

Monopolistic Competition, Intra-Industry Trade and Direct Lobbying: The Case of the Transatlantic Business Dialogue

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Abstract: This paper analyses the influence monopolistic competition and intraindustry trade (IIT) exert on trade policy lobbying. More specifically, it concentres on how firms producing in monopolistic competition and trading in IIT act in the political arena: the argument is that the type of production and accordingly, the type of trade where a firm is embedded determine its lobbying strategies. Monopolistic competition and IIT, the latter conceived as the "simultaneous import and export of commodities classified in the same industry or product group" (Greenway and Milner, 1983 p.900), fragment business interests thus incentivising individual firms to run alone in the lobbying arena. As a result, lobbying becomes a private good (Gilligan, 1997) thus triggering direct lobbying dynamics. A case study is employed to prove this argument: the Transatlantic Business Dialogue (TABD) is taken into consideration in order to test whether firms active in IIT between the US and EU employ direct lobbying strategies in trade policy.

Keywords: corporate lobbying; direct lobbying; monopolistic competition; intra-industry trade

Introduction

The author already tested elsewhere (Vannoni, 2012) whether the traditional endowments-based trade models may help the researcher to uncover the determinants of the direct corporate lobbying dynamics in place in the European context. Two factor-endowments models were considered: the 'mobile factors' version of the Stolper-Samuelson theorem and the 'specific factors' version of the Ricardo-Viner model. According to the first scenario, an increase in trade affects the rewards to specific factors regardless of the sectors in which they are employed. Accordingly, countries abundant in those factors obtain higher returns and *viceversa*. In this trade model coalitions are formed along factoral or class cleavages thus increasing collective action problems. This conclusion was reached thanks to 'approach shopping': trade models were employed in conjunction with the Olsonian argument (Olson, 1965; 1982). Conversely, in the second scenario factor returns are tied to the industry in which factors are employed so that trade policy coalitions form along industry

lines thus reducing collective action problems (Gilligan, 1997). As a consequence, direct corporate lobbying should be detected in a scenario similar to the one theorised by Stolper-Samuelson theorem, where collective action is so problematic that firms are incentivised to act alone in the political arena. The findings spoke volume: asset mobility proved to be correlated to direct lobbying. The approach employed in that work relies on a strong analytical assumption: the scope of application of those trade models was broadened going further the analysis of trade policy lobbying. Indeed, it was argued that the vast part of the legislation issued by the EU and affecting firms bear the reallocation of costs and benefits between industries and individual firms in the various Member States in a way akin to traditional trade policy.

Regardless the locus of analysis, that work steered a safe path for further considerations on the employment of trade models to analyse corporate lobbying dynamics: theorisations on monopolistic competition and intra-industry trade, which came predominantly to the fore in the last decades, deserve the same level of a attention. In this vein, this work tests whether monopolistic competition and IIT determine the action of the firm in trade policy lobbying: the hypothesis is that those specific modes of production and trade are associated to direct corporate lobbying. The findings derived from the analysis conducted below verify the hypothesis thus paving the way for further research in this regard. The article proceeds as follows. Firstly, the emergence of the 'new trade theory' and the theorisation of monopolistic competition are discussed. Secondly, the focus shifts to adjustment costs and how lobbying is conceived as a substitute for trade induced adjustment costs: the allocation of costs in a IIT scenario is explained. Then, the case study where the hypothesis is tested is presented. The article concludes by showing the findings of the analysis and by arguing that monopolistic competition and IIT are associated to direct corporate lobbying in trade policy.

Monopolistic Competition and Intra-Industry Trade

This part illustrates the recent developments the models of imperfect competition and international trade have undergone in the last five decades with the emergence of the 'new trade theory'. The focus is on the fusion between the models based on market structure and those based on international trade along with the effects this new theorisation has borne on the concept of adjustment costs. Nevertheless, a complete analysis of the theories on IIT and its determinants is beyond the scope of this work. Starting from a brief outlook of the historical contingencies of the conceptualisation of this new trade pattern, this part continues with the theoretical framework within which monopolistic competition has become to be conceived as inextricably interconnected

with IIT. Then, a series of data on IIT both at global and European level is shown demonstrating thus the relevance of this *phenomenon* in contemporary economies. This part concludes with a rigorous analysis of IIT induced adjustment costs and the 'smooth adjustment hypothesis': without challenging the fact that IIT is associated with low adjustment costs at macro-level this study argues, nevertheless, that individual firms face non trivial costs when acting in a IIT scenario.

The attention accorded to IIT has increased exponentially in the last decades: IIT passed from a 'statistical artefact', as argued by Finger (1975), to one of the most important discoveries in international trade economics. Leamer (1994, p.68 in Greenway and Milner, 2006) describes IIT as one of the "only two empirical findings [which] seem to have had a major impact on the way economists think [about international trade]", the other being the Leontief paradox. In the mid-1960s traditional endowments-based trade models started to be perceived as no longer sufficient to explain may aspects of the reality of advanced countries (Gilligan, 1997; Marrewijk, 2008; Bergstrand and Egger, 2006). In that period, "the simultaneous import and export of commodities classified in the same industry or product group" (Greenway and Milner, 1983 p.900) was detected for the Benelux customs union and thereafter for the European Coal and Steel Community (ECSC) by Adler (1970) and for the European Economic Community-6 (EEC-6) by several researchers (Verdoorn 1960; Balassa 1966; Grubel 1967). Then, Grubel and Lloyd (1975) provided a methodological framework to analyse and measure such a phenomenon¹, which found a solid theoretical basis in the literature on monopolistic competition in the 1980s and 1990s. The seminal works of Krugman (1979; 1980) and Lancaster (1979;1980) on monopolistic competition supplied the foundations to unite trade in differentiated products with scale economies in concentrated industries: the first to provide such a comprehensive explanation of IIT was Helpman (1981), whose work was then revisited by himself in collaboration with Krugman (1985). These studies combined the analysis of market structures, with special regard to monopolistic competition, with IIT models. As soon as the monopolistic competition model started to be applied in association with IIT, the focus moved from a categorisation based on consumer tastes (e.g. Lancaster 1966; 1979; Dixit and Stiglitz, 1977) to one based on the production side.

In the 1990s this field underwent a crucial development. Greenaway *et al* (1994) and thereafter Fontagné and Freudenberg (1997) decomposed IIT into two elements: the horizontal one, among different varieties of similar products and the vertical one, among products different in quality and price. Many scholars (e.g. Marrewijk, 2008; Fontagné et al, 2006) expanded these two categories by

¹ The GL index is calculated as follows: GL = [(Xi+Mi)-|Xi-Mi|] / (Xi+Mi). The part on the empirical research deepens the issue of the measurement of IIT from various perspectives.

focusing on the stage of processing. In their conception, horizontal IIT refers to imports and exports of products at the same stage of processing, whereas vertical IIT to trade in products at different stages of processing. The importance of this division per se but also with respect to the impact on adjustment costs has received almost unanimous consensus by the literature (e.g. Marrewijk, 2008; Fontagné et al 2006; Greenaway and Milner, 2006). Analytical remarks are duly treated in the ensuing part, but two developments are noteworthy. First, many economists emphasise the relevance of distinguishing between diachronic and synchronic analysis. In fact, the Grubel-Lloyd index, which measures the IIT in a product between two countries, is considered too static and thus guilty of hiding changes in trade flows (Brülhart and Elliott, 1998). As a result, the need to capture the degree of symmetry across countries in trade changes has been satisfied by the literature on marginal intra-industry trade (MIIT), especially by Brülhart index (1994)². The latter measures the intensity by which trade induced adjustment occurs at intra-industry level. A further development of this measurement is the other index introduced by Brülhart (1994)³, which captures the relative trade performance of industries in a particular country. Second, categorical aggregation is not an uncontroversial issue and may lead to serious problems in the comparison of different sets of data (Greenway and Milner, 1983). In order to obviate this problem harmonisation of data aggregation has been achieved by the Standard International Trade Classification (SITC), the Harmonised System (HS) and several others, which classify data on product trade according to sectors with different level of aggregation: from broad categories (i.e. 1-digit) to narrow ones (i.e. n-digit).

The evolution of IIT has witnessed a constant increase in the world economy since the 1960s. Furthermore, as foreshown, IIT can assume two forms: either an exchange of goods at the same stage of production, usually amongst countries with similar economic characteristics, or of goods at different stages of production, usually amongst countries at different levels of economic development. High levels of IIT in final goods are associated with high levels of IIT within high income countries. Besides, high levels of IIT between high income countries and medium income ones are associated to high levels of IIT in final goods (Brülhart, 2008).

IIT has been associated with regional integration and especially with European integration since its conceptualisation. Indeed, since the very first studies (e.g. Balassa and Bauwens, 1987; Marvel and Ray, 1987) trade liberalisation has been connected by the literature to IIT: free trade agreements are supposed to stimulate IIT. Nevertheless, apart from indirect evidence this association has never been proved for several reasons, among which the peculiarity of the European integration process and its historical contingencies along with the difficulties of isolating the effects of a free trade

² A= 1- [($|\Delta Xi - \Delta Mi|$) / ($|\Delta Xi| + |\Delta Mi|$)]

³ B= (Δ Xi- Δ Mi) / (| Δ Xi|- | Δ Mi|)

agreement from other phenomena. The only case study conducted on this topic is the study on the Closer Economic Relations (CER)⁴ Agreement undertaken by Hamilton and Kniest (1991) and no empirical support for the hypothesised association between trade liberalisation and IIT was found. Regardless the limited scope of this case-study casting doubts on the generalisability of these findings, it is not among the objectives of this study to test this hypothesis: it suffices to state that IIT has historically been associated with European integration.

In the period 1961-1995 intra-EU trade in manufactured goods increase from 12.4 per cent to 27.3 per cent of GDP and the share of intra-EU trade over the total trade from 41.8 per cent to 58.5 per cent (Brülhart and Elliott, 1998). This rise in the intra-EU trade is associated with a rise in IIT among European countries. Nevertheless, the increase in IIT has not been constant: a stagnation period in 1977-1990 was followed by a sharp increase in 1990-1992. In fact, the rise in IIT was particularly sharp in the period of the establishment of the Single European Market. Two other aspects are noteworthy. First, IIT averages of EC/EU member states have converged throughout the last 30 years (Brülhart and Elliott, 1998). Second, in 2000 the highest share of (horizontal) IIT in the overall trade (i.e. 86 per cent) was between France and Germany (Fontagné et al, 2006). As a conclusion, IIT is a reality which may not be neglected in the study of the structures of European market and trade and, accordingly, it deserves due attention also in the study of European business lobbying.

Intra-Industry Trade Adjustment Costs

A vast literature on the effects of trade adjustment costs on lobbying has developed throughout the last decades, as already discussed by the author elsewhere (Vannoni, 2012). Nonetheless, it will be worth resuming the factor-endowments models before illustrating the literature on the 'smooth adjustment hypothesis' associated with IIT. Two factor-endowments models are predominant: the 'mobile factors' version of the Stolper-Samuelson theorem and the 'specific factors' version of the Ricardo-Viner model. According to the first scenario, an increase in trade concerns specific factors regardless where they are employed: a country's factor endowment is at the basis of this approach. In this model trade policy coalitions are formed along production factors' lines thus increasing collective action problems: an entire societal class (e.g. labour and capital) has to mobilise. Conversely, the second scenario allocates costs on the industry where factors are employed so that trade policy alliances constitute along industry lines thus reducing collective action problems (Gilligan, 1997).

⁴ The agreement put into function a free trade area between New Zealand and Australia in 1983.

The discussion on IIT and adjustments costs dates back to the 1960s when, as a consequence of the establishment of the European Economic Community (EEC), the 'smooth adjustment hypothesis' came into being thanks to the analyses of economists such as Balassa (1966). This issue returned to the fore during the negotiations for the Single Market (Brülhart and Elliott, 1998). The main assumption was that, since an increase in IIT augments the welfare of consumers and producers in all trading countries, trade policy becomes an uncontroversial issue thus reducing lobbying practices (Gilligan, 1997). Assuming that "adjustment costs arise from temporary inefficiencies when markets fail to clear instantaneously in response to changes in demand or supply conditions" (Brülhart and Elliott, 1998 p.227), in a IIT scenario production factors do not have to reallocate from a declining import sector to an expanding export sector, but between different product lines within the same sector (Brülhart, 2008). Neary (1985) identifies two main sources of trade adjustment costs: the imperfect substitutability of labour and the stickiness of wages. Building on these assumptions, the advocates of a minor role of adjustment costs in an IIT scenario argue that mobility of labour force tends to be significantly high within an industry and besides, wages are more flexible.

Brülhart and Elliott (1998) criticise these two points by emphasising the role of minimum wage legislation and collective bargaining in some countries along with the role of vertical IIT. Indeed, a significant share of the overall IIT consists of trade in products at different stages of processing or with slightly different characteristics requiring thus different skills. Several authors have concentrated their efforts to test the 'smooth adjustment hypothesis' both at European level (e.g. Greenaway and Milner, 2006) and in other case-studies (e.g. Hamilton and Kniest, 1991). The results are not of concern for this work, since the following part focuses on the adjustment costs within an industry. In fact, whilst in an IIT scenario adjustment costs can be 'smooth' at national level, firms face costs not trivial at all.

In a pioneering work, Gilligan (1997) argues that although the country and the industry as a whole may benefit from an increase in IIT, trade adjustment costs affect individual firms within an industry in different degrees. Worthy of note is that 'firms' in this model are conceived as 'production units' rather than 'strategy units' (Lancaster, 1979; Brülhart, 2008). Figure 1 illustrates a hypothetical product variety circle of firms producing goods 1, 2, 3, 4 in an autarky scenario and the dotted square shows the internal equilibrium being the firms evenly spaced. In case of IIT, foreign firms producing similar goods (i.e. 1^* , 2^* , 3^* , 4^*) enter the market disrupting the

equilibrium in that country. As a consequence, domestic firms in order to guarantee themselves a market niche thus exploiting increasing returns of scale have to realign on the product variety circle until the equilibrium is reached again (Gilligan, 1997). This realignment may be extremely costly: "[it] may include retooling and developing a whole new product line, and developing new distribution networks with a whole new set of buyers" (Gilligan, 1997 p.462).

Furthermore, the industry concerned witnesses a fragmentation of interests in that, for instance, firm producing good 1 is the only which has interests in lobbying against the import of good 1^* . Conversely, firm producing good 2 is not negatively affected by the import of good 1^* ; rather, it might be affected in a positive way. Accordingly, lobbying becomes 'a private good' (Gilligan, 1997) and the incentives for collective action decrease: the actor in the political arena is no longer the industry, but the individual firm. In other words, trade policy coalitions form neither along factoral cleavages nor along industry lines: firms tend to lobby directly. As a conclusion, in an IIT scenario firms are not incentivised to collaborate with each other, even within the same industry, but to employ direct lobbying strategies.

Figure 1: Adjustment Costs in a IIT Scenario



Source: Gilligan, 1997

The Case Study Selection: the TABD

This study aims to answer the following question: given that IIT related adjustment costs affect individual firms, is IIT connected with direct lobbying dynamics? Anecdotal evidence may be

found in the literature: the majority of GATT dispute resolution cases, for instance, have occurred between countries characterised by high levels of IIT (Gilligan, 1997). Nevertheless, this study provides a more analytically reliable approach. The analysis is circumscribed to a case study, namely the TABD. In social sciences the case study selection is always one of the most disputed analytical issues: usually no clear-cut guidelines for this choice exist. Nonetheless, the TABD has been chosen with a precise rationale. First of all, Gilligan (1997), on which this work builds, employs a similar case study in his analysis, namely the International Trade Commission (ITC). Secondly, the US is the major trade partner of the EU and IIT levels between them are extremely high (Gilligan,1997). Thirdly, several studies (e.g. Coen and Grant, 2000; Woll, 2009; The European Evaluation Consortium, 2004) emphasise the influence exerted by the TABD on US and EU trade policy. The portrait European Voice (in Coen and Grant, 2000, p.16) depicted of the TABD is revealing in this regard:

Captains of industry in the EU and US are preparing, once more, to remind politicians who really holds the power [...] Hanging on their every word will be government ministers from both sides of the Atlantic including US Commerce Secretary Bill Daley and top officials such as new European Trade Commissioner Pascal Lamy [...] When the big guns of industry speak with one voice, only the bravest of governments ignores their demands.

The analysis employs the membership of the TABD as a proxy of direct corporate lobbying in EU-US trade policy in order to find an association between the level of IIT in which a firm is involved and direct lobbying dynamics. In other words, this study aims to explain why firms producing in industries characterised by high levels of IIT between US and EU participate directly in the TABD. The remainder of this part demonstrates how direct lobbying is associated with the membership of the TABD.

The 1990s have witnessed the profusion of a novel EU logic of collective action in line with the tendency of business direct lobbying. Indeed, the scenario of business interest associations passed from one characterised by pure federations (i.e. European associations made up of national associations) to one in which also firms participate directly and actively. Nowadays, EU business associations consist of: federations (60 per cent), mixed associations (24 per cent) and large firm clubs (16 per cent) (Greenwood, 2011). An example of mixed associations is the Confederation of the Food and Drink Industries (CIAA) in the agro-industry since 2000, when direct company

membership was allowed (Grant and Stocker, 2009). Examples of large firm clubs are, indeed, the Transatlantic Business Dialogue (TABD) in the European transatlantic trade policy and the European Round Table (ERT) in market regulation, as cross-sectoral associations. Many others are present at the sectoral level: the European Services Forum (ESF) in services market and the one active in the financial services (i.e. the European Roundtable of Financial Services, ERFS) and the retail domain (i.e. the European Retail Round, ERR) (Greenwood, 2011). They are all part of that trend which "has led many Commissioners and Director Generals to create their own constellation of industrialists" (Coen and Grant, 2000 p.3).

It is worth briefly mentioning the characteristics of such associations bolstering direct lobbying dynamics: a strong role of the Commission in their establishment, a flexible structure with a company driven decision-making process (usually CEOs take an active part) and a weak secretariat, a selective membership and a focus mainly on single issue representation (Coen and Grant, 2000; Cowles, 2001; The European Evaluation Consortium, 2004; Eising, 2007; Woll, 2009; Coen, 2009; Greenwood, 2011). In sum, they represent the opposite scenario of European traditional federations in that a high room for manoeuvre of members is associated with a limited one of the association as a single entity: they are no more than short life issue alliances (Mahoney, 2008).

The creation of the Transatlantic Business Dialogue (TABD) in 1995 has, indeed, been associated with the direct lobbying dynamics at work both in Brussels and Washington (e.g. Coen and Grant, 2000). Revealing of the fact that the TABD is a CEO driven association exploited by firms in order to directly advocate their interests to decision-makers is the following sentence pronounced by a TABD official (in Coen and Grant, 2000 p.13) in the light of the future agenda of his/her association:

We have got a bit cumbersome, we need to focus on hotter items, low hanging fruit (like product liability)...Three years ago we had *115* recommendations all equal priority and it seemed a lot. Today we have *130 - 140*. You can do more, but the secretariat gets behind and people don't necessarily want it, you become an infrastructure.

Considering that TABD copes with transatlantic trade issues and it comprises the CEOs of the most important companies of both sides of the ocean, complaining about 130-140 recommendations seems to be an exaggeration. On the contrary, this is revealing of the approach firms bear with themselves when they set up this type of associations.

The objective of the TABD is to gather CEOs of major American and European undertakings in order to draft policy proposals and exert influence on the public actors (Woll, 2009) in several areas of consensus. Two elements are noteworthy: its flexible character and its membership. First, the TABD is a company driven process (Coen and Grant, 2000), namely it may not be associated with a representative body. Indeed, it is more a policy process than a form of business association, given the weakness of its secretariats and the prominent role of the firms in the agenda-setting (Cowles, 2001). Accordingly, it is consistent with the aforementioned trend in European business lobbying, whereby new and more fluid *fora* for business cooperation have been created (Coen and Grant, 2000). Second, membership requirements are rather discretional⁵, but *de jure* they include a noteworthy requirement: the pro-liberalisation nature of a firm. In fact, the TABD unites the mayor European and American firms which have strong interests in liberalising trade between their two countries.

Accordingly, one of the major *fora* for transatlantic business cooperation is constituted neither along sectoral nor along class/factoral lines, but along individual firms' lines. The main actors within the TABD are CEOs of the individual firms, not sectoral associations. For instance, neither the European Automobile Manufacturers' Association (ACEA) nor the European Association of Automotive Suppliers (CLEPA) are represented in the TABD, though Audi AG and Ford MC are in the Executive Board. This paper argues that firms have incentives to cooperate with their transatlantic counterparts because IIT privatises trade policy.

Data and Measurement

This study identifies as a determinant of a firm's political action the level of IIT in which the firm is involved. A caveat is needed: the variable IIT must be handled with care for two main reasons. First of all, IIT regards exclusively trade in manufacturing goods. Whilst some attempts have been done by the literature to expand this concept to other fields, for instance services (Lee and Lloyd, 2002), there is consensus over the entire literature on the necessity to limit the concept of IIT to the manufacture trade. This necessity is not (only) due to the difficulty in gathering data and the discretionality of the definitions of each type of service (Lee and Lloyd, 2002): it is a conceptual necessity. Indeed, the concept itself of IIT loses its specificity if associated with flows of trade other than those in physical and tangible goods. Generally speaking, the problem of limiting the analysis

⁵ The case of the intellectual property rights in pharmaceuticals sector and the exclusion of the European Generic Drug Association (EGA) from the TABD is quite revealing in this regard (Coen and Grant, 2000; Greer, 2009).

to manufacturing industries is not negligible, but trivial; indeed, several American scholars (e.g. Ozer and Lee, 2009 Esty and Caves, 1983; Grier et al, 1991) argue in favour of "manufacturing industry as an ideal industry for the study of corporate political strategy" (Ozer and Lee, 2009 p. 8).

The operationalisation of IIT is troublesome also in another respect: categorical aggregation. In fact, this issue "is not a trivial one, and it occupies the courts as well as scholars" (Hansen et al, 2005) p.154). Indeed, not only is the variety of classification systems utilised by the literature rather wide, but also the level of aggregation differs. For what concerns the former aspect, the Standard Industry Classification (SIC) (e.g. Gilligan, 1997), the Australian Standard Industry Classification (ASIC) (e.g. Hamilton and Kniest, 1991) and the North American Industrial Classification System (NAICS) (e.g. Leech et al, 2002; Hansen et al, 2005) have been utilised by the Anglo-Saxon literature on the 'new trade theory'. These systems do not differ radically; rather, the NAICS has repealed the SIC in US government data collection and the ASIC is the Australian equivalent. European literature (e.g. Greenaway and Milner, 1983; Brülhart and Elliot, 1998; Brülhart, 2008), on its part, has been consistent in the use of the SITC⁶. The level of industry aggregation is crucial in the gathering of data for IIT: the vast majority of scholars (e.g. Gilligan, 1997; Brülhart and Elliot, 1998; Hamilton and Kniest, 1991) have opted for 3-digit/4-digit. Some exceptions are present, but "third digit of the SITC approximates the concept of an industry more closely than any other" (Greenaway and Milner 1983, p.902). Noteworthy is that industry aggregation is crucial not for statistical reasons, given that the indices used to measure IIT are insensitive to the level of industry aggregation (Gilligan, 1997), but for conceptual reasons. In fact, the identification of values associable with the level of aggregation closest to the concept of industry is necessary to isolate IIT flows from other forms of trade.

Other considerations are needed. The Grubel and Lloyd (1975) index has been since its creation the most reliable and therefore utilised measure of IIT. The great majority of scholars who analyse the 'new trade theory' (e.g. Gilligan, 1997; Greenaway and Milner, 1983; Brülhart and Elliott, 1998; Brülhart, 2008; Hamilton and Kniest, 1991; Clark, 1993) recognise its importance. Nevertheless, several of them have proposed some variations to this index. Greenaway and Milner (1983; 1986) emphasise the necessity to adjust the GL index for trade imbalances to circumvent the 'opposite sign bias'. Nevertheless, this possibility have been explicitly shoved aside by the majority of scholars (e.g. Brülhart and Elliott, 1998; Hamilton and Kniest, 1991; Clark, 1991; Clark, 1993; Gilligan 1997). Under this light, the unadjusted GL index proposed by the OECD STAN database is reliable.

⁶ It should be noted that the SITC was revised twice, in 1978 and 1988: the consequence has been the narrowing-down of the definition of industry. Accordingly, IIT levels measured thereafter are biased downwards (Brülhart and Elliott, 1998). Indeed, the slight slowdown of the increase in IIT in the 1990s can either be due to this statistical phenomenon or due to a real one: there is no consensus among scholars.

Furthermore, Hamilton and Kniest (1991) have argued that the measure furnished by the GL index of IIT was excessively static to be associated with adjustment costs thus proposing the MIIT. The introduction of the MIIT has been embraced by several scholars (e.g. Brülhart and Elliott, 1998; Brülhart, 2008; Hamilton and Kniest, 1991). Although acknowledging the fact that this novel measure is more sensitive to changes in trade flows and thus more related to adjustment costs than the traditional GL index, the latter still provides an analytically reliable tool for a case study. Last but not least, the calculation of the GL index for bilateral IIT flows (in this case between EU and US) is the optimal choice (Brülhart, 2008).

Findings

Through exploratory research the firms composing the Executive Board of the TABD⁷ were connected with their main areas of economic activity in order to test whether they produce and trade goods with their transatlantic counterpart in sectors where IIT level is high. The firms' websites were thoroughly researched in March 2011 in order to detect their main activities. Unsurprisingly, since the majority of the firms analysed are big multinationals the activity of the firms resulted to be multi-faceted: in the cases where the activity of the firm regards many products the respective GL indices were associated to it. GL indices derive from Erixon and Pehnelt (2009), who use a unadjusted bilateral GL index. The latter, as argued above, is the most appropriate for the analysis conducted in this study. The results of the research may be appreciated in Table 1. What may be easily extrapolated from Table 1 is that both European and American firms participating to the TABD produce and trade goods with their transatlantic counterpart with extremely high GL indices. The GL index varies between 0 and 1. The higher the GL index is the more IIT is in place with the value 0 meaning no IIT and the value 1 meaning that the trade between the two countries and in the industry under analysis consists exclusively of IIT. A GL index equal or superior to 0.85 is usually associated with high IIT (Erixon and Pehnelt, 2009). Furthermore, despite the aforementioned unreliability of data on IIT in services, several studies (e.g. Lee and Lloyd, 2002) demonstrate high levels of IIT in those sectors which are more represented in the TABD. In other terms, financial, insurance, construction, transportation, communications and in general business services show IIT levels averagely higher than 0.5 GL in world trade. This is an interesting insight, which needs to be handled with care though.

Table 1: TABD Executive Board's Members and GL Indices.

⁷ http://www.tabd.com/index.php?option=com_content&view=section&layout=blog&id=5&Itemid=7 (Accessed May 2011).

Albemarle Corporation	flame retardants chemicals, antioxidants, FCC catalysts, HPC catalysts.	0.85:0.93
	pharmaceutical products	
Applied Materials, Inc.	Semiconductor materials	0.96; 0.91; 0.94
Capstone Turbine Corp	Industrial Electrical Equipment	0.86; 0.87
Chartis	Commercial Insurance, Property Casualty Insurance	n.a.
The Coca Cola Company	Beverage	<0.85
Covington & Burling LLP	International law firm: general practices	n.a.
Deloitte	Audit, Consulting, Financial advisory Tax, Enterprise Risk	n.a.
Ernst & Young	Audit, Tax, Financial, Advisory, Consultancy	n.a.
Ford Motor Company	Automobiles, Automotive parts, Automotive finance Vehicle leasing, Vehicle service	0.97; 0.96
General Electric Company	Appliances, aviation, consumer electronics, electrical distribution, electric motors, energy, entertainment, finance, gas, healthcare, lighting, locomotives, oil, software, water, weapons, wind turbines	0.87; 0.86 ; 0.91; 0.93; 0.96
Intel Corporation	Microprocessors, Flash memory Motherboard Chipsets, Network Interface Card, Bluetooth Chipsets	0.91; 1
KPMG	Audit, Tax, Advisory	n.a.
Merck & Co., Inc	Pharmaceuticals	0.85; 0.93; 0.91
Microsoft Corporation	Computer software, Consumer electronics Digital distribution, Computer hardware Video games, IT consulting Online advertising, Retail stores, Automotive software	<0.85
Pfizer, Inc	Pharmaceutical	0.85; 0.93; 0.91

PricewaterhouseCoopers	Assurance, Tax Advisory Consulting, Financial Advisory, Actuarial	n.a.
	Legal	
Travelport	Travel technology	0.97
Airbus SAS	Aerospace	0.87; 0.97; 0.92
Audi	Automobiles, Engines	0.97
BASF SE	Chemicals, plastics, performance chemicals, catalysts, coatings, crop technology, crude oil and natural gas exploration and production	0.85; 0.93; 0.85; 0.93
Banco Bilbao Vizcaya Argentaria, S.A.	Banking, insurance, asset management	n.a.
British Airways	flag carrier airline	<0.85
British American Tobacco p.l.c	Tobacco	<0.85
BP p.l.c.	Oil and natural gas, alternative fuels	0.93
BT Group plc	Telecommunications	0.91
Deutsche Bank AG	Financial services	n.a.
Freshfields Bruckhaus Deringer LLP	International law firm: general practices	n.a.
Heitkamp BauHolding GmbH	Construction company	n.a.
Lloyds Banking Group plc	Banking Financial services	n.a.
Siemens AG	Business services, financing, project engineering and construction	n.a.
Svenska Lantchips, AB	food	0.85
ThyssenKrupp AG	Steel, engineering, capital goods	0.86; 0.98
Umicore N.V.	Metallurgy, chemicals	0.95; 1
Unilever NV	Consumer products: food, beverages, cleaning etc.	0.91

Source: Author's own compilation. GL indices from Erixon and Pehnelt, 2009.

Conclusion

This work provides an alternative but complementary approach for the explanation of direct corporate lobbying. Several political motivations may lead the firm to act directly vis-à-vis public authority and these have been thoroughly discussed in the European literature (e.g. Coen, 1997; 1998; Coen and Richardson, 2009). Conversely, the economic rationale underpinning corporate strategies has hitherto been black-boxed by the literature on European lobbying, despite few exceptions (e.g. Bernhagen and Mitchell, 2009; Vannoni, 2012). Firms' interests are primarily economic interests thus underlying an economic explanation. This article argues that the mode of production and the type of trade in which the firm is embedded determine its political behaviour: firms producing in monopolistic competition and trading in IIT lobby directly because those modes of production and trade fragment interests within industries. In this vein, it has been demonstrated that the TABD, one of the major *fora* for business cooperation between the EU and its main trade partner, is composed by individual firms which are heavily engaged in IIT with their transatlantic counterparts. Accordingly, the main hypothesis has been verified: IIT induced adjustment costs fragment costs and benefits thus creating trade policy coalitions neither along industry lines nor along factoral lines, but along individual firms' lines. As a result, monopolistic competition and IIT are associated to direct corporate lobbying

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