

**INVESTIGATE CORPORATE PERFORMANCE, INTERNATIONALISATION
AND LOCATION'S COMPETITIVENESS:
EVIDENCE FROM SOUTH MEDITERRANEAN EUROPEAN COUNTRIES**

Ioanna Giannoukou
Department of Business Administration, University of Patras
Patras, Greece

ABSTRACT

Traditionally, tourism was placed second as a priority in the agenda of investors, policy makers, and academics. Previous studies have attempted to explain destination and/or firm strategic positions by focusing on (mostly demand side factors) prices, exchange rates, qualitative and other institutional factors. Supply side factors and in particular company strategy contact and performance have not been taking explicitly into consideration. However, important pioneer research has been done regarding the globalization of the service sector and the hotel industry. To continue this important stream of research this paper examines the significance of MNEs in the Hotels sector in France, Greece, Italy, Portugal and Spain.

INTRODUCTION

Traditionally, tourism was placed second as a priority in the agenda of investors, policy makers, and academics. Tourism is not an industry in the “classical sense” and the tourism product is complex and of a perishable nature (Archer, 1987). The tourism product is consumed at the place (destination country) and the time it is produced and it is based on social interaction between the supplier and the consumer, where its quality is mainly defined by this interaction. Tourism consumption spreads into many markets and links a series of cross-cutting activities involving the provision of goods and services such as accommodation, transport, entertainment, construction, and agricultural and fisheries production (UNCTAD, 2007). Therefore its structure encompasses a wide diversity of players, ranging from global MNEs to Small and Medium-Sized Enterprises (SMEs).

The tourism industry has benefited from the process of globalization (Manera and Taberner, 2006). Tourism is today one of the most internationalized sectors of the world economy. The world tourism market has been substantially extended, adding considerably to the potential for further growth and at the same time bringing about greater competition between tourism countries. (OECD, 2005).

According to World Tourism Organization (WTO), the European Union (EU) numbered six Member States among the top 10 countries in the world welcoming the largest number of international tourist arrivals. Within the EU, receipts from international tourism in 2004 were highest in Spain, France, and Italy, followed by Greece and Portugal (mainly Mediterranean destinations). Mediterranean is considered to be the most popular destination worldwide (Briguglio & Vella, 1995). The most important feature of the Mediterranean tourism is the diffused sea – side installation. The tourist resources of the Mediterranean countries succeeded in attracting the international tourism. These elements give originality and iniquity to the territory of the Mediterranean area. (Amico and Giudice, 2006) It is one of the regions that offer a wide variety to its tourists. From traditional sun and sand destinations (like Spain, Turkey and Tunisia) to those with a high cultural or heritage-based component (in particular France and Italy), the Mediterranean’s coastal areas are mainly visited for holiday and leisure purposes, although other incentives are gradually gaining ground, as is also occurring at a world level, such as travel for health purposes or professional and business reasons (Manera and Taberner, 2006).

The hotel and restaurant sector – which mainly covers hotels, restaurants, cafés and bars, camping grounds, canteens and catering – has witnessed tremendous development in these countries (Eurostat, 2004). In particular Spain, Greece and Italy experienced the highest specialization compared with the EU average. France experienced specialization equal to the EU average and Portugal below average (Anastassopoulos and Patsouratis, 2004). Previous studies have attempted to explain destination and/or firm strategic positions by focusing on (mostly demand side factors) prices, exchange rates, qualitative and other institutional factors. Supply side factors

and in particular company strategy contact and performance have not been taking explicitly into consideration. However, important pioneer research has been done regarding the globalization of the service sector and the hotel industry (Dunning and McQueen 1981, 1982; Boddewyn et al., 1986; Li and Guisinger, 1992; Dunning and Kundu, 1995; Contractor and Kundu, 1998). To continue this important stream of research this paper examines the significance of MNEs in the Hotels Sector in France, Italy, Spain, Greece and Portugal. The rest of the study is organised as follows: a thorough literature review on the investigation of tourism destinations' competitiveness, a discussion of the five South Mediterranean European countries, the data and sample, some preliminary empirical results and future research avenues.

LITERATURE REVIEW

The hotel industry is often perceived as one of the most 'global' in the service sector (Mace, 1995; Litteljohn, 1997). Our investigation is related to the multinational subsidiaries' performance and the competitiveness of locations. Earlier studies have attempted to identify the main aspects of internationalisation in the tourism sector (Dunning and Kundu, 1995; Dunning and McQueen, 1982; Johnson and Vanetti, 2005). Other studies have also investigated expansion strategies of international hotel firms (Chen and Dimou, 2005). Also, there are studies that investigated the various motives for foreign investment in tourism (Dwyer, Forsyth, 1994). Finally, there are studies that have attempted to explore multinationals' entry modes or multinationals' emergence from different countries (Melian-Gonzalez and Garcia-Falcon, 2003; Rodriguez, 2002; Williams and Balaz, 2002; Zhao and Olsen, 1997). This literature is of crucial importance to managers and policy makers as both have to address a dynamically changing industry.

Many researchers have worked on tourism competitiveness and there are several definitions of tourism competitiveness. Scott & Lodge (1985) defined competitiveness as the ability of one country to create, produce, distribute and/or service products in a global market and economy and be able to make a profit. Spence & Hazard (1988) defined competitiveness as a complex concept due to a whole range of factors affecting it. It is, thus, both a relative and a multidimensional concept. Destination competitiveness is defined as the ability of a destination to offer goods and services that are superior to those offered by other destinations (Chens, Sok, K. Sok, 2008). Dwyer et al. (2000) stated that tourism competitiveness is a general concept that combines price differentials together with exchange rate movement, issues influencing and affecting the attractiveness of a destination and the productivity levels of different constituents of the tourist industry. From his perspective, therefore, competitiveness of a destination is defined as the ability of that destination to sustain its market position and share and/or to improve it through time (d'Hartserre, 2000), while competitive advantage of a destination refers to a destination's ability to use these resources effectively.

The success of tourist destination can be appreciated by the measurement of tourism competitiveness (Crouch & Ritchie, 1994, 1999; Dwyer et al., 2000; Go &

Govers, 2000; Kozak & Rimmington, 1998, 1999; Mihalic, 2000; Ritchie & Crouch, 1993, 1995 ; De Keyser & Vanhove, 1994; Evans & Johnson, 1995; Hassan, 2000; Kozak, 2001; Sirše & Mihalič, 1999; Thomas & Long, 2000). Dwyer, Forsyth and Rao (2000a) state that tourism competitiveness is a general concept that encompasses price differentials coupled with exchange rate movements, productivity levels of various components of the tourist industry and qualitative factors affecting the attractiveness or otherwise of a destination' (Dwyer et al., 2000).

There are several models focusing on tourism competitiveness. Firstly, the studies of Haahti & Yavas (1983) and Kozak & Rimmington (1998, 1999) used survey data of perceptions and opinions of visitors such as friendliness of local citizens, shopping facilities, and so on to measure the competitiveness of one destination. Poon (1993) suggested four main principles: strongly sustaining environment; making tourism a leading sector; strengthening the distribution channels in the market; and building a dynamic private sector for the destinations to be competitive. De Keyser and Vanhove model (1994) argue that the analysis of a competitive position should take five groups of competitiveness factors into account: tourism policy, macro economic, supply, transport and demand factors. The model has been applied to the Caribbean area (De Keyser & Vanhove, 1994) and used in a competitiveness study of Slovenian tourism in 1998 (Sirše & Mihalič, 1999). Pearce (1997) pointed out destination evaluation techniques and methods that can systematically analyse and compare the diverse attributes of competing destinations within a planning concept. Go & Govers (1999) used seven attributes, namely facilities, accessibility, quality of service, overall affordability, location image, climate and environment and attractiveness to measure the destination's competitive position compared with others. Dwyer et al. (2000) used published data to measure the competitiveness of tourist destinations.

In a cohesive empirical approach, Kozak and Rimmington (1999) evaluated the quantitative and qualitative aspects of destination competitiveness. According to their study, tourists make comparisons between quantitative and qualitative aspects of various destinations and make a choice between them. In their study they made a comparison between Mediterranean destinations and found that the friendliness of local people, value for money, safety and security, local transport, natural environment and food are some of the factors which were ranked as the most positive elements of the tourism industry in Turkey for example.

Other studies, like the one by Mihalic (2000), suggest that the environmental quality refers to the quality of the natural features of the destination that can, eventually, be deteriorated by human activities. Hassan (2000) went a step further and measured the market competitiveness by using four determinants: comparative advantage includes factors concerned with macro- and micro-environments that are important to market competitiveness); demand orientation (the ability of a destination to counter the change of market demand); industry structure; and environmental commitment.

One crucial point in all studies refers to the actual measurement of competitiveness. According to Dwyer et al. (2003), there is no single or unique unit of indicators that can exploit and apply to all destinations at all times. Generally, there are two kinds of variables used, objectively measured variables such as visitor numbers and market share, and subjectively measured variables such as image, climate, and so on. (C. Y. Chens, P. Sok, K. Sok, 2008) To this extent, Dwyer, Forsyth and Rao (2000) constructed indices of price competitiveness taking into account of both travel costs to and from 19 competing destinations whilst Ritchie and Crouch (2000) made an effort to create a model that measures destination competitiveness by combining the elements of tourism and industry competitiveness. They stated that a destination's competitiveness is a country's ability to create added value and thus increase the national wealth by managing assets and processes, attractiveness, aggressiveness and proximity, and there by integrating these relationships within an economic and social model that takes into account a destination's natural capital and its preservation for future generations. In their study they argue that competitiveness is deceptive without sustainability and that to be competitive the development of tourism in any destination must be sustainable. It cannot just be economically or ecologically sustainable, but it must be socially, culturally and politically sustainable as well. Following that, in 2003, they presented the Conceptual Model of Destination Competitiveness. It has five key determinants, namely destination policy, planning and development, destination management, core resources and attractors, and supporting factors and resources. (Ritchie & Crouch, 2003).

Based on this model, Dwyer, Livaic, and Mellor (2003) created the Integrated model that included some variables identified by Ritchie and Crouch In their model they included factors such as Inherited Resources, Created Resources, Supporting Factors and Resources, Destination Management, Situational Conditions and Demand Conditions. (Dwyer, Livaic, & Mellor, 2003). The model has been empirically tested on the cases of Korea and Australia, in 2001, and in 2004 its methodology was applied to evaluate the tourism competitiveness of Slovenia.

From an empirical perspective, Dwyer & Kim (2003) used 131 indicators categorised into seven main sections, namely: endowed resource, created resources, supporting factors, destination management, situational conditions, demand factors and market performance indicators. Omerzel (2006) proposes a model using 85 indicators to measure tourism competitiveness classified under six main headings: inherited resources, created resources, supporting factors and resources, destination management, situational conditions and demand conditions. WTTC (2006) uses 23 indicators under eight main headings, namely: human tourism indicator, price indicator, infrastructure indicator, environment indicator, technology indicator, human resource indicator, openness indicator and social indicators, to measure the competitiveness of countries all around the world. Although the majority of the studies, discussed above, capture a tourist destination's competitiveness, the emphasis put on the characteristics of firms, domestic and multinationals, is almost non-existent. To this end, this is the main contribution of this paper. It bridges the two streams of

the literature by adopting a corporate perspective and more specifically focusing on the behaviour of multinationals in the South Mediterranean European countries.

THE FIVE SOUTH MEDITERRANEAN EUROPEAN COUNTRIES

Mediterranean is considered to be the most popular destination worldwide (Briguglio & Vella, 1995). The most important feature of the Mediterranean tourism is the diffused seaside. These key elements give originality to the territory of the Mediterranean area and make it an incomparable destination. (Amico; Giudice, 2006). Tourism activities, in the area, range from traditional sun and sand destinations, like Spain, to those with a high cultural or heritage-based component, in particular France, Greece and Italy. Although the Mediterranean's coastal areas are mainly visited for holiday and leisure purposes, alternative tourism activities are gradually gaining ground, such as travel for health purposes or professional and business reasons (Manera; Taberner, 2006).

Within the global tourism industry, the Mediterranean countries represent the most important place visited by tourists with 237.5 millions of foreign arrivals which represents 34.4% of the world's total (Manera; Taberner, 2006). Projections for the area show that in 2010 the arrivals in the Mediterranean countries will increase by at least 2.8%. In particular the Southern Mediterranean Europe performed quite well last year when one takes into consideration that the only global events that took place in the region were the Rugby World Cup in France and the Americas Cup in Valencia, Spain. On the other hand factors such as the weakening of US dollar, the increase in interest rates, the climate change, the increase of the oil price didn't seem to affect the performance of Southern Mediterranean Europe that was for year 2006 the "star performer" according to UNWTO.

It is therefore evident that Southern Mediterranean Europe is one of the most important sub-regions in the world and in Europe, in particular, regarding international tourist arrivals. It holds nearly 20 per cent of world share and more than a third of the overall regional volume. In 2004, destinations in Southern Mediterranean Europe received over 149 million arrivals, which represent a 2% growth over the 2003 figures. Among the mature destinations in the Euro-zone, Spain continues to perform rather positively (+3%), while arrivals declined acutely in Italy (-6%) and somewhat stagnated in Portugal (-0.8%) (WTO, 2005). Within this context the rest of this section will provide a description on the situation in the five countries of the Southern Mediterranean Europe under examination.

Following the success of the World Cup in France during 1998, the French Government Tourist Office strived to maintain growth rates in all regions. Partnerships with Air France and Brittany Ferries set out to promote different aspects of French holidays from skiing, golf and special interest travel as well as the more traditional sun and sand holidays in coastal regions. This led to a transformation of the French tourism product. Indicative figures of this transformation are recent the tourism flows which place France in the 10th place globally with 79 million tourism arrivals in 2006,

90% of which came from European countries. The international tourism receipts were 42,910 mil US \$ in 2006 (UNWTO, 2008). In the French case the tourism industry generates annual revenues of approximately 11% of the GDP. It is therefore obvious why France takes tourism really serious (WTTC, 2008).

Greece is usually selected by international tourists solely as a place of recreation, whereas cultural and other qualitative elements are not the main incentives of tourist attractiveness (Patsouratis, Fragouli, and Anastassopoulos, 2005). This perception has resulted in a highly seasonal industry, focused primarily on the Islands, and largely dependent on low return package tours for its success (WTTC, 2005). Greece, like France with the World Cup, seems to have benefited from the Olympic Game effect, especially from long-haul markets – the USA, for example, rose by some 30% in terms of arrivals. While unfortunate events like the forest fires in August 2007 received much media attention, they appear to have had little effect on tourism demand, although this cannot yet be substantiated by official statistics. Currently, the Greek tourism industry is transforming its competitive positioning from a low cost recreational only location, to a location offering higher quality and value for money as well as specialised tourism activities, i.e. agro-tourism, winter sports, conference tourism and archaeologically related tourism. In addition to focusing on more affluent travellers, Greece is also trying to promote itself as a year round destination, rather than just a summer only destination. Given that tourism generates annual revenues of around 15% of GDP, these efforts are being taken very seriously.

Italy is another developed Southern Mediterranean European country with an important tourism sector. Although in the Italian case we do not observe the same transformational process as in the previous two cases, i.e. France and Greece, Italy has the last couple of years focused on high class tourists that can generate substantial revenues for local tourism and hospitality companies. Indicative of this are the recent tourism flows with Italy ranking 28th globally with 41 million tourism arrivals in 2006, of which 88% came from European countries. The international tourism receipts was 41,058 million \$ in 2006 (UNWTO, 2008) and tourism generates annual revenues of around 10% of GDP (WTTC, 2008).

Portugal is another interesting example of a successful exploration of a big athletic event to further boost the tourism prospects of the country. A key policy followed targets the equal development of the country as a tourism destination. The Portuguese tourism authorities are monitoring tourism in the south of the country and disperse the economic benefits to other parts of the country. The north of the country is therefore, currently, subject to a major promotional campaign. It is noted that the north of Portugal is the location for many manor houses and cultural attractions, plus the fact that it is an important wine growing region. Golfing holidays are also linked to the north with new courses opening up. The Lisbon Expo '98, also, was a major force for tourism with a great deal of infrastructure built specifically for the event: the south of the country has therefore experienced massive promotion in the recent past. The promotion of the north is seen as a way of readressing this balance. Indicative of this transformation are recent tourism flows with Portugal ranking 15th globally with 79

million tourism arrivals in 2006, 93% of which came from European countries. The international tourism receipts were 11,282 million US\$ in 2006 (UNWTO, 2008) and that tourism generates annual revenues of approximately 15% of GDP (WTTC, 2008).

Last but not least, Spain has well established itself as one of the most popular tourist destinations in the world, thanks to its Mediterranean location and features (Rodriguez, 2002). Tourism has played a leading role in the Spanish economy over the last 30 years. Apart from its well known contribution to the balance of payment, there are no doubts about tourism's key role in the generation of incomes and jobs. (E.F. Sola, 1992). Tourism represent 9 % of Spain's gross domestic product, offering employment to 1.3 million people (Secretaria General de Turismo, *Libro Blanco del Turismo, Espaniol*, Madrid. Secretaria General de Turismo, 1990). Amongst the five countries under investigation, Spain is the most widely referenced success case regarding the expansion of tourism and the development of economic performance (Jimenez; Pulina, 2006). Currently, Spain is ranked 5th globally with 58 million tourism arrivals in 2006, 94% of which came from European countries. The international tourism receipts was 51,115 million US \$ in 2006 (UNWTO, 2008) and in Spain, tourism generates annual revenues of around 18% of GDP (WTTC, 2008).

DATA AND SAMPLE DESCRIPTION

In this paper we combined two different databases to obtain consistent data on the tourism industry activities in South European Countries. Our corporate level data come from AMADEUS. This database covers a large number of European firms and is constructed by Bureau Van Dijk in collaboration with 30 large European Information Providers. It contains normalised, with respect to currency and accounting standards and thus comparable information on almost 1.5 million European corporations. AMADEUS uses key Information Providers in different markets and the primary source of information is the published annual reports of companies. On the industry level data were collected from Euromonitor International. The database builds on published and unpublished data from the World Tourism Organisation. Our sample covers five South European countries, i.e. France, Greece, Italy, Portugal and Spain for a decade, i.e. the period 1997-2006. For presentation reasons our basic statistics will represent the sample in the most recent period, i.e. 2006 as this is more relevant for managerial implications. Our dataset covers 737 companies participating in NACE Revision 1.1 - 55 Sector, which are either domestic ones or subsidiaries of MNEs.

EMPIRICAL RESULTS

In Table 1 we present some basic statistics on the tourism industry size for each country as well as our sample representation in terms of number of companies. Italy has by far the largest size both in terms of bed-places as well as rooms in tourism accommodation. France and Spain follow, whilst Greece and Portugal are significantly lower markets. The picture is slightly different when it comes to absolute number of firms. Spain and France still have the highest numbers but Italy falls at the

last place. The most interesting observation though comes from the number of foreign subsidiaries. Greece attracts a substantial number of MNEs as almost two out of every three companies have some kind of international participation in their ownership structure. A correlation coefficient though does not reveal any substantial relationship between the size of the market and the number of MNEs present.

Table 1
Size of Tourism Market and number of Domestic and Multinational Companies

	Bed-places in tourist accommodation - '000	Rooms in tourist accommodation - '000	Total Companies	Domestic Companies	Subsidiaries of MNEs
FRANCE	1232.6	616.3	210	167	43
ITALY	2056.2	1029.7	61	34	27
GREECE	695.9	365.9	92	32	60
SPAIN	1597.5	806.6	304	251	53
PORTUGAL	261.8	115	70	58	12
Correlation with number of MNEs subsidiaries	0.213	0.183			

Source: AMADEUS and Euromonitor International

Table 2 presents the international exposure of each market and the relative number of MNEs' subsidiaries. Data on the International versus Domestic nights are presented. We calculate an international exposure measure, i.e. International over Domestic Tourism Nights. According to this Greece has by far the most internationally exposed market with the number of International nights spent being almost three times the number of Domestic nights. This provides a reasonable explanation on the large number of MNEs' subsidiaries present in the Greek market. In contrast, Portugal although it has a substantial number of International nights over Domestic ones has by far the lowest number of foreign subsidiaries. A correlation coefficient though does not reveal any substantial relationship between the calculated ratio and the number of MNEs' subsidiaries in the economy.

Table 2
International Exposure of Markets

	International Tourist Nights	Domestic Tourist Nights	Ratio (I/D)	Subsidiaries of MNEs
FRANCE	72532.6	121640.6	0.596286108	43
ITALY	140810.1	108209.1	1.301277804	27
GREECE	40800	13990.4	2.916285453	60
SPAIN	103503.4	138355	0.748100177	53
PORTUGAL	23757.5	11487.5	2.068117519	12
Correlation			0.0349	

with number of MNEs subsidiaries				
---	--	--	--	--

Source: AMADEUS and Euromonitor International

A key question in the international business literature is related to the improvement in efficiency and productivity that MNEs can generate. In table 3 we present data on the Hotel bed occupancy rates and the number of MNEs' subsidiaries. Greece and France have the highest percentage whilst Portugal underperforms substantially showing only a 37% in terms of bed occupancy. A key point that should be made here is relative to the product's nature. The tourism product is not something that can be stocked or produced immediately once the demand is present. It requires substantial investments and thus a consistent low bed occupancy rate can create substantial problems in the long term. A correlation coefficient reveals a strong positive relationship between the bed occupancy rate and the number of MNEs' subsidiaries in the economy. This finding creates enough scope for further investigation.

Table 3
Market Efficiency and number of MNEs

Country	Hotel bed occupancy rates - % of beds occupied	Subsidiaries of MNEs
FRANCE	59.1	43
ITALY	40.5	27
GREECE	58.4	60
SPAIN	54.9	53
PORTUGAL	37.1	12
Correlation with number of MNEs subsidiaries	0.827	

Source: AMADEUS and Euromonitor International

In table 4 we present two measures of size, i.e. Total Assets and number of employees, a measure of corporate performance, i.e. Profit (Losses) before taxes and finally a measure of the funding, i.e. the long term debt. In terms of Total Assets the Italian and the Spanish companies are substantially larger than the rest. An interesting point is that in Italy, Spain and France the subsidiaries of MNEs are of a similar size to domestic companies. In contrast both for Portugal and Greece Domestic companies are significantly larger than subsidiaries of MNEs. The picture changes though when one compares companies based on the number of employees. Italian, Portuguese and Spanish subsidiaries of MNEs are larger than their domestic counterparts. In Greece the differences are rather small whilst France is the only country where domestic companies are by far larger than the foreign affiliates. Spanish companies are the most profitable ones in absolute numbers whilst Greek companies, both domestic and foreign show losses. In the Greek case the losses of foreign affiliates are almost five times larger on average than those of their domestic competitors. Finally, Spanish and

Greek companies rely substantially on long term debt whilst in the Greek, Italian and Portuguese case, local companies on average borrow much more than the subsidiaries of MNEs.

Table 4
Comparative measures of domestic and MNEs' subsidiaries

		Subsidiaries of MNEs	Domestic Companies	Total Companies
Total Assets (000 Euros)	FRANCE	51322	56334	55337
	GREECE	35689	50854	40964
	ITALY	90803	91082	90960
	PORTUGAL	33959	49052	46646
	SPAIN	70245	75955	74953
Number of Employees	FRANCE	389	847	766
	GREECE	210	230	216
	ITALY	1472	588	1005
	PORTUGAL	736	431	474
	SPAIN	744	480	524
Profit (losses) before taxes	FRANCE	2103	2237	2210
	GREECE	-576	-96	-409
	ITALY	895	569	712
	PORTUGAL	1506	50	282
	SPAIN	2385	2071	2126
Long Term Debt	FRANCE	3897	2813	3029
	GREECE	10321	15885	12256
	ITALY	9902	26619	19287
	PORTUGAL	9948	17418	16532
	SPAIN	30664	25601	26493

Source: AMADEUS and Euromonitor International

CONCLUSIONS

This study is a first attempt to investigate corporate performance, internationalisation and a location's competitiveness. The key contribution of this study is dual. On the one hand to provide a thorough literature review on the current global picture of the tourism industry and the role of multinational enterprises and on the other to offer a first reading of the situation in an important, in terms of the tourism sector, geographic region that of the South Mediterranean countries, i.e. France, Greece, Italy, Portugal and Spain. The study identifies the key challenges that multinationals active in the industry face and then provides a descriptive discussion of the situation in the above mentioned countries. It goes beyond the scope of this paper to offer substantial econometric evidence on the interrelationship between a location's competitiveness and multinationals' performance. We suggest that as a key stream for

future research though. The key scope of this study is to re-establish the agenda of tourism industry within the context of international business.

REFERENCES

Amico, S. and Giudice, P. L. (2006). The importance of Tourism in the European Mediterranean area, *European Regional Science Association conference papers*.

Anastassopoulos, G. and Patsouratis, V. (2004). Labour productivity and competitiveness: an initial examination of the hotels and restaurants sector in selected countries. *East West Journal of Economics and Business*, VII (2).

Archer, B. H. (1987). Demand forecasting and estimation. (Ed.) *Travel, tourism and hospitality research*. New York: Goeldner, Wiley.

Boddewyn, J.J., Baldwin H. M. and A.C. Perry. (1986). Service Multinationals: Conceptualization, Measurement and Theory. *Journal of International Business Studies*, 17: 41-57.

Briguglio, L., and Vella, L. (1995) The Competitiveness of the Maltese Islands in Mediterranean International Tourism (eds), Island Tourism. *Management Principles and Practice*, U.K., Wiley.

Chens, C. Y. Sok, P. Sok, K. (2008). Evaluating the Competitiveness of the Tourism Industry in Cambodia: Self-assessment from Professionals. *Asia Pacific Journal of Tourism Research*, 13(1): 41-66.

Chen, J. J. and Dimou, I. (2005). Expansion strategy of international hotel firms. *Journal of Business Research*. 58: 1730-1740.

Crouch, G. and Ritchie, J.B.R. (1994). Destination Competitiveness: Exploring Foundations for a Long-Term Research program. Proceedings of the Administrative Sciences Association of Canada, Annual Conference, Halifax, Nova Scotia, June 25-28, 1994: 79-88.

Crouch, G. and Ritchie, J.B.R. (1995). Destination Competitiveness and the Role of the Tourism Enterprise. Proceedings of the Fourth Annual Business Congress, Istanbul, Turkey, July 13-16: 43- 48.

Crouch, G. I., & Ritchie, J. R. B. (1999). Tourism, Competitiveness, and Societal Prosperity. *Journal of Business Research*, 44: 137-152.

D'Hartesse A. (2000). Lessons in Managerial Destination Competitiveness in the case of Foxwoods Casino Resort. *Tourism Management*, 21(1): 23-32.

De Keyser, R., & Vanhove, N. (1994). The competitive situation of tourism in the Caribbean area—Methodological approach. *Revue de Tourisme*, 3: 19–22.

Dunning, J. and Kundu, K.S. (1995). The Internationalization of the Hotel Industry: Some New Findings. *Management International Review*, 35(2): 101-133.

Dunning, J. and McQueen, M. (1981). The Eclectic Theory of Multinational Production: A Case Study of the International Hotel Industry. *Managerial and Decision Economics*, 2(4): 197-210.

Dunning, J. and McQueen, M. (1982). Multinational Corporations in the International Hotel Industry. *Annals of Tourism Research*, 9: 69-90.

Dwyer, L., Forsyth, P. & Rao, P. (2000). The Price Competitiveness of Travel and Tourism: a comparison of nineteen destinations. *Tourism Management, Special issue: the Competitive Destination*. 21(1): 9-22.

Dwyer, L., & Kim, C. (2003). Destination Competitiveness: determinants and indicators. *Current Issues in Tourism*, 6 (5): 369-414.

Dwyer, L., Livaic, Z. and Mellor, R. (2003). Competitiveness of Australia as a tourist destination. *Journal of Hospitality and Tourism Management*, 10 (1): 60–78

Evans, M.R. and Johnson, R.B. (1995). Identifying competitive strategies for successful tourism destination development. *Journal of Hospitality and Leisure Marketing*, 31(1): 37–45. Eurostat. (2004). European business, facts and figures, Part 5, Trade and tourism data 1991–2001. Chapter 19. Tourism.

Forsyth, P., Dwyer, L. (1994). Modelling Tourism Jobs: Measuring the Employment Impacts of Inbound Tourism. *Occasional Paper No. 2*, Commonwealth Department of Tourism.

Go, F.M. and Govers, R. (1999). The Asian perspective: Which international conference destinations in Asia are the most competitive? *Journal of Convention & Exhibition Management*, 1(4): 37–50.

Haahti, A. and Yavas, U. (1983). Tourists' perceptions of Finland and selected European countries as travel destinations. *European Journal of Marketing*, 17(2): 34–42.

Hassan, S. S. (2000). Determinants of market competitiveness in an environmentally sustainable tourism industry. *Journal of Travel Research*, 38(3): 239–245.

Jiménez, I. C. and Pulina, M. (2006). Tourism and growth: Evidence for Spain and Italy. *46th Congress of the European Regional Science Association*. University of Thessaly (Volos, Greece).

Kozak, M. and Rimmington, M. (1999). Measuring tourist destination competitiveness: conceptual considerations and empirical findings. *Hospitality Management*, 18: 273-83

Kozak, M. (2001). Repeaters' behaviour at two distinct destinations. *Annals of Tourism Research*, 28 (3): 784–807.

Li, J. and Guisinger, S. (1992). The Globalization of Service Multinationals in the “Triad” Regions: Japan, Western Europe and North America. *Journal of International Business Studies*, 23: 675-696.

Litteljohn, D. (1997). Internationalization in hotels: current aspects and developments. *International Journal of Contemporary Hospitality Management*, 9 (5/6): 187–198.

Mace, E. (1995). International trends in the hotel industry or, survival in the global economy. *Hotel and Motel Management*, 210 (10): 11–13.

Manera, C. and Taberner, J. G. (2006). *The Recent Evolution and Impact of Tourism in the Mediterranean: The case of Island Regions, 1990 – 20002*. Nota di Lavoro. Natural Resources Management. Fondazione Enu Enrico Mattei.

Melian-Gonzalez, A. and Garcia-Falcon, J.M.(2003). Competitive potential of tourism in destinations. *Annals of Tourism Research*, 30 (3): 720–740.

Mihalič, T. (2000). Environmental management of a tourist destination: A factor of tourism competitiveness. *Tourism Management*, 21: 65–78.

Omerzel, Doris Gomezelj (2006). Competitiveness of Slovenia as a Tourist Destination. *Managing Global Transitions*, 4(2): 167-89.

Organisation for Economic Cooperation and, Development, 2005. Global tourism growth: a challenge for SMEs. In: Conference Proceedings, Gwangju, Korea.

Patsouratis, V., Fragouli, Z. and Anastassopoulos, G. (2005). Competition in Tourism among the Mediterranean Countries. *Applied Economics*, 37(16): 1865-70.

Pearce, D. (1997). Competitive destination analysis in Southeast Asia. *Journal of Travel Research*, 35 (4): 16–24.

Poon, A. (1993). *Tourism, Technology, and Competitive Strategies*. Cab Intern. Wallingford.

Ritchie, B.J.R. and Crouch, G.I. (1993). Competitiveness in international tourism—a framework for understanding and analysis. Reports on 43rd Congress, 35: 23–71.

Ritchie, J.R.B. and Crouch, G.I. (2000). The competitive destination, a sustainable perspective, *Tourism Management*, 21 (1): 1–7.

Ritchie, J.R.B. and Crouch, G.I. (2003). The competitive destination, a sustainable tourism perspective. Cabi Publishing. Cambridge. ent 10 (1): 60–78.

Rodríguez, A. R. (2002). Determining factors in entry choice for international expansion. The case of the Spanish hotel industry. *Tourism Management*, 23: 597-607

Scott, B. R. and Lodge, G. C. (1985). *US Competitiveness in the world economy*, Harvard Business School Press.

Sirše, J. and Mihalič, T. (1999). Slovenian tourism and tourism policy—a case study. *Revue de Tourisme*, 3: 34–47.

Sola, E.F.: (1992). A strategic outlook for regional tourism policy. *Tourism Management*, 13(1): 45-49.

Spence, M. and Hazard, H. (1988), (eds.) *International Competitiveness*. Ballinger. Cambridge. Mass.

Thomas, R. and Long, J. (2000), Improving competitiveness: Critical success factors for tourism development. *Journal of the London Economic Policy Unit*, 4: 313–328.

UNCTAD (2007). *FDI in Tourism: The Development Dimension*. New York and Geneva: United Nations Publications.

UNWTO (2008). *World Tourism Barometer*. Volume 6, No 1, January 2008.

Williams, A.M. and Balaz, V. (2002). The Czech and Slovak Republics: conceptual issues in the economic analysis of tourism in transition. *Tourism Management*, 23: 37–45.

World Travel and Tourism, Council (2005). *World Travel and Tourism Council*, Greece.

World Travel and Tourism, Council (2008). *World Travel and Tourism Council*, Greece, Spain, Italy, Portugal, France.

Zhao, J.L. and Olsen, M.D. (1997). The antecedent factors influencing entry mode choices of multinational lodging firms. *International Journal Hospitality Management*, 16 (1): 79–98.

EMU and FDI Flows Among selected EU countries

Irini Smaragdi¹
Department of Economics
Aristotle University of Thessaloniki

Konstantinos Katrakilidis²
Department of Economics
Aristotle University of Thessaloniki

Nikos C. Varsakelis^{3,c}
Department of Economics
Aristotle University of Thessaloniki

¹Aristotle University of Thessaloniki, Egnatia str., Greece, esmaragd@econ.auth.gr

² Aristotle University of Thessaloniki, Department of Economics, Egnatia str., Greece, ktrak@econ.auth.gr

³ Aristotle University of Thessaloniki, Department of Economics, Egnatia str, Greece, barsak@econ.auth.gr

1. correspondence author

EMU and FDI Flows Among selected EU countries

Abstract

This paper investigates whether the big economic and institutional change in Europe, European Monetary Union (EMU), has caused significant impacts and changed the behavior of Foreign Direct Investment (FDI) flows within selected countries in European Union. The empirical methodology employs the Lee and Strazicich (1999b, 2004) approach, panel LM unit-root test, for the detection of one structural break. The results provide evidence that FDI flows are stationary series with one structural break mainly the period before EMU inauguration dates.

Keywords: Stationarity, FDI flows, structural change, European Union, panel data

Introduction

In 1992 “*The Treaty of European Union (TEU)*” was signed in Maastricht aiming at the creation of the European Monetary Union (EMU). The Internal Market Programme had already stimulated the mobility of capital within EU. From 1994 until 1999, intra- EU FDI flows were equivalent to 4^{1/2} % of gross domestic fixed capital formation in the EU on average, as compared to 2% in the previous 5 years (Barrell and Pain 1997).

EMU was expected to minimize destabilizing speculation, increase transparency and reliability of rules and policies. The removal of the exchange-rate uncertainty would encourage cross-border investment in the EU economies (Commission, 1990, ch. 1). This is considered important since uncertainty about future returns may discourage investment (Dixit A. and Pindyck R., 1994).

So far studies have been limited in the examination of specific countries and focus mainly on the determinants of FDI inflows towards EU countries and the effects of exchange rate on FDI. (Clegg (1992), Lunn (1980)). This paper investigates the integration properties of time series of FDI flows in order to test for the impact of the institutional changes that caused EMU, on FDI flows among selected EU members. The integration properties are important characteristics for the use of FDI variables in other researches, as well as, for policy evaluation. We apply the Lee and Strazicich (1999b, 2004) methodology to detect possible structural break, identify the break date and evaluate the importance and the impacts of this economic and institutional event on capital flows. We employ an LM-type test that allows for testing the unit root hypothesis in the presence of one endogenously determined structural break in the level. The empirical analysis uses annual panel data for FDI flows within EU and covers the period from 1991 to 2005. The results provide evidence that FDI flows are stationary series with one structural break prior the establishment of EMU.

The paper is organized as follows: The second section introduces the theoretical framework. The third section presents the methodology. The fourth section reports the data and the empirical results. Finally, the fifth section discusses and offers some concluding remarks.

Theoretical framework

European Monetary Union constitutes a major institutional change in the world economy. It affects FDI decisions through different channels. The removal of the exchange-rate uncertainty would encourage cross-border investment in the EU economies because it was expected to minimize destabilizing speculation, increase transparency and reliability of rules and policies. Therefore, the single currency would be a powerful incentive for cross- border investments (Commission of the EC, 1990).

The main advantage of economic integration is the transition from floating to fixed exchange rates, which eliminates the risk.

According to OECD (1992), the prospect of a large unified market attracts investors due to stable exchange rate, monetary discipline and lower costs. Molle and Morsink (1991b) examined the effect of Monetary Union on FDI and concluded that exchange rate risk may discourage FDI. Aizenman J. (1992) reached similar conclusion that fixed exchange rates regime is more conducive to FDI than the flexible exchange rate, regardless of the type of the shock taking place in an economy. In case of monetary shocks, the production function implies that shocks will reduce expected profits under a flexible exchange rate regime, while fixed exchange rates are able to isolate the level of employment and production from monetary shocks and are related to higher expected profits. This, consequently, encourages domestic investment and FDI. However, for the case of horizontal FDI, the removal of exchange rate volatility may decrease FDI and increase trade flows as a substitute. Broll and Zilcha (1992) set two models, of vertical and of horizontal product differentiation. In the first one, the effects of volatility depend on the uncertain exchange rate, while in the second one is a function of the shape of the profit function.

Dixit A. and Pindyck R.(1994) claimed that uncertainty about future returns may discourage investment. This holds for risk-averse firms, since monetary integration increases the certainty value of their expected profits, reduces the trade costs and favours vertical FDI. An implication of this is that companies can expand their production output by placing their activities in countries- members of EU according to differences in factor prices or other locational advantages. Darby et al. (1999) claimed that there is a negative impact of exchange rate uncertainty on investments. The model is an extended version of Dixit - Pindyck (1994) and suggests that exchange rate volatility affects FDI in two reverse ways. On the one hand, it discourages investment because the firm will only invest if the present value of the expected revenues is higher, by an amount equal to the value of waiting, than the entry sunk cost. On the other hand, the opportunity cost of waiting raises with exchange rate volatility and hence boosts investment.

Some studies agree with the above authors under conditions. More specifically, Tamim Bayoumi and Gabrielle Lipworth (1997) claimed that only the case of a depreciation of the host country's currency has a positive effect on FDI inflows, since depreciation lowers the costs of production in host countries relative to the cost in source countries and thus, making foreign investment more profitable and attractive. Later, Sung and Lapan (2000), who were also influenced by Dixit-Pindyck (1994) model, argued that, under exchange rate uncertainty, investments abroad may be useful in forwarding the production abroad in case the foreign currency depreciates. Kozo Kiyota and Shujiro Urata (2004) examined Japan's FDI by industries and agreed that the depreciation of the currency of a host country attracted FDI, while the high variability of the exchange rate discouraged FDI.

Bénassy-Quéré et al. (2001), agreeing with the above authors, argues that an increase in the volatility of nominal exchange rate leads to a reduction in FDI. This is due to the fact that a risk averse firm locates in two different foreign positions in order to export from one to another. These transportation costs influence the elasticity of FDI to exchange rate uncertainty, since regardless of the sign of correlation between the two exchange rates, an increase in the variability of exchange rate leads to a reduction in FDI. Furthermore, lower volatility of exchange rate in a country increases the sensitivity of output in that country to local costs.

Cushman (1985) analyzed the effects of real exchange rate risk and expectations on FDI and concluded that an increase in exchange rate volatility reduces the real exchange rate risk and therefore, lowers the expenditure of domestic financing of foreign capital which implies an increase in FDI. He observed positive effects of exchange rate volatility on annual, bilateral FDI flows from the United States to the United Kingdom, France, Germany, Canada and Japan. In line with Cushman (1985), Goldberg and Kolstad (1995), studying bilateral investment flows between the U.S. and the U.K., Canada and Japan, claimed that floating exchange rates stimulate the activity of foreign investments. The financial markets' development and the exchange- rate liberalization increase predictability for the decision process and enhance investor confidence (Culem C., 1988). In line with them, Roy and Viaene, (1998) argued that an increase in foreign exchange variability has a positive impact on vertical FDI.

Another important advantage, as an implication of the creation of a monetary union, is the reduction of transaction costs when it is necessary to change currency in order to carry out a transaction. Transaction costs from currency exchange are financial costs and in-house costs. Emerson (1992) estimated that for the members of the European Monetary Union, total savings from abolishing conversion within Europe, including savings from "reductions in inefficiencies inside firms," were at 0.4 percent of GDP¹.

On the other hand, according to Richard Ware (1998), the constitutional dimension of the currency unification implies that sovereignty over monetary policy has been limited. The limitation of the national independence means the loss of the possibility of absorbing big shocks via devaluation or revaluation or an adjustment in domestic monetary policy. Governments are not able to decide their domestic policy that allows for adjustment if disequilibrium in balance of payment arises from the implementation of domestic policy. However, there is another opinion that claims, that if countries are facing shocks, the loss of monetary policies as means for adjustment could be compensated by other mechanisms under the condition that these countries are highly integrated. These mechanisms include flexibility in prices and wages, mobility of labour and other factors of production, or fiscal transfers².

Another opinion which explains the reduction of FDI flows among members of EMU is that when the members of a union are dissimilar, a common monetary policy is unlikely to be optimal for all members, due to differences among them, which is one of the main determinants of FDI. Also, a shift in the political culture of the Member States may occur and not find all members ready to accept. In this regard, Boone and Maurel (1999) showed that the members of EMU whose economic cycle is similar to that of Germany (the largest European economy) would be favoured by the adoption of the euro.

Concluding, EMU created a new regulatory framework which reduces macroeconomic instability, eliminates risk and encourages investments, since it

¹ For small open and less developed European economies, they estimated such savings at 1 percent of GDP.

² Some economists argue that redistribution of income through the federal government is one of the key reasons why the currency union in the United States, which originally did not represent an optimal currency area, has survived without major problems (Sala-i-Martin and Sachs, 1991). Other reasons include labor and capital mobility

makes cost and pricing decision more predictable, even with the cost of the loss of a policy instrument (Lane P., 2006). Therefore, we posit the following hypothesis:

H₂: “The implementation of EMU caused structural change on the Foreign Direct Investment flows within selected EU countries”.

Methodological Issues

The presence of structural breaks in time series data can imply a behavior similar to that of a non-stationary process which makes difficult to distinguish between a unit root and a stationary process with shift. The existing panel unit root tests, such as the IPS (Im, Pesaran and Shin, 2003), the MW (Maddala and Wu, 1999) and the modified Augmented Dickey Fuller (ADF) type tests, test the assumption of no break under the null hypothesis and cause the test statistic to diverge from its asymptotic properties, leading to size distortions (Nunes, Newbold and Kuan (1997), Lee & Strazicich (2001)). Im, Lee and Tieslau (2002), proposed an LM panel unit root test whose most important feature is that its asymptotic distribution does not depend on parameters that indicate the existence, the number and the date of the structural breaks in each cross section unit. In line with them, Lee and Strazicich (1999b, 2004) proposed an LM unit root test with endogenous break selection process, which provides greater flexibility and accuracy in the determination of the break dates. The break dates are selected where the statistic for the unit root null hypothesis is minimized. It has to be underlined that the invariance property of the LM unit root test does not hold in the presence of changes in trend slope, when it is applied on panel data, even though it does under the presence of level shifts.

More specifically, in the LM unit roots test statistic of Lee and Strazicich (1999, 2004) for panel data, the LM-statistic follows the asymptotic distribution, which also holds if dummies are included to test possible structural breaks, as long as $N/T \rightarrow k$, for each finite intercept k , as long as $N, T \rightarrow \infty$. As Amsler and Lee (1995) showed, the LM statistic for the i^{th} time series can arise as a t-statistic when testing for $\varphi_i=0$ in the regression.

$$\Delta y_{i,t} = \gamma_{2i} + \delta_i \Delta D_{it} + \varphi_i \hat{S}_{i,t-1} + \rho_{ij} \Delta \hat{S}_{i,t-j} + \varepsilon_{2t} \quad (1)$$

Where $\tilde{S}_{i,t-1} = y_{i,t-1} - \tilde{\gamma}_{2i}(t-1) - \tilde{\delta}_i D_{i,t-1}$ and $\tilde{\gamma}_{2i}$ and $\tilde{\delta}_i$ are the ordinary least square estimators of γ_{2i} and δ_i from the restricted regression $\Delta y_{i,t} = \gamma_{2i} + \delta_i \Delta D_{it} + \varepsilon_{i,t}$.

Letting $\hat{S}_{i,-1} = (\hat{S}_{i0}, \hat{S}_{i1}, \dots, \hat{S}_{i,T-1})'$ and $\Delta D_i = (\Delta D_{i1}, \Delta D_{i2}, \dots, \Delta D_{iT})'$, the LM t-statistic for the i_{th} series that tests the null hypothesis $\varphi_i=0$ in regression (4) series can be expressed as:

$$t_{LMIT}^B = \frac{\sum_{t=1}^T (\mathbf{S}_{i,-1}^{j=1} \mathbf{M}_{(I_T, \Delta D_i)} \Delta \mathbf{Y}_i)}{\sqrt{(\mathbf{S}_{i,-1} \mathbf{M}_{(I_T, \Delta D_i)} \mathbf{S}_{i,-1}) (\Delta \mathbf{Y}_i \mathbf{M}_{(I_T, \Delta D_i)} \Delta \mathbf{Y}_i)}}$$

Data

The data employed in the empirical analysis are annual FDI flows among selected EU countries-members that join EMU. The countries were selected taking into consideration the fact that there are bilateral FDI flows among them, as well as the availability regarding a sufficient time span which in our analysis covers a fifteen year horizon, from 1992- 2005. More specifically, among the first twelve countries that have adopted the common currency euro, five have established bilateral FDI flows among them and these are: France, Germany, Netherlands, Portugal and Spain.

Regarding the rest of the countries, we should mention that FDI outflows from Belgium and Luxemburg are presented summed and cover only a 4 year time horizon (2001-2003). Concerning FDI outflows from Austria, Italy, Ireland, Finland and Greece it was not possible to acquire complete data set for the examined flows among them. Besides, in the cases of Ireland and Greece, the available data do not cover a period longer than 10 years. Finally, since UK and Denmark have not entered EMU, they are excluded from the sample of countries. The data come from UNCTAD.

Empirical Results and Discussion

This paper uses the panel LM unit root test of Lee and Strazicich (1999, 2004) to determine endogenously the location of a structural break in FDI flows within EU.

More particularly, we test the integration properties of the FDI outflows from France towards Germany, Netherlands, Portugal and Spain, accounting for the existence of one possible structural break. The results provide evidence that when the one break minimum LM unit root test is applied regarding the FDI outflows series from France, the results suggest that the FDI series are stationary with one structural break. The detected break dates for the four countries are as follows: for Germany (1996), for Netherlands (2001), for Portugal (1997) and for Spain (1994).

Also, the FDI outflows series from Germany are stationary with a structural break, which is detected in the following dates: for France (1996), for Netherlands (1995), for Portugal (2002) and for Spain (1998).

Concerning the FDI outflows from Netherlands, the findings suggest that the FDI series are stationary with a structural break. The detected break dates for the four countries are identified as follows: France (1998), Germany (1998), Portugal (1998) and Spain (2000).

Regarding the FDI outflows from Portugal, the test suggests that the FDI series are stationary with a structural break. The detected break dates are as follows: for France (2003), for Germany (2001), for Netherlands (2001), and for Spain (1998).

Finally, with reference to the FDI outflows from Spain, there is also evidence in favour of stationarity with breaks. The detected break dates are as follows: for France (1998), for Germany (2002), for Netherlands (1998) and for Portugal (1998).

Through this investigation, we can imply that a change in the intercept of the testing model in the flows could indicate a jump in the level of the FDI flows possibly due to the changes in the regulatory framework. This refers to microeconomic regulations implemented in product, labour and financial markets. Such shifts include competition policies, entry barriers, tax and benefit systems, rules to protect employment, education and motives given to research and development. They are considered important and influential for FDI because they enhance the possibility of economic growth and assists in adaptation of the economic changes. Therefore, the oncoming consequences of EMU, like exchange rate stability, greater transparency, monetary discipline and reduction of the transaction costs could explain the motivation of firms from European countries to enforce investment in other countries- members of EU.

Moreover, the negotiations among governments on investments are carried out at a bilateral level within EU and a considerable increase of cross-border investment flows and investment-related agreements³ (IIAs) have been observed in the past decade (Radu A., 2008). More specifically, the Netherlands, Finland, Germany and Spain accounted for the majority of the new bilateral investment agreements, which were contracted after 1993 (UNCTAD, 2008). According to A. Mestral (2008), the EU member states have been some of the most prolific

³ There are more than 150 intra-EU BITs, most of them concluded between the 12 new members and EU-15.

bilateral investment treaty makers with Germany and France as two of the leaders.

Conclusion

Since it is clear from the literature that the monetary integration tends to increase FDI within and towards the European region (Dixit and Pindyck (1994), Darby et al (1999), Commission (1990) etc.), the examination of possible structural changes in the behavior FDI inflows that has been caused is a matter of great importance. Thus, we attempted to investigate the integration properties of FDI flows within selected EU countries accounting for the presence of the potential existence of one endogenously determined structural break in the levels. Actually, we tested whether Foreign Direct Investment flows could be characterized as a unit root (non- stationary) process with a shift in the levels. The results revealed stationary FDI flows that following a shock, they revert to their trends implying that shocks have transitory effects. It is essential to note that such shocks were mostly observed in the period 1995-1999.

Panel Lm unit root test with one structural break

Home country	Host Country	Univariate LM unit root test statistic	Optimal lag length (k)	Break Location
France				
	Germany	-1.221	2	1996
	Netherlands	-2.407***	0	2001
	Portugal	-1.608*	0	1997
	Spain	-2.660***	0	1994
Germany				
	France	-4.426***	2	1996
	Netherlands	-6.371***	2	1995
	Portugal	-3.139***	2	2002
	Spain	-0.288	2	1998
Netherlands				
	France	-4.958***	0	1998
	Netherlands	-4.561***	0	1998
	Portugal	-4.982***	0	1998
	Spain	-2.311**	1	2000
Portugal				
	France	-5.717***	2	2003
	Germany	-1.963**	0	2001
	Netherlands	-2.756***	2	2001
	Spain	-3.220***	0	1998
Spain				
	France	-4.853***	1	1998
	Germany	-4.440***	1	2002
	Netherlands	-4.372***	1	1998
	Portugal	-4.349***	1	1998

The 1, 5 and 10% critical values for the panel LM unit root test with one break are : -2.326, -1.645 and -1.282

*significant at the 10% level

** significant at the 5% level

*** significant at the 1% level

References

- Aizenman Joshua (1992), "Exchange Rate Flexibility, Volatility, and the Patterns of Domestic and Foreign Direct Investment", *NBER Working Papers No 3953*.
- Amsler, C. & J. Lee (1995), "An LM test for a unit root in the presence of a structural Change", *Econometric Theory*, 11, 359 - 368.
- Arman de Mestral (December 2008), "The EU as a Maker of Investment Agreements: the Potential Impact on Canada and the Broader World System of Bilateral Investment Treaties", *Policy Brief*.
- Barrell, R., and N. Pain (1997), "Foreign Direct Investment, Technological Change, and Economic Growth Within Europe," *The Economic Journal*, 107, p1770 – 86.
- BEA (Bureau of economic analysis)
- Benassy- Quere A., Fontagne L. and Lahreche Revil A., (2001), " Exchange rate strategies in the competition for attracting foreign direct investment", *Journal of the Japanese and International Economics*, vol. 15, No 2, pp 178-198.
- Broll U. and Zilcha I., (1992), " Exchange rate uncertainty, Future Markets and the Multinational Firm, *European Economic Review*, 36 (4), 815- 826
- Boone, L. and M. Maurel (1999), "An Optimal Currency Area Perspective of the EU Enlargement to the CEECS", *CEPR Discussion Paper Series*, No. 2119.
- Commission of the European Communities, One market, one money, European Economy, vol. 44, October 1990.
- Culem C. G. (1988), "The locational Determinants of Direct InvestmentsM among Industrialized Countries", *European Economic Review* 32, pp 885- 904.
- Cushman DO., (1985), "Real exchange rate risk , expectations and the level of direct investment ", *Review of Economics and Statistics*, 67: 297-308.
- Darby J., Hughes Hallet A. Ireland J., Piscitelli L., (1999), " The impact of exchange rate uncertainty on the level of investment", *Economic Journal*, vol. 109, pp c55-c67.
- Dixit, A. and R. Pindyck (1994), " Investment under uncertainty", *Princeton University Press* (NJ, Princeton).
- Emerson M. (1992), "One Market, One Money", *Oxford University Press*,
- Goldberg L. S. and Kolstad C. D. (1995), "Foreign Direct Investment. Exchange Rate Variability and Demand Uncertainty", *International Economic Review* 30, pp 855-73.
- Im, Kyung-So, Lee, J. and M. Tieslau (2002), "Panel LM Unit Root Test with Level Shifts," *Oxford Bulletin of Economic and Statistics*.
- Im, K. Pesaran, M. Shin, Y. (2003), "Testing for unit roots in heterogeneous panels" *Journal of Econometrics*, vol.1, pp. 115.
- Kozo Kiyota, Shujiro Urata, (2004), "Exchange Rate, Exchange Rate Volatility and Foreign Direct Investment," *The World Economy, Blackwell Publishing*, vol. 27(10), pages 1501-1536
- Junsoo Lee, Mark C. Strazisich (2004), " Minimum LM Unit Root Test with one structural Break", Department of Economics, Appalachian State University, *Working Papers*, No 04-17,.
- Lane, P. (2006), "The Real Effects of EMU", *IIS Discussion Paper*, 115,.
- Lee J. and M. Strazicich (1999b), "Minimum Lm Unit Root Tests", *Working Paper*, University of Central Florida,.
- Lee, Junsoo & Strazicich, Mark (June 2001), "Testing the Null of Stationarity in the Presence of a Structural Break," *Applied Economics Letters*, Taylor and Francis Journals, vol. 8(6), , pages 377-82.

Luis Catela Nunes, Paul Newbold, Chung-Ming Kuan (1997), "Testing For Unit Roots with Breaks: Evidence on the Great Crash and the Unit Root Hypothesis Reconsidered", *Oxford Bulletin of Economics and Statistics*, vol. 59, p. 435-448

Maddala, G.S., Wu, S. (November 1999), "A comparative study of unit root tests with panel data and a new simple test", *Oxford Bulletin of Economics and Statistics*, Special Issue, vol. 61, pp 631-652.

Molle W. T. M. and Morsink R. L. A. (1991b), "Direct investment and monetary integration", *European Economy*, Special Edition No. 1.

Radu Ance (March 2008), "Foreign Investors in the EU—Which 'Best Treatment'? Interactions Between Bilateral Investment Treaties and EU Law", *European Law Journal*, Vol. 14, No. 2, pp. 237–260.

Richard Ware (July 1998), "EMU : The constitutional implications", *Research Paper 98/78* House of Commons Library.

Roy S. and Viaene M., (1998), "On strategic Vertical Foreign Direct Investment", *Journal of International Economics*, 46(2), 253-279.

Sung, Hongmo & Lapan, Harvey E. (May 2000), "Strategic Foreign Direct Investment and Exchange-Rate Uncertainty," *International Economic Review*, vol. 41(2), pp.411-23.

Tamim Bayoumi & Gabrielle Lipworth (1997), "Japanese Foreign Direct Investment and Regional Trade," *IMF Working Papers 97/103*, International Monetary Fund.