European integration and the dynamic process of investments and divestments of foreign TNCs in Greece

Keywords
European Integration, Foreign Direct Investment, Regionalism, Mergers & Acquisitions, Greece

Structured abstract

Purpose of this paper
The purpose of the paper is to analyze how European integration shapes the locational decisions of foreign Transnational Corporations (TNCs).

Design/Methodology/approach
We concentrate on Foreign Direct Investment (FDI) in the European Union (EU) and highlight the case of Greece. The investigation is based on a wide original sample of 199 foreign industrial subsidiaries operating in Greece. In particular, the paper reveals the dynamic investment and divestment strategies of TNCs in the host economy, which have taken place in the context of the reduction of EU market fragmentation and barriers to entry.

Findings
The empirical results suggest, that, in general, the participation of Greece in the EU has not increased the attractiveness of the country as a production base for TNCs. In fact, Greece did neither manage to attract considerable amounts of export oriented foreign investment nor did it receive much efficiency seeking FDI.

Research limitations/implications (if applicable)
Our findings show for the case of Greece that divestment strategies of TNCs play a crucial role in explaining FDI patterns. For extending our results to more general applications, further research on this topic is needed.

Practical implications (if applicable)
We conclude that the integration of Greece into the EU has uncovered some structural deficits of the national economy. In addition, we identify some important locational weaknesses concerning the Greek ability to attract FDI. Thus, in order to stop divestment of foreign TNCs
further reform efforts are necessary. These findings are of particular interest for public policy makers.

What is original/value of paper

To the best of our knowledge this is the first study that jointly analyzes the investment and divestment strategies of TNCs in the specific regional context of Greece and the EU. It draws on an original sample of 199 foreign enterprises operating in Greece.

Type of paper
Research paper
Introduction

Modern theories of regional economic integration highlight the importance of FDI as a growth promoting factor (Eithier, 1998). Regional integration agreements (RIAs) are believed to offer better market opportunities (market size, and, presumably, market growth) and challenge existing market positions of local firms by changing the existing hierarchy of location advantages. That way they foster regional restructuring activities within the region and induce new FDI from outside (Preusse, 2004). In general, these activities are appropriate to increase income and wealth within the region, though this increase might be distributed unevenly. In particular, the activities of TNCs within the region might be concentrated on some countries or sub-regional growth centers (agglomerations) but bypass others. As a result, a weak growth effect of regional integration may occur in those countries that are not considered to be an attractive location for TNCs (Goerg and Ruane, 2000).

As a consequence of their entrance into the EU, Spain, Portugal and Ireland, for example, have received considerable amounts of FDI during the 1980s and 1990s. However, Greece did not manage to attract much FDI and in fact suffered significant divestments (UNCTAD, 2003). The analysis of this kind of international divestment has attracted only little research so far and information on this topic is scarce (Jagersma and van Garp, 2003), since closures are only recorded with a considerable time lag if at all (Belderbos, 2001). This paper aims at filling this gap.

In the following we analyse the consequences for the Greek FDI performance of the participation of the country in the process of European integration. In order to do this, the investigation builds on Dunning's concept of FDI strategies that distinguishes four types of FDI: market seeking, resource seeking, efficiency seeking and strategic asset seeking.
investment (Dunning, 1993, 2000). As has been shown in the literature most TNCs rely on one of these strategies in order to access distinct markets and increase profitability. By identifying the relevance of the respective strategies in the case of Greece, which is a small semi-industrialised open economy, we will be able to explain the behaviour of FDI activities before and after the entry into the European market. We shall also show that after the EU entry the TNC market penetrating strategies in Greece have predominantly taken the form of acquisitions rather than Greenfield investments. That way, the Greek structures of industry, firm size, and ownership have significantly changed.

The study is based on field research gathering information from a sample of 199 foreign subsidiaries operating in Greece, and covers the vast majority of TNCs engaged in the country.

The remainder of the paper consists of four sections. Section 2 elaborates on the theoretical concept on which the econometric approach will be build. In section 3 the hypotheses will be formulated and the variables discussed. Thereafter we shall present and discuss the major results. A final section summarises these findings.

**Theoretical background**

There is a growing body of research on the interaction between trade, investment, and integration (Bende-Nabende, 1999, Barrell and Pain, 1999, Motta and Norman, 1996). Regional integration virtually means the liberalisation of goods and factor markets thereby fostering mobile factors (capital and high skilled labour, in particular) to follow the new market signals. That is, new investments will be undertaken in order to exploit competitive advantages in the member states, and to develop an increasingly sophisticated net of
specialised chains of production for the extraction of Economies of Scale (ECS) and the extension of product differentiation. Changing patterns of investment and trade are the consequences of these restructuring procedures. Put differently, regional integration fosters trade and investment expansion in some sectors and countries, but may lead to stagnation of international activities – at least in the short and medium run – in others. That way, potential winners and losers of regional integration may be created.

In practice, economic policies in the member states (e.g. industrial, trade, and regional policies), too, affect the evolving new pattern of trade and investment within the region. By improving or weakening the relative location advantages (Hubert and Pain, 2001) they, too, may support trade and investment flows from or into a particular sub-region or country. European integration, too, has contributed to a more intensive specialisation along these lines. That is, by changing the pattern of incentives, the EU integration has affected the strategic choices of international firms and the trade and investment flows within and between the member states. During this process, FDI was substituted for trade and vice versa (Markusen and Venables, 1996). Investment creation took place in some countries and investment diversion in others. Specifically, for TNCs, European integration has lessened the need to maintain fragmented systems of branch plants in relatively closed national markets thereby lowering the burden of fixed costs. In addition, regional integration has also diminished the need of spreading risk by means of international diversification in segmented markets. Again, additional scope was created for the realisation of ECS and Economies of Scope.

On the firm level TNCs might also exploit firm-specific assets more intensively in regionally dispersed plants which are operated under common ownership. The realisation of ECS, then, will not be limited to the plant level but can be extended to apply to the whole enterprise. This effect has been explained most convincingly by Ghoshal and Bartlett (1990),
who draw on the theory of organisation and perceive TNCs as inter-organisational networks. These network TNCs are characterised by a high level of horizontal and vertical specialisation (conglomerate TNCs). Within this network, foreign subsidiaries in different countries are important providers of key inputs for the TNC network, because they dispose of their own specific knowledge that adds to the firm's overall core abilities. Trade flows, intermediate inputs in particular, are traded intensively within the network TNC thus creating a high level of geographic interdependence (Girma, 2001). Last not least, the evolution of international firm networks goes hand in hand with the creation of specific advantages in assessing new markets and resources. Again, efficiency gains will result.

Another closely related point is that regional integration, by providing new incentives for TNCs, initiates a change of strategy from a multi-domestic to a regional approach. Again, such a change of strategy leads to an array of new concentration and de-concentration activities. Static and dynamic ECS, for example, typically favour the integration and concentration of firm activities, while high transport costs tend to lead to dispersion (Krugman, 1991).

From the point of view of a single country all this means that regional integration comes along with quite different forces, some of them working in favour of new FDI inflows, others, however, are working in the opposite direction.

In order to analyse these concentration and de-concentration processes more systematically we draw on Dunnig (1993, 2000) and distinguish four types of FDI. The first type is resource seeking investment (RS). TNCs which are operating on this strategy are concerned with the exploitation of physical resources and cheap labour. The second type is market seeking investment (MS). It usually takes place in order to promote new or defend
existing markets. Efficiency seeking investment (ES) is the third category. It builds on the existing firm activities (RS or MS) and aims at rationalising the firm's activities by optimising the intra-firm division of labour. Strategic asset seeking investment (SAS) is the last type. It is employed to augment the existing set of specific assets via merger & acquisitions.

In the last two decades, SAS and ES investments have notably increased in the EU, as TNCs have augmented and restructured their activities to meet the new European economic environment. Efficiency seeking FDI, in particular, has played a prominent role in this process. Nevertheless, ES investment may have quite different meanings in different economic settings. In a North-South environment, for example, ES investments will be targeted to optimise the exploitation of differences in factor endowments in the respective host economies. Quite another situation applies when the ES strategy aims at the optimal positioning of the firm within a set of countries with broadly similar factor endowments (as a matter of rule this is the case of high income countries). In that case, TNCs devote special attention to the specialisation on specific product varieties and inputs, the exploitation of ECS or of the so called "new locational advantages" (Dunning, 2000,175) such as agglomeration advantages and supra-national institutional provisions. These kinds of "spatial variations" of the ES investments are said to have contributed substantially to the growth of intra-European FDI flows (Dunning, 2000).

The acceleration of intra-European FDI goes hand in hand with the growth of international acquisitions. In fact, Girma (2001) has noted that acquisition FDI have become more responsive to the growing European market than Greenfield FDI. The main reasons are the growing size of the immediately accessible European market, the enhanced transparency of international operations, and the declining costs of cross-border acquisitions (UNCTAD, 2000; Angwin and Savill, 1997; European Commission, 1995). Last not least, market entry
via acquisition is also a favourable option, if a quick and low-risk market access is aimed at or when the firm is eager to acquire "valuable" assets in the host economy (Larimo, 2003).

**Hypotheses and variables**

When Greece joined the EC in 1981, it implicitly opted for the implementation of an open economy and against the import substitution strategy (IS) that had characterised the economy throughout the post World War II period. Thus, the EU membership has brought about a major change for the Greek economy that had important implications for trade and investment. FDI, in particular, was expected to change considerably. Under the IS regime, FDI in Greece took predominantly place under the tariff hopping (market seeking) motive. As trade barriers were broken down in Europe the small Greek market could now be better served in many cases from the European center and tariff hopping as a means to assess foreign markets became largely obsolete. Hence we hypothesise

H 1: European integration has caused divesture among foreign TNCs that had started their production operations during the import substitution era.

With EU membership Greece has changed into a relatively open economy. Nevertheless, the growth performance of the 1980s and early 1990s lagged behind the European average. Thus, the Greek market remained small and – perhaps even more important – relatively stagnant, and divestment of market seeking TNCs was at order. However, ES investment gained importance under the new economic conditions in Europe, and this could have compensated for the loss of MS investments, if the Greek economy would only have been able to offer favourable conditions for European investors. Apparently, this
was not the case in the eyes of many TNCs, so that only moderate capital inflows of the ES type can be registered. These new ventures might be attributed to two basic motives. First, even if the overall situation of the Greek economy is not favourable enough to attract foreign investors in large quantities, there are still some competitive advantages to be found in distinct production sectors. In these sectors, locating production within the boundaries of the Greek economy may still be economically rational. The second criterion is overlapping with the first one and rests on the idea that the exploitation of famous Greek brand names on the local market might be a profitable investment for international investors. This idea becomes all the more convincing, when the investor considers the possibility of developing these products on the European and on the world market over the longer run. In any case it is important to note that under these circumstances the mode of entry of FDI should have changed after 1981. Before that date, in Greece FDI took predominantly place in the form of Greenfield investments, because they substituted the TNCs' own export products for local production via subsidiaries. Nowadays, in turn, potential foreign investors are eager to acquire existing Greek firms in order to access the local markets. Acquisitions, therefore, should be expected to have displaced Greenfield investments as a matter of rule. These considerations lead to our second hypothesis

H 2: EU integration favoured the growth of acquisitions to the detriment of Greenfield investments.

The literature on the behaviour of TNCs on large integrated markets suggests that the changes of the motives for investment in Greece, though having caused a diminished overall activity of TNCs in the economy, should still have brought about an increase of the export propensity of the remaining producers. Girmes (2001), for example, has found that FDI in the form of acquisitions is concentrated in industries with an above average intra-EU export propensity. Balasubramanyam and Greenaway (1992) have argued that dismantling of Non-
tariff barriers in the EU will stimulate FDI in specific locations which are explicitly elected to serve the regional (European) market via exports. Thus, in as much as ES investments are stimulated, and Greek establishments become integrated into the regional (or global) networks of the respective TNCs, rising exports should be the result. In fact, Ivarrson and Johnsson (2000) have found that intra-firm exports (raw materials and intermediate inputs as well as finished products) are positively correlated with affiliates, which are engaged in rationalised production (that is efficiency FDI). Following this reasoning the third hypothesis may be formulated as follows

H3: European integration has promoted an increasing outward-orientation of foreign subsidiaries.

In the theoretical section it has been argued that ES international investment requires open markets with low barriers of trade and investment. Low transaction costs further stimulate these kinds of activities. European Integration has improved on each of these prerequisites of ES FDI. MS and RS investments, in turn, have ceased to be attractive investment motives in Europe and even globally. We should, therefore, expect that apart from the overall decline of FDI the motives of investing in Greece should also indicate this change of intention. That is, we hypothesise

H4: The Greek entry into the EU has been accompanied by a relative large amount of ES investment that came at the expense of MS and RS FDI.

The variables employed in the econometric analysis and their respective specifications are defined as follows:

*Market Entry* - it takes the value 0 before 1981 and 1 thereafter.

*Divestments* – it takes the value 0, if a company continues its productive activities after 1981 and 1, if not.
Modes of FDI entry – it takes the value 0, if a Greenfield investment applied and 1, if an acquisition took place.

Export orientation – it takes the value 0, if export orientation of a foreign affiliate is below 50 per cent and 1, if it is above 50 per cent.

Types of FDI – it takes the value 1, if it is MS-investment, 2 if it is RS-investment and 3 if it is ES-investment. In the case of MS-investment, the management of a foreign affiliate reported that export orientation is below 50 per cent and the investment motive was penetration and an effective supply of domestic market. In the case of RS-investment, the management of a foreign affiliate reported that export orientation is above 50 per cent, with high intra-firm transactions mainly to parent company, and the investment motive was the exploitation either of cheap labor or of natural resources. In the case of ES-investment, the management of a foreign affiliate reported that export orientation is above 50 per cent, with intra-firm relationships to more than two related companies located in different countries in the context of a specialised division of labour.

Variables were correlated with the aid of the Pearson chi-square test. This is a test of the statistical independence of the variables. Thus, the null hypothesis for this test is that the row and column variables are independent of each other. The significance levels quoted show how certain we can be that the test of independence can be rejected. Specifically, the computed chi-square statistic is associated with a probability (p value) or a significance level. If this probability is small enough (less than 0.05 or 0.01), the hypothesis of independence is rejected. This means that there is an association between the examined variables. However, if certain assumptions are not met, this probability can be distorted or misleading. We decided to follow the commonly used guideline for qualification of the results:

a) no cell should have an expected value less than 1.0

b) no more than 20% of the cells should have expected values less than 5.
Empirical Results and Discussion

According to Table 1 there are 147 cases of foreign subsidiaries, which have been established before Greece joined the EU. 35 (24%) of them ended their engagement after 1981. After EU entry 52 new cases have been notified. Only one of these decided to discontinue its activities thereafter. The significance value (0,000) indicates that the hypothesis of independence between EI and the divestment decisions has to be rejected.

“take in Table 1”

Thus we can state that a significant reduction of the number of new subsidiaries has taken place after 1981, and quite a lot of the early foundations have been shut down after Greece had joined the EU.

Table 2 informs about the distribution of FDI regarding Greenfield investments relative to Acquisitions. It is obvious that Greenfield investments dominated the activities of the TNCs before Greece joined the EU (96%). Thereafter the mode of entry changed dramatically in favour of acquisitions (64%). The hypothesis of independence between EI and the respective modes of entry has been rejected.

“take in Table 2”
This data reveals that if there was a change of the predominant investment motive of TNCs from MS to other goals, it went hand in hand with a change in the mode of entry from Greenfield to acquisition FDI. However, this change took place while the overall volume of FDI inflows dropped significantly. This observation points to the fact that the scope for profitable acquisitions in Greece is limited because the economy is small and relatively poorly developed. More precisely, there are not many firms in Greece, which are sufficiently large to become a promising target of cross-border acquisitions nor are the so called “new locational advantages” (Dunning, 2000) available in any attractive quantity. This situation is the more lamentable as many domestic Greek markets do show clear signs of dualism with a large number of small firms operating below the economy’s production frontier. Thus, from this point of view, too, the minimum scale for qualification as an international investment objective is met only by few local producers.

Table 3 presents information on the export orientation of foreign TNCs in Greece before and after 1981. Before joining the EU 78% of the foreign subsidiaries exhibited a relatively low export orientation. However, the 52 new establishments which have been founded since then are even less inclined to exports. In fact, only 13% do have an export coefficient of more than 50%. As the null hypothesis has not been rejected we can state that the export orientation of foreign affiliates resulting from recent acquisitions is not much different from the one of the earlier Greenfield investments. To be more precisely, it has even dropped from 78% to 87%. This suggests that the recent cross-border acquisitions should be understood as tools of local market penetration (just as the former Greenfield investments) rather than new building blocks of the extending net of international production.

“take in Table 3”
Apparently our findings of the TNC activities after 1981 reveal that the Greek economy is still not an attractive location for efficiency seeking investment. Those TNCs, which have engaged in the country recently are looking for attractive Greek brand names and trade marks, and well-established local distribution networks. That is, serving the local markets is still the dominant target of these strategies. Export expansion may have some appeal for these firms as far as future developments are concerned (in as much as local brands can be positioned more effectively on the international markets), but it is certainly not the main objective of these FDI presently.

The conclusions drawn from our findings in Tables 1-3 do find support from the test carried out in Table 4. In this test we have analysed the motives directly, which the firms covered by the sample have let to their investment decision.

From the 147 subsidiaries that had been established in Greece before the country joined the EU, 80% were market seekers, 16% were resource seekers, but merely 4% followed the efficiency seeking strategy. After 1981 the situation has not changed considerably. In fact, the MS motive has become even more dominant nowadays (90%) and the ES strategy plays virtually no role (2%). That is, even after the entrance of Greece into the EU, TNCs still saw only one valuable reason for the establishment of local production sites: the Greek market. However, while the early market seeking ventures were dedicated to jumping the country’s
trade barriers and establish new international products and brands in Greece, the present interest of TNCs is restricted by and large to the incorporation of a limited number of promising Greek brands into the overall network of activities. As a result, the economy suffers from particularly low FDI inflows.

Conclusions

In this paper we have shown that the poor Greek FDI performance after joining the EU is due to the fact that early tariff hopping FDI has been removed when the EU trade barriers dropped. New FDI inflows, which could have contributed to a more intense integration of the economy into the European production network and compensate for these outflows did not take place in any important quantity. In order to find out the reasons for this poor performance we have tested for the investment motives of the TNCs operating in Greece before and after the country joined the EU. We differentiate between market seeking, resource seeking and efficiency seeking investments and also look at different modes of entry (Greenfield investments and acquisitions). Our analysis supports the thesis that before EU participation Greek FDI inflows were mainly market driven. Thus, disinvestments of these earlier tariff hopping ventures after 1981 had to be expected, because TNCs, under the new conditions, are empowered to decide on the spread of their international production plants on purely economic criteria. That is, they will be looking for those locations which dispose of the relevant comparative and competitive advantages and position their production sites accordingly.

The crucial point from the Greek perspective is that apparently the economy was unable to stand the test of the international investors and qualify as an attractive location for international production. Surprisingly, we have found that even those TNCs that still kept on producing in Greece and those which started new ventures are still inclined to the market
seeking motive. However, under the conditions of European integration it is obvious that this motive only holds for quite specific cases. That is, these firms use to be engaged in incorporating particular Greek brand names, trademarks, and distribution networks into their portfolios. Apparently, the scope for attracting these kinds of activities is not large. This is the more so the smaller and the less developed the local market is. It may be widened, if the respective products can be successfully positioned on the entire European and world market, but this strategy is only viable in the long run.

Thus, it is relatively straight forward to conclude that the Greek FDI performance will remain poor as long as the country does not manage to attract more efficiency seeking investment. As FDI flows are important carriers of technology and know how, it has to be feared that the Greek economy, as it currently presents itself, will be unable to fully participate in the overall process of growth and development in Europe. In order to remove these deficits it appears to be indispensable to improve the country’s supply conditions in such a way as to attract larger amounts of efficiency seeking FDI.

References


Hubert F. and Pain N. (2001), “Fiscal incentives, European integration and the location of foreign direct investment”, *paper prepared for the GEP conference on FDI and economic integration*, University of Nottingham, June 29th – 30th.


### Table I  European Integration (EI) and investments and disinvestments of TNCs in Greece

<table>
<thead>
<tr>
<th>Market Entry Before EU Entry</th>
<th>Total</th>
<th>Divestments After EU entry</th>
<th>No divestments After EU entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 1981</td>
<td>147</td>
<td>35 (24%)</td>
<td>112 (76%)</td>
</tr>
<tr>
<td>After 1981</td>
<td>52</td>
<td>1 (2%)</td>
<td>51 (98%)</td>
</tr>
</tbody>
</table>

Notes:

a) Chi-Square = 12,418; Sig. (2-sided) = 0,000

b) 0 cells (0%) have expected count less than 5. The minimum expected count is 9,41.

### Table II  European integration and the modes of entry of FDI

<table>
<thead>
<tr>
<th>Market Entry Before EU Entry</th>
<th>Total</th>
<th>Greenfield</th>
<th>Acquisition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 1981</td>
<td>147</td>
<td>141 (96%)</td>
<td>6 (4%)</td>
</tr>
<tr>
<td>After 1981</td>
<td>52</td>
<td>19 (36%)</td>
<td>33 (64%)</td>
</tr>
</tbody>
</table>

Notes:

a) Chi-Square = 85,954; Sig. (2-sided) = 0,000

b) 0 cells (0%) have expected count less than 5. The minimum expected count is 10,19.
### Table III  European Integration (EI) and export orientation of foreign TNCs

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Export orientation &lt; 50%</th>
<th>Export orientation &gt;50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Entry before 1981</td>
<td>147</td>
<td>115 (78%)</td>
<td>32 (22%)</td>
</tr>
<tr>
<td>Market Entry after 1981</td>
<td>52</td>
<td>45 (87%)</td>
<td>7 (13%)</td>
</tr>
</tbody>
</table>

Notes:

a) Chi-Square = 1,682; Sig. (2-sided) = 0,195

b) 0 cells (0%) have expected count less than 5. The minimum expected count is 10,19.

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### Table IV  European Integration and the type of investment strategy employed by the TNCs

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>MS</th>
<th>Types of FDI</th>
<th>RS</th>
<th>ES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>MS</td>
<td></td>
<td>RS</td>
<td>ES</td>
</tr>
<tr>
<td>Market Entry before 1981</td>
<td>147</td>
<td>117 (80%)</td>
<td>24 (16%)</td>
<td>6 (4%)</td>
<td></td>
</tr>
<tr>
<td>Market Entry after 1981</td>
<td>52</td>
<td>47 (90%)</td>
<td>4 (8%)</td>
<td>1 (2%)</td>
<td></td>
</tr>
</tbody>
</table>

Notes:

a) Chi-Square = 3,087; Sig. (2-sided) = 0,214

b) 1 cell (16,7%) has expected count less than 5. The minimum expected count is 1,83.