm expected outcome, as it got negative sign and is significant at 1%.

The intellectual merit of this project is associated with theoretical advancement in the study on determinants of outward US FDI. The empirical significance of this research relates to the fact, that it employs recently developed panel data techniques and generates database which will be benefiting researchers. This research will enhance the knowledge of the factors affecting U.S. investing abroad and might have policy-making implications, as it answers the questions: why investing abroad is more attractive for American companies than investing at home, what factors are statistically significant when taking overseas invest decisions. Currently, the operations of U.S. MNCs remain concentrated in the United States, as the U.S. parents account for more than two-thirds, and American foreign affiliates for less than one-third, of MNCs' combined value added, employment, capital expenditures, and R&D expenditures.

Based on certain results, we can try to reflect how to create more favorable setting for multinational investors to locate their best jobs, most beneficial operations and most dynamic activities here in the United States. There is strong empirical evidence that foreign MNC's operating in the U.S. contribute to the output growth and have positive and significant impact

Kornecki & Ekanyake

on GDP in the U.S. economy. The U.S. multinationals continue to enhance the nation's economy by their capital investment, research and development, and continued support of good-paying American jobs.

Acknowledgement

This research was submitted for funding to National Science Foundation NSF Division of Social and Economic Sciences /Program Economics in July, 2014 - by Embry-Riddle Aeronautical University, Dean of Research and Graduate Studies, the Office of Sponsored Research Administration.

References

- Al-Sadig, A. J 2013, 'Outward Foreign Direct Investment and Domestic Investment: the Case of Developing Countries'. *Washington: International Monetary Fund WP/13/52*, IMF Working Paper. Middle East and Central Asia Department. Available at: <<https://www.imf.org/external/pubs/ft/wp/2013/wp1352.pdf>>
- Agiomirgianakis, G, Asteriou, D & Papatoma, K 2006, 'The Determinants of Foreign Direct Investment: A Panel Data Study for the OECD Countries'. *Discussion Paper Series* Department of Economics, School of Social Sciences,.
- Alfaro, L, Chanda, A, Kalmli-Ozcan, S & Sayek, S 2004, 'FDI and economic growth: the role of local financial market'. *Journal of International Economics*, vol. 64, no. 1, pp. 89-112.
- Barefoot, K & Mataloni, R 2011, 'Operations of U.S. Multinational Companies in the United States and Abroad in 2008', *Preliminary Results from the 2009 Benchmark Survey*, Bureau of Economic Analysis. Available at: <http://www.bea.gov/scb/pdf/2011/11%20November/1111_mnc.pdf>
- Barefoot, K 2012, 'U.S. Multinational Companies, Operations of U.S. Parents and Their Foreign Affiliates in 2010', *Bureau of Economic Analysis*. Available at: <<http://www.bea.gov/scb/pdf/2012/11%20November/1112MNCs.pdf>>
- Bellak, C, Leibrecht, M & Riedl, A 2008, 'Labour costs and FDI flows into Central and Eastern European Countries: A survey of the literature and empirical evidence.' *Structural Change and Economic Dynamics*, vol. 19, no. 1, pp. 17-34.
- Bengoa, M & Sanchez-Robles, B 2003, 'Foreign direct investment, economic freedom and growth: new evidence from Latin America', *European Journal of Political Economy*, vol. 19, no. 3, pp. 529-545.
- Biglaiser, G & Staats, J 2012, 'Foreign Direct Investment in Latin America: The Importance of Judicial Strength and Rule of Law', *International Studies Quarterly*, vol. 56, no. 1, pp. 193-202.
- Bureau of Economic Analysis, *Comprehensive Financial and Operating Data Archive by Industry of Affiliate*, available at: <http://www.bea.gov/international/di1fdiop.htm>
- Cho, J 1997, 'Foreign Direct Investment: Determinants, Trends in Flows and Promotion Policies', in *Investment Promotion and Enterprise Development Bulletin for Asia and the Pacific*, United Nations, New York, pp. 99-112.
- Congressional Research Service (CRS), available at: <<http://www.fas.org/sfp/crs/misc/RS21118.pdf>>
- Contessi, S & Weinberger, A 2009, 'Foreign Direct Investment, Productivity, and Country Growth: An Overview', *Federal Reserve Bank of St. Louis Review*, vol. 91, no. 2, pp. 61-78.
- Dunning, J 1988, 'The eclectic paradigm of international production, a restatement and some possible extensions', *Journal of International Business Studies*, pp. 1-31.

Kornecki & Ekanyake

- Fatehi-Sedeh, K & Sfizadeh, M 1988, 'Sociopolitical events and foreign direct investment: American investments in South and Central American Countries, 1959-1982', *Journal of Management*, vol. 14, no. 1, pp. 93-107.
- Furchtgott-Roth, D & Feyman, Y 2012. 'The Merits of a Territorial Tax System', no. 29, Manhattan Institute for Policy Research, New York. Available at: <http://www.manhattan-institute.org/pdf/ir_29.pdf>
- Globerman, S & Shapiro, D 2006, 'Outward FDI and the Economic Performance of Emerging Markets', *Proceedings of the International Conference on the Rise of TNCs From Emerging Markets: "Threat or Opportunity?"*, Columbia University, New York.
- Grubert, H & Mutti, J 1991, 'Texas tariffs and transfer pricing in multinational corporate decision making'. *Review of Economics and Statistics*, vol. 73, no. 2, pp. 285-293.
- Harrison, A, McMillan, M & Null, C 2006, 'US Multinational Activity Abroad and US Jobs: Some Stylized Fact', *Tufts University*. Available at: <<http://www.tufts.edu/~mmcmilla/papers/McMillanUSMultinationalActivityAbroadAndUSJobs.pdf>>
- Herzer, D 2009, 'Outward FDI and economic growth', *Journal of Economic Studies*, vol. 37, no. 5, pp. 476-494.
- Hufbauer, G.C, Moran, T.H, Oldenski, L & Vieiro, M 2013, 'Outward Foreign Direct Investment and US Exports, Jobs, R&D: Implications for US Policy', *Peterson Institute for International Economics*, U.S., no. 6680.
- Ibarra-Caton, M & Mataloni, R 2013, 'Outward FDI in the United States and its Policy Context'. *University of Columbia, Vale Columbia Center, Columbia FDI Profiles*, New York. Available at: <http://www.vcc.columbia.edu>
- Ibarra-Caton, M & Barefoot, K 2012, 'Direct investment positions for 2011: country and industry detail', *U.S. Bureau of Economic Analysis*. Available at: <www.bea.gov/scb/pdf/2012/07%20July/0712_dip.pdf>
- Kearney, A.T., *2012 FDI Confidence Index*. Available at: <https://www.atkearney.com/research-studies/foreign-direct-investment-confidence-index/2012>
- Kornecki, L 2013, 'Inward FDI in the United States and its Policy Context'. University of Columbia, Vale Columbia Center, Columbia FDI Profiles, New York. Available at: <<http://www.vcc.columbia.edu>>
- Kornecki, L & Borodulin, V 2012, 'A Study of Foreign Direct Investment Stock Contribution to output Growth in the U.S. Economy'. *Progress in Economics Research*, Volume 25 A, Study of Albert Tavidze 2011, Nova Science Publishers, Inc., New York. Available at: <https://www.novapublishers.com/catalog/product_info.php?products_id=27767&osCsid=
- Kornecki, L 2013, 'Outward U.S. Foreign Direct Investment Performance during Recent Financial Crises', *Journal of Latest Trends in Finance and Economic Sciences*, vol. 3, no. 2, pp. 270-485. Available at: <www.ojs.excelingtech.co.uk/index.php/IJLTFES/article/download/Kornecki/461>
- Lall, P, Norman, D & Featherstone, A 2003, 'Determinants of US direct foreign investment in the Caribbean', *Applied Economics*, vol. 35, no.13, pp. 1485-1496(12).
- Lee, B & Min S. B 2011, 'Exchange rates and FDI strategies of multinational enterprises', *Pacific-Basin Finance Journal*, vol. 19, no. 5, pp. 586-603.
- Lipsey, R 1995, *Outward Direct Investment and the U.S. Economy*, University of Chicago Press.
- Lipsey, R 2001, 'Foreign Direct Investment and the Operations of Multinational Firms: Concepts, History, And Data', *National Bureau of Economic Research, Cambridge*.
- Location USA - Area Development, available at: <<http://www.areadevelopment.com/LocationUSA/>>
- Mataloni, R & Yorqason, D 2006, 'Multinational Enterprises and the Global Economy, Operations of U.S. International Companies Preliminary Results' *2004 Benchmark Survey*, Survey of Current Business, vol. 86, no. 11, pp. 37-68.

Kornecki & Ekanyake

- Mody, A & Srinivasan, K 1998, 'Japanese and U.S. firms as foreign investors: Do they march to the same tune', *The Canadian Journal of Economics / Revue Canadienne d'Economique*, vol. 31, no. 14, pp. 778-799.
- Moran, T 2011, 'Foreign Direct Investment and Development: Launching a Second Generation of Policy Research: Avoiding the Mistakes of the First, Reevaluating Policies for Developed and Developing Countries', *Peterson Institute for International Economics*, Washington, D.C.
- Montero, A 2008, 'Macroeconomic Deeds, Not Reform Words: "The Determinants of Foreign Direct Investment in Latin America', *Latin American Research Review*, vol. 43, no. 1, pp. 55-83.
- Narula, R & Wakelin, K 1996, 'The Pattern and Determinants of US Foreign Direct', *Investment in Industrialized Countries*, MERIT Press Maastricht University.
- Organization for International Investment & RSM McGladrey, available at: <<http://www.ofii.org/resources>>
- Oseghale, B & Nwachukwu, O 2010, 'Effect of the Quality of Host Country Institutions on Reinvestment by United States Multinationals: A Panel Data Analysis', *International Journal of Management*, vol. 27, no. 3.
- Oseghale, B 1993, 'Strategic reaction of United States multinationals to abrupt changes in host government policies: an ex-post study', *International Journal of Management*, vol. 10, no. 2, pp. 206-214.
- Pasha, T 2013, 'Foreign Direct Investment in the United States, "Drivers of U.S. Economic Competitiveness', *International Trade Administration, SelectUSA*, 2013. Available at: <http://selectusa.commerce.gov/documents/full_report_fdi_in_the_united_states.pdf>
- Pomerleau, K & Lundeen, 'A 2014, The U.S. Has the Highest Corporate Income Tax Rate in the OECD, Tax Foundation'. Available at: <<http://taxfoundation.org/blog/us-has-highest-corporate-income-tax-rate-oecd>>
- Pugel, T 1981, 'The Determinants of Foreign Direct investment: an analysis of US Manufacturing industries', *Managerial and Decision Economics: Multinational Business*, vol. 2, no. 4, pp. 220-228.
- Root, F & Ahmed, A 1978, 'The influence of policy instruments on manufacturing direct foreign investment in developing countries', *Journal of International Business Studies*, vol. 9, pp. 81-93.
- Sampayo, F & Brandão, F 2004, The Locational Determinants of the U.S. Multinationals Activities, *Economic Research Department, Banco de Portugal*, Working Paper.
- Slaughter, M 2010, How U.S. Multinational Companies Strengthen the U.S. Economy, *United States Council for International Business*, BR Business Roundtable. Available at: <http://www.uscib.org/docs/foundation_multinationals.pdf>
- Stiglitz, J.E 2006, 'The Multinational Corporation', *Making Globalization Work*, 1st edition, W.W. Norton & Co, New York, pp. 187-211.
- United Nations Conference on Trade and Development (UNCTAD), 'Assessing the impact of current financial and economic crisis on global FDI flows', January 2009, available at: <<http://unctad.org/en/Pages/Publications.aspx>>
- United Nations Conference on Trade and Development (UNCTAD), available at: <www.unctad.org/fdistatistics>
- United States Council for International Business (USCIB), available at: <<http://www.uscib.org/index.asp>>
- U.S. Department of Commerce, Bureau of Economic Analysis (BEA), available at: <<http://www.bea.gov>>
- U.S. Department of Commerce, Bureau of Economic Analysis, FDI database, available at: <www.bea.gov/international>
- U.S. Department of Commerce. Annual Survey of State Government Finances, available at: <<http://www.census.gov/govs/state/>>
- U.S. Direct Investment Abroad. The International Economic Accounts. BEA. U.S. Department of Commerce , available at: <http://www.bea.gov/about/pdf/international_usdia.pdf>

Kornecki & Ekanyake

- Wheeler, D & Mody, A 1992, 'International Investment Decisions: The Case of U S firms', *International Journal of Economics*.
- Witt, M & Lewin, A 2007, 'Outward Foreign Direct Investment as Escape Response to Home Country Institutional Constraints', *Journal of International Business Studies*, vol. 38, no. 4, pp. 579-594.