Economic Thought 3.2: 38-57, 2014

The Theory of the Transnational Corporation at 50+

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Abstract

The paper briefly summarises the historical evolution of transnational corporations (TNCs) and their activities. It then introduces the major theories developed to explain the TNC. There is an attempt to place the theories historically, within the context of the socio-economic conditions and of the relevant economic ideas in which they were developed. The following theories are discussed: Hymer's, market power and control; Vernon's international product life cycle; the internalisation theory; Dunning's eclectic framework based on Ownership, Location, and Internalisation (OLI) advantages; The Scandinavian School; the evolutionary approaches of Cantwell and of Kogut and Zander; the New Trade theory applied to the TNC; the role of nation-states in the strategic behaviour of TNCs. There are some critical comments at the end of each presentation. A brief analysis of key elements in the theories, their differences and commonalities follows. It is pointed out that the pattern of development shows tensions between the following interconnected elements: (1) contents and methods of interest to Business Schools and to Economics Departments; (2) static versus dynamic approaches; (3) emphasis on efficiency versus strategic elements; (4) strategies towards rivals as well as towards other players in the economic system such as labour, governments and suppliers; (5) single- *versus* multi-disciplinary approaches; and micro *versus* macro approaches.

Keywords: transnational corporations, Hymer; Vernon, internalisation theory, Dunning, Scandinavian School, Cantwell, Kogut and Zander, New Trade theory and multinationals, nation-states and transnationals, history of economic ideas

1. Introduction

The theory of the transnational corporation (TNC) [2] and of its defining activity – foreign direct investment (FDI) – were born with the seminal doctoral dissertation of Stephen Hymer (1960 [1976]). Prior to it there have been theories of cross-border movements of capital and theories of imperialism[3]. The TNCs as such played no part in either. Theories about international capital movements were developed within the neoclassical tradition and following, mainly, the framework of neoclassical theories of trade, specifically Heckscher (1919) and Ohlin (1933)[4]. The theories of imperialism were developed within the Marxist tradition, whether the relevant

[1] A version of this paper was presented at the 17th Annual Conference of the European Society for the History of Economic Thought (ESHET) on *Economic Theory and Business Practice: Their Relations Through the Ages,* Kingston University, London 16-18 May 2013.
[2] A variety of adjectives and nouns are used to indicate this particular type of firm. Adjectives include 'international', and 'multinational'; the nouns include: 'firm', 'company', 'corporation', 'enterprise'. I prefer the adjective 'transnational' because it conveys the fact that these corporations can organise, manage and control activities across countries rather than just operate in several of them independently.
[3] A summary of those pre-WWII theories is in Ietto-Gillies (2012, Part II).
[4] Other main contributions are Nurkse (1933) and Iversen (1935).

authors maintained their Marxists roots or not (Hobson, 1902; Luxemburg, 1913; Lenin, 1917; Bukharin, 1917).

What has been developed since Hymer's work is a variety of theories dealing with different aspects of the TNC. Their focus ranges from: why firms become transnational; to the modalities of their activities; to FDI as their main activity; to why some countries become host or home (or both) for TNCs and FDI.

This paper considers the main theories, developed since Hymer's, which have the TNC as a focus. The next section gives a brief excursion into the activities of the TNCs in the twentieth century and beyond. Section three summarises the main theories by presenting them – as far as possible – in historical sequence. Section four analyses the key elements in the theories presented in section three. Section five summarises and concludes.

2. TNCs and Their Activities in History[5]

The antecedents of the modern TNC can be traced very far back into history. Transborder direct business activities go back many centuries, indeed before the formation of nation-states. The Medici Bank can be considered a company with such direct business activities. In later centuries, the chartered companies such as the East India Company, The Royal African Company and the Hudson Bay Company had some elements in common with the present TNCs but the differences are too large for them to be seen as forerunners. Hymer (1971), following Chandler (1962), traces back the origin of the TNC in joint stock companies established from the mid-nineteenth century. But what is the distinguishing characteristic of modern TNCs compared to previous companies?

The distinguishing way of doing business abroad, the one that characterises the transnationals compared with other companies, is *direct* production and generally direct business activities abroad. In order to engage in these direct activities, the TNCs establish affiliates abroad and acquire the ownership and control of their assets. This gives them a long-term interest in the strategies and management of the foreign enterprises which they control. But what do we mean by control?

Control is usually seen as ownership control: what percentage of ownership secures a majority in decision making[6]. While percentage ownership remains the main element in the exercise of control we should point out two qualifications. First, as Cantwell notes in his Comments – it is possible for the contemporary large TNC to exercise control over a network of externalised activities performed in independent firms over which the TNC has no ownership control. This is a point raised by Cowling and Sugden (1987; 1998) as well as Dunning and Lundan (2008). Second, ownership control, in itself, may not be sufficient to exercise full control by management. For the latter to be able to fully control the activities of their company two requirements are necessary: (a) a good system of communications and transportation; and (b) appropriate internal organisation of the company. Innovations of the technological and organisational types have made it possible to secure such control and therefore they have made it possible for the modern TNCs to develop and grow from the 20th century onward.

The growth in the number of TNCs worldwide and in their operations has progressed steadily after the Second World War. The increase has been very considerable since the mid-1970s. In 1968–9 the number of TNCs originating from 14 developed countries was 7276

[5] For a more extensive treatment of the issue discussed in this section see Ietto-Gillies (2012, Part I).

[6] This is indeed the basis on which the IMF (1977) distinguishes between foreign direct investment (FDI) – 10+ percent holding – and portfolio investment – less than 10 percent.

(Ietto-Gillies (2002a, p. 12, table 2.1). This figure is likely to be very close to the total number of world TNCs at the time. The latest World Investment Report (UNCTAD, 2012; statistics table 34) estimates the total number of TNCs worldwide to be 103,786.

Various elements have contributed to the growth of TNCs and their activities, specifically the following: (a) The developments in transportation and in communications technologies and costs. (b) The organisational innovation within large companies and institutions. (c) The favourable political environment after the Second World War. (d) The liberalisation and privatisation programmes of many developed and developing countries in the last 30 years.

Elements (a) and (b) have made control at a distance possible. Moreover, they have led to lower costs including the cost of inventory holding[7]. All four elements together have greatly facilitated and encouraged companies to invest abroad. There has been large growth in the value of FDI worldwide as well as in the growth of other modalities of internationalisation for which TNCs are responsible: from trade to licensing, to franchising to joint ventures. The growth in the number of transnationals and in their activities is also reflected in changes in the sectoral structure and connected changes in the geographical structure of TNCs' activities. Between WWI and WWII most FDI was by resource-seeking TNCs and therefore most FDI was in developing countries. After WWII most FDI was in manufacturing. It was by developed countries' TNCs and directed towards other developed countries: for example, a manufacturing US corporation investing in the UK or Canada.

The development of information and communications technologies (ICTs) has allowed the vertical division of the production process and the location of various components into different type of countries; labour intensive components located in developing countries and those requiring the high skills and latest technologies located in developed countries. From the late 1970s onwards we have seen a surge of FDI in services directed to both developed and developing countries. In terms of modalities the first few decades after WWII saw most of FDI taking the greenfield – i.e. real investment and accumulation – mode. From the 1980s onwards most FDI has taken the mergers and acquisition (M&A) modality (UNCTAD, 2000). The different pattern has implication for competition as well as for the level of activity and employment in the host country.

Regarding the political environment (elements c and d above), the post WWII decades have seen considerable changes. The 1960s and 1970s were seen as decades of *confrontation* between TNCs and national governments, particularly those in developing countries. There were large numbers of nationalisations of foreign affiliates, particularly in developing countries. As neoliberalism took hold and spread we saw confrontation slowly turning into *cooperation* between national governments and TNCs (Dunning, 1993, ch. 13). Far from threatening nationalisations, many governments in developing and east European countries followed in the footsteps of some developed countries in engaging in large-scale privatisations. The privatised assets were often bought by foreign companies. UNCTAD (1993, fig. 1, p. 17) shows that the number of nationalisations peaked in the mid-1970s and became non-existent after the mid-1980s. Privatisations started in the mid-1970s and increased very rapidly in the 1980s and 1990s. The 1990s saw a wave of protests by anti-globalisation movements against international institutions at the heart of globalisation and neoliberalism including TNCs. The protests faded away leaving few traces[8]. Neoliberalism led to the big financial crisis of 2007-08. The austerity policies that followed have recently (2012-13) led to questions about the tax arrangements of TNCs via their transfer prices policies.[9]

[7] See Cantwell (2014) and also Iammarino and McCann (2013, ch.3.3, pp. 90-95).

[8] The new wave of protests (in Turkey and Brazil) in the last few years are indirectly focused on TNCs and globalization issues.

[9] On transfer prices and their effects see Ietto-Gillies (2012, ch. 20) as well as Eden (2001).

The next section will discuss the main theories put forward to explain these developments.

3. The Main Theories[10]

Hymer's Seminal Work

Stephen Hymer was a Canadian economist doing doctoral research at the Massachusetts Institute of Technology in Cambridge, USA. He became intrigued by the motivations behind the large foreign investment by US corporations in a growing number of countries including his own. He died in a car accident in 1974, aged 39, and his dissertation was published posthumously in 1976. Hymer's work constitutes a radical departure from the conventional neoclassical approach of the time. It opened a whole new research programme in the area of international production. Follow-ups, refinements and new twists to the theory are continuously coming out.

In order to understand the relevance of Hymer's contribution, as well as the novelty of his approach, we must remember that, when he was writing, there was no theory of foreign direct investment as such. There was no perceived need to consider direct investment as a special case; indeed the concept of foreign direct investment had not been developed before Hymer's breakthrough. The then prevalent neoclassical theory explained movements of capital across borders via differentials in interest rates. However, as Hymer noted:

- FDI does not necessarily involve movement of funds from the home to the host country. In fact, direct investment is, at times, funded in other ways including borrowing in the host country or via retained profits.
- FDI often takes place both ways so that both countries involved are originators and hosts to FDI.
- FDI tends to be concentrated in particular industries across various countries, rather than in a particular country across various industries.

These three characteristics are incompatible with the neoclassical explanation for movements of capital based on differentials in interest rates. Hymer thus saw the need to differentiate between purely financial investment (i.e. from portfolio investment) and investment by large firms for production purposes. His demarcation criterion between foreign direct investment and portfolio investment is *control.* Direct investment gives the firm control over the business activities abroad; portfolio investment does not. By acquiring control of foreign assets the firms removes conflicts with local competitors. It does so by giving the controlling firm more market power and thus intensifying the imperfections in the market structure. The existence of structural market imperfections is, in fact, one of the key assumptions of Hymer's theory: market imperfections and the search for market power are a key determinant of FDI. Moreover, market power is affected by companies' strategies including the ones leading to control of foreign assets and production. The types of imperfections he considers are structural ones, that is, those imperfections arising from the market structure, for example from an oligopolistic structure in which a few large firms dominate the market.[11]

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[10] The theories presented in this section as well as other theories are discussed at greater length in Ietto-Gillies (2012, Part III). See also Cantwell (2000).

[11] Transactional imperfections – à la Coase - are considered by Hymer (1968), a paper which seems to have little relationship with his main work (1960 [1976]) and with his later research.

Later works by Hymer are more in the Marxist tradition. They emphasise the contradictory and conflictual nature of capitalist production and deal with the following issues.

(a) Effects of MNCs' activities on: labour; politics; the nation-state and its government.

(b) The effectiveness of economic policies (Hymer, 1966; 1975; Cohen et al., 1979, chs 9 and 11).

(c) The division of labour (Hymer, 1970, 1971; 1972; Cohen et al., 1979, ch. 6) within the firm, the industry and the international arena (in particular between developed and developing countries).

Vernon's International Product Life Cycle

Raymond Vernon was working on what became a well-known theory at the same time as Hymer and indeed up the road from where Hymer was working: at the Harvard Business School. The economic context of Vernon's theory is one of expanding technologies and markets for new mass consumption products such as washing machines. It was also one of increased internationalisation as barriers to movements of products and capital gradually came down after WWII. The theoretical background to his approach must be sought in the technological gap theories of trade (Posner, 1961) and in the theories of the product's life cycle (Kutznets, 1953). In fact, while Hymer's point of departure is the firm, Vernon's is the product. How new products emerge; how they impact on the innovating firm and to the industry structure in which the firm operates; how the firm is affected by the progress of the product through its life; how the product progresses through its life in national and international markets and production locations.

Vernon begins with the assumption that enterprises in any one of the advanced countries of the world have equal access to knowledge. However, this does not mean an equal probability of application of such knowledge to the development of new products. It is the consciousness of opportunities and the responsiveness to such opportunities that vary from one entrepreneur to another. Such consciousness and responsiveness are associated with the market conditions in which entrepreneurs operate; this makes knowledge inseparable from the decision-making process about its use. Therefore knowledge is not an exogenous variable.

In the 1960s and 1970s the US market offered unique opportunities for the exploitation of knowledge and its embodiment in new products because:

- It was a market in which consumers had high average income per capita.
- It was a very large market; hence even minority tastes were likely to provide a fairly large market.
- It was characterised by high unit labour costs and a large supply of capital; it was, in other words, a market abundant in capital and scarce in labour.

For these reasons the new product would be located in the US. Such location would secure flexibility of adaptation to possible problems and to requirements of consumers. Adaptation is more easily achieved if production takes place near its initial development location. Moreover, when first launched into the market, the product enjoys a large amount of differentiation and thus a semi-monopolistic position. It will have low price elasticity of demand and high income elasticity.

However, as the product matures and the market expands there will be the threat of imitators. Expanding foreign demand – usually in other developed countries – will first be met by exports. At a later stage direct production in Europe may replace exports in response to the following: the emergence of competitors in European countries; possible import controls; and possible lower production costs in Europe. As the product becomes standardised, competition increases and the search for lower production costs starts. This last phase in the life of the product is likely to lead to the location of production in developing countries and to the sourcing of developed countries' markets – including the US itself – from this production.

The key elements in Vernon's highly dynamic theory are: innovation in products which gives the firm a temporary monopolistic position; interaction between the life of the product, the degree of competition in the industry and the geography of trade and of FDI/production.

Many criticisms can be levelled at the theory[12]. It was developed in the 1960 and reflected the economic environment of the times as Vernon himself recognised in a courageous article which dissects critically his own theory (1976). Moreover, as time went by, not only the economic environment and the differences between the US and European economies changed, we also saw significant technological changes. The development and wider effects of ICTs brought shorter product lives as well as changes in the sequences of location of international production. Moreover, it should be noted that the concentration of the theory on the product more than on the firm does not allow a full analysis of the competitive position of the firm and how it can be affected by product diversification strategies.

The Internalisation Theory

The post war expansion in Western economies saw concentration of production and increase in firms' size. Concomitantly with – as a consequence of – these developments companies adapted their organisational systems to cope with new functions, new products or new geographies in the more complex resultant structures.

The internalisation theory of the TNC reflects these changes in the economic environment. It was developed on the back of Coase's analysis of the firm (1937) and it also benefitted from Williamson's later developments (1975; 1981). It started with a paper by McManus (1972); a fuller development was achieved with Buckley and Casson (1976). Further contributions include Teece (1977); Rugman (1981); Caves (1982) and Hennart (1982).

Buckley and Casson concentrate on a particular type of market imperfection: transaction imperfections as in Coase's analysis. When markets present transactional imperfections there is an incentive to internalise. Why do firms internalise? What are the limits to internalisation? There are benefits of internalisation and there are also costs; the balance between the two will determine the limit to internalisation[13]. The benefits of internalisation stem from *transactional market imperfections* and relate to one or more of the following situations.

- When there are long time lags between initiation and completion of the production process and, at the same time, futures markets are non-existent or unsatisfactory.
- When the efficient exploitation of market power over an intermediate product requires discriminatory pricing of a kind difficult or impossible to implement in an external market, though possible to implement internally.
- When imperfections would lead to bilateral concentration of market power and thus to an unstable situation under external markets.

[12] See, for example, Cantwell (1995).
[13] This equilibrium approach to the firm is taken up by the New Trade theories applied to the TNC as discussed below.

- When there is inequality in the position of the buyer and seller regarding knowledge on the value, nature and quality of the product; the resultant buyer uncertainty may encourage forward integration.
- When there are imperfections deriving from government intervention in international markets – such as the existence of *ad valorem* tariffs, restrictions on capital movements, discrepancies in rates of taxation.

The two most important areas of internalisation relevant to TNCs are *markets for intermediate products* and *markets for knowledge*. Before the Second World War the major factor that contributed to the emergence of multinational enterprises (MNEs) was demand for primary products, leading to vertical integration across frontiers and to internalisation of intermediate markets. Since WWII the major factor has been the growth in demand for knowledge-based products coupled with the difficulties of organising efficient external markets for intangibles and knowledge. A TNC implies internalisation across national boundaries. Buckley and Casson (1976, p. 45) write on this issue: 'There is a special reason for believing that internalization of the knowledge market will generate a high degree of multinationality among firms. Because knowledge is a public good which is easily transmitted across national boundaries, its exploitation is logically an international operation.' So the conclusions seem to be that imperfect markets generate incentives to internalise; the market for knowledge is highly imperfect, so there are strong benefits in internalising it.

The internalisation theory of the TNC is still a very successful and widely used theory. However, there are some doubts about it. There is the question of whether the theory is tautological as the authors themselves recognise. Casson (1982, p. 24) writes: 'Internalization is in fact a general theory of why firms exist, and without additional assumptions it is almost tautological.' Buckley (1983, p. 42) expresses similar doubts when he writes: 'At its most general, the concept of internalisation is tautological; firms internalise imperfect markets until the cost of further internalism outweighs the benefits.'

In terms of relationship with the economic context to which the theory is supposed to apply the following should be noted. When the theory was first developed, there had been decades of firms' growth via internal expansion leading to concentration and large firms in many industries. However, the last 30 years have seen a great increase in outsourcing and generally in firms' activities being contracted out and bought on the market. Yet, these are the decades when the internalisation theory has been most successful within the international business community. The two macro patterns – decades of internalisation followed by decades of externalisation – cannot be explained by the same theory of internalisation[14] though the theory can explain the choice between internalisation and externalisation at the level of firms.

Moreover, the following should be noted. The internalisation theory tries to explain why – and in what circumstances – firms prefer the FDI rather than licensing route to growth, thus why they prefer internalisation to market-based relationships. However, even accepting that internalisation is to be favoured because it cuts transactional costs, it is not clear why firms should prefer the FDI rather than the exporting route: the first implies internalisation across borders; the latter modality implies internalisation within the nation-state.

Dunning's OLI Advantages

John Dunning worked on international production issues from the 1950s onwards and until his death in 2009. His early research was on the factors leading to the high productivity of

[14] See Cantwell (2014) and Ietto-Gillies (2014) for a further discussion on this issue.

American investments in British manufacturing. In his (1977) he developed a 'systemic' theory – whose origin he traces to his earlier work (Dunning, 2000b) – designed to explain internationalisation modes and processes. He developed a framework for considering: (a) all main modalities of internationalisation and specifically FDI, exports and licensing thus attempting to address the criticism of the internalisation theory mentioned in the last paragraph of the previous subsection; (b) issues of why and when firms invest in foreign countries; and (c) issues of why certain countries become attractive for inward FDI.

Dunning's wide framework was built around the analysis of three sets of advantages: Ownership, Locational and Internalisation (OLI) advantages.

1. *Ownership advantages* are those that are *specific to a particular enterprise*.[15] They constitute competitive advantages towards rivals and enable the company to take advantage of investment opportunities wherever they arise. This set of advantages links Dunning's theory to Hymer's.
2. *Locational advantages* are those advantages *specific to a country* which are likely to make it attractive for foreign investors.
3. *Internalisation advantages* are all those benefits that derive from producing internally to the firm; they allow it to bypass external markets and the transaction costs associated with them. They are, essentially, benefits of operating within *hierarchies rather than markets.* This set of advantages links Dunning's theory to the internalisation theory and, of course, to Coase's theory of the firm.

Foreign direct investment takes place whenever:

- The enterprise concerned possesses '…net ownership advantages *vis-à-vis* firms of other nationalities in serving particular markets' (1980, p. 275).
- The enterprise derives benefits from internalising the use of resources in which it has an advantage rather than selling them on external markets, e.g. via licensing.
- The country where the FDI takes place must offer special locational advantages to be used in conjunction with those deriving from *ownership* and *internalisation.*

Dunning's theory has been for many years – and still is – the main reference framework for many pieces of international business research. It gives a clear, well defined framework which gives scope for micro-meso-macro analyses and for multi- and inter-disciplinary approaches. Its multi-variable structure makes it easy to apply to almost any country, firm and time. Each of the above three sets of advantages (OLI) can include a long list of variables from which researchers can choose in the adaptation of their research to the specific context they are interested in. Thus the theory seemed to be always applicable independently of specific circumstances. This wide applicability made the theory irrefutable and rather than strengthen it, may have weakened it. A theory that is always applicable may be tautological and loses its usefulness and scientificity. Moreover, most of the criticisms that were levelled at the internalisation theory apply also to Dunning's because it also relies on internalisation. Nonetheless, Dunning's wide framework has the enduring virtue of adaptability and flexibility (Cantwell, 2014). Moreover, it lends itself to multi-level and interdisciplinary analyses.

Dunning was well aware of the weaknesses of his framework and, in later years, further developed it. He also worked on many other aspects of international business. Specifically he developed important work in the following areas:

[15] I agree with John Cantwell (2014) when he points out that ownership advantages is a wider concept than firm-specific advantages. The former includes those advantages that the firm derives from the macro and national environment.

- Operationalisation via contextualisation of the three sets of variables (Dunning, 1993a and 2000a).
- Dynamisation (Dunning, 1993b) of his eclectic theory.
- The relationship between international production and countries' development patterns (Dunning, 1981, ch 5; Dunning and Narula, 1996).
- Incorporations into the framework of new and growing organisational forms such as mergers and acquisitions and inter-firm collaborative agreements (Dunning, 1997).

The Scandinavian School

The international business researchers we have discussed so far concentrated on countries which have been traditionally involved in FDI such as the US and UK. However, the 1960s and 1970s also saw many other countries involved in international direct production. A group of Swedish economists and management/marketing/strategy academics (Johanson and Wiedersheim-Paul, 1975; Johanson and Vahlne, 1977 and 1990) became interested in studying the position of smaller countries and their companies' strategies towards international activities. Their interest focuses on strategies in relation to the stages and modalities of internationalisation that companies go through. The authors link the stages and modalities to the timing of internationalisation activities. The timing determines the modality of establishment of operations abroad; it also affects the amount invested and the type of country in which the operations are established, starting with the nearest countries in terms of both spatial and psychic distance.

The authors analyse two internationalisation patterns. The first one is designed to explain the increasing involvement in a single foreign country. The second pattern explains involvement in a variety of countries. The theory is very dynamic in that it considers time sequences and also because the resources already committed in a country impact on further decisions. Thus, decisions about the future modalities, countries and the amount of resources to be committed abroad depend on the path already followed in internationalisation in terms of resources committed, modalities followed and countries of involvement.

The conclusion is that involvement in any single foreign country will proceed cautiously and in accordance with the following stages in the establishment chain:

- exports via agents;
- setting up of sales subsidiaries;
- setting up of production subsidiaries.

The above sequence is the result of state and change aspects in which knowledge and uncertainty play a large role. The dynamic sequence is linear in two ways: because each stage leads to the next one and because each new stage involves a larger commitment of resources than the previous stage.

The *second internationalisation pattern* refers to the spread of internationalisation *from one foreign country to others*. Here the sequence is also dynamic and linear proceeding by stages from the foreign country(ies) psychically closer to those more distant. Psychic and spatial distances tend to be strongly related.

The dynamism in the theory links it to Vernon's. Both theories consider stages and time sequences. In Vernon's case the stages relate to the life of the product and they affect its production location and its markets. They also impact on the competitive environment in which the firm operates at the various stages in the product life. In the case of the Scandinavian School the stages refer to the modalities and locations of internationalisation.

This is a theory not about the product, but about the firm and its internationalisation strategies. The relationship between the product – in terms of innovativeness, technology or potential demand – and the firm is not considered; neither is the market structure in which the firm operates.

Evolutionary Approaches to the Theory of the TNC

Coase (1937) questioned the firm-market relationship and the reasons for the very existence of the firm. However, questions about the internal functioning of the firm and its objectives were left unanswered or, indeed, were not asked at all: the firm continued to be a black box. Its opening started with Penrose (1956) – a work that had very little impact when first published though it is now, deservedly, recognised – and with Nelson and Winter (1982), a work that had a considerable impact since publication.

Neither of these two works dealt directly with the multinational company. However the competence-based theory of the firm which they expounded had a big impact on other authors working on international business and specifically on John Cantwell as well as on Kogut and Zander.

Cantwell (1989) takes on the competitive advantages view of Hymer and of Dunning but goes a step further. He considers such advantages not as exogenous but as created by the firm itself. Specifically they can be created in the field of innovation and technology within which the firm becomes the generator of its own advantages. The theory is thus injected with: (a) realism, because it attempts to answer the question: where do advantages come from? and (b) dynamism because it links created advantages to changes within the firm and its environment.

According to Cantwell, the TNCs are in a particularly strong position to develop their ownership advantages in innovation. By operating in many countries – often characterised by diverse knowledge and innovation contexts – they can acquire knowledge from the localities and use it to further their innovative activities. In this process the TNC is aided by its involvement in two types of networks: (1) its own internal network between the various units of the firm spread in a variety of geographies; and (2) external networks between units of the firm and suppliers/distributors, consumers and partners in collaborative ventures[16].

The latter networks enable units of the TNC to acquire knowledge from their external environment. This knowledge is incorporated within the unit and also transferred to other units of the TNC via its internal network. The TNC, with its geographically diversified structure, its variety of organisational interactions with the external environments and its internal network, is in the best position to accumulate innovation and technology across countries and through time. The internal networks raise issues of control of the subsidiaries by the headquarters of the company. The external networks raise issues of the degree of embeddedness of the subsidiary into the local economy. The acquired knowledge gives the TNC advantages in all its modalities of operation from FDI to export to licensing. Here is one of the several criticisms of the internalisation theory on the part of Cantwell: in the real world, FDI and exports are complementary not an 'either/or' situation. There is an empirical basis to this criticism since the TNCs are responsible not only for all FDI but also for over three quarters of world trade (UNCTAD 2013, fig. IV.14 and Box IV.3, pp. 135-6). Moreover, over one third of world trade is intra-firm, i.e. between different units of the same company though across different countries.

[16] The links between internal and external networks and knowledge diffusion have been explored in the management/organisational analysis literature (Forsgren at al., 2005; Hedlund, 1986; Hedlund and Rolander, 1990; Bartlett and Ghoshal ,1988 and 1991; Ghoshal and Nohria, 1997).

Thus knowledge spills over from the locality to the TNCs. It also spills over from the TNC to the local economy. The absorptive capacity of the locality becomes crucial for the innovation benefits for both the local economy and the unit of the TNC operating within it. There is a dynamic interaction and a cumulative causation mechanism between ownership advantages and locational advantages and both can be seen as endogenous and created. Thus the separation of ownership from location advantages in Dunning's OLI framework may be misleading.

Kogut and Zander's analysis focuses on the role played by knowledge in the boundaries of the firm, i.e. the extent to which the firm decides to expand via internalisation or through external, contractual relationships. Kogut and Zander start by criticising the standard view on the boundaries of the firm: the internalisation theory. In the latter the boundaries are set by the failure of the market to protect knowledge and by market transaction costs. Moreover, in the internalisation view the boundaries of the firm are independent of its ownership advantages.

Kogut and Zander's (1993) key insights are the views of (a) the firm as a social community and (b) the development of knowledge as a product of the social group. They write: '…firms are social communities that serve the efficient mechanisms for the creation and transformation of knowledge into economically rewarded products and services'. In Kogut and Zander (2003, p. 511) we read on this point: '…knowledge exists in networks and in institutionalized contexts.'

Whenever knowledge is embedded in – and dependent on – social structures, it is more context-specific and, largely, tacit. This makes it less likely to be codifiable, teachable and transferable to other social settings. The social community setting of knowledge development means that: (a) knowledge is more likely to be tacit because emerging from shared experiences and procedures; and (b) further knowledge development is likely to emerge from the shared experiences. Here we have clear pointers towards the fact that the social nature of the firm and of groups within it lead to a specific type of knowledge and to ownership advantages and value creation. The authors write: 'Cooperation within an organization leads to a set of capabilities that are easier to transfer within the firm than across organizations and constitute the ownership advantages of the firm.' (p. 627). The social community setting of the firm applies also to the TNC because its subsidiaries tend to share identities and values or, at least, they share them to a higher degree than each subsidiary would share with independent external firms.

For Kogut and Zander, the limits to the firm are, therefore, set not by market failure but by the firm's efficiency in acquiring knowledge. They write: 'In our view, firms are efficient means by which knowledge is created and transferred […]. Through repeated interactions, individuals and groups in a firm develop a common understanding by which to transfer knowledge from ideas into production and markets. In this very critical sense, what determines what a firm does is not the failure of the market, but the firm's efficiency in this process of transformation relative to other firms' (p. 631).

Moreover, the authors see knowledge as the main source of ownership advantages and there is, therefore, interaction between ownership advantages and internalisation. The ownership advantage characteristic of knowledge is enhanced by the fact that tacit, uncodifiable knowledge is also more difficult to imitate: knowledge is therefore an advantage on which the firm can further build up without fears from rivals' imitations.

Knowledge is cumulative. Older knowledge is more easily codifiable and therefore more easily transferable outside the boundaries of the firm. The costs of technology transfer vary with the degree of tacitness of the related knowledge. Thus established technology is not a public good; it is transferable at a cost and the cost varies with the accumulation of experience and learning about codification procedures.

As knowledge becomes more codifiable with the passage of time, the company is likely to move from internalisation to externalisation, from FDI to licensing in international operations. The sequence and its timing depend on the degree of tacitness and codifiability of the knowledge specific to the firm.

These two evolutionary theories have much in common as well as many differences. Cantwell's approach is very critical of the internalisation theory while Kogut and Zander's is, ultimately, a theory of why firms internalise. Their view is that the limits to internalisation and thus the boundaries of the firm are not set by transactional market failures – as in Coase and in the internalisation theory – but by the efficiency of the firm in developing, spreading and utilising knowledge. Both theories can be seen to have elements of created ownership advantages and thus of market power. However, the impact on – and interaction with – the local economy so prominent in Cantwell is absent in Kogut and Zander.

New Trade Theories and the TNC

The evolutionary theory of the firm was an attempt to move the theory of the TNCs more towards the real world and away from the neoclassical theory of the firm. It was also an attempt to inject into the theory elements from disciplines other than economics and more in line with organisational sociology (Kogut and Zander). Meanwhile other forces were pushing more towards the directions of an 'economics-only' theory of the TNCs and one more strongly embedded into partial equilibrium analysis and the neo-classical framework. The 1980s saw the development of New Trade theories (Krugman, 1985; 1991a; 1998) in which the trade pattern could be linked to increasing economies of scale and its advantages for countries on the basis of their factor endowments[17]. These developments gave way to a considerable amount of research in which the New Trade theories and their models could be used to explain regional development and agglomeration as well as developed versus developing countries' trade. They were also used to draw policy implications from those analyses.

This framework, however, cannot explain direct production in other countries by TNCs. Essentially, if there are external economies of agglomeration and the internal economies are plant economies, then it can only make sense to produce in one location/country and supply other markets through exports. There is a basic conflict and tension between a theory that predicts clustering of production activities and a reality of companies that spread their activities in space – sometimes horizontally, sometimes vertically, sometimes both ways.

At the theoretical level it is possible to solve the conundrum by adjusting some of the assumptions, and this is what some economists have done. The assumption of capital immobility – underlying much trade theory – has obviously to be removed when dealing with theories of direct foreign production and FDI, which by their nature imply capital mobility. Moreover, constraints on the movements of products are sometimes introduced, such as barriers to trade.

However, the main adjustment is in the treatment of *internal economies of scale*. They are split into two types:

- internal economies at the level of plants
- internal economies at the level of the firm.

[17] The modelling of equilibrium under economies of scale became possible after the development of the mathematics behind imperfect competition and increasing returns (Dixit and Stiglitz,1977).

These economies separately or together are of the Chamberlinian type i.e. they are internal to the firm. They are therefore analysed in the context of imperfect competition. The first type of economies – those at the plant level – are linked to more traditional fixed inputs, those deriving from traditional physical assets such as machinery; they give rise to fixed costs. The second type of economies derives from such inputs and assets as organisational, technological, managerial/marketing; the services deriving from them are of benefit to – and can be used by – the company as a whole, and therefore by its head office as well as by its affiliates. These are *joint inputs within the firm* because they can be used by different parts of the firm for the same product and/or for different products. No matter how many plants (and affiliates) are going to use these inputs, the marginal cost of using the inputs in additional plants – at home or abroad – is low or negligible. In addition to this, the industry as a whole may also achieve scale economies of the external, Marshallian type.

The authors dealing with this specific theory in the context of TNCs have developed models for FDI from developed countries directed towards (a) other developed countries (Markusen, 1984 and 1995); and (b) developing countries (Helpman, 1984 and 1985; Helpman and Krugman, 1985). This is done by changing the assumptions.

These highly theoretical models do not seem to fit the facts very well. Krugman (1998, p. 15) writes: 'preliminary efforts . . . have found that such models are not at all easy to calibrate to actual data; in general, the tendency toward agglomeration is stronger in the models than in the real economy!'

There are several problems and contradictions within the overall framework. They go from using a Chamberlinian monopolistic competition framework for companies that operate under oligopolistic condition; to the lack of consideration for exports as an alternative to FDI. This is a point in common with the internalisation theory which is the starting framework for the New Trade theories. It is a problematic point because – as we saw above – TNC are responsible for most world trade as well as for all FDI.

In my view the most problematic element is the fact that the analysis is largely a spatial analysis: transport costs play a big role in the outcome of where different plants will be located. It is essentially a theory of spatial location of production – a field that geographers have been interested in for decades. As such it does not distinguish between plant location within a single nation-state or across nation-states. In other words, the nation-state is hardly relevant in the New Trade theories.

The Role of Nation-States

I have argued elsewhere (Ietto-Gillies, 2012, ch.14) that the existence of nation-states is the very reason why we need theories of the TNC as opposed to theories of the firm in general. Yet the nation-state – as determinant of TNCs' activities if not in terms of effects on it – has, largely, been ignored by most theories. Hymer did write on the State and the nation-state and their interaction with the international firm. This was part of his post-dissertation research which had a Marxist orientation. He was particularly interested in the effects of TNCs' activities on the abilities of national governments to develop and implement policies. However, Hymer did not consider the relevance of the nation-state for the explanation of TNCs and FDI.

Nation-states are relevant because they are characterised by different regulatory regimes[18] regarding (a) labour and social security systems; (b) fiscal systems; (c) currencies; (d) industrial policies including incentives to businesses; and (d) environmental and safety standards. The differences in these regulation regimes allow companies that can truly organise, manage and control their operations transnationally to arrange their activities so as to benefit from these differences. Their transnationality puts them in a position of advantage towards actors – with whom they interact – who are not able to operate transnationally, or not to the same extent. Such actors include: labour; governments of nation and regional states; suppliers. Moreover, their international operations allow them, also, to build up advantages in terms of risk spreading and of acquisition of knowledge from the various localities in which they operate.

Transnationality therefore gives the TNC the ability to develop strategies that maximise their bargaining power towards other actors such as labour, governments or suppliers. In particular, labour working for the same company in countries with differing labour law, trade unions and social security systems cannot organise effectively – or not as effectively – as if it were all working for the very same company within the same country. These strategies of transnationality thus result in a strategy of fragmentation of labour by national geographies. Moreover, in the last 30 years there have also been strategies of organisational labour fragmentation. Outsourcing strategies lead to labour working for a variety of companies and have thus weakened its bargaining power. Outsourcing can take the international route via offshoring strategies. The organisational fragmentation of labour can, in this case, combine with geographical (by nation-state) fragmentation.

It was pointed out above how the internalisation theory cannot explain the trend towards externalisation in the last three decades. This trend can only be explained if we bring in socio-political-economic elements linked to reactions to the power of labour vis-à-vis large corporations. Outsourcing and externalisation in general were developed from the 1980s onwards as organisational strategies leading to the fragmentation of labour and thus to its lower bargaining power. Such power had increased in earlier decades characterised by internalisation.

Thus, a full study and understanding of TNCs require them to be placed in the context of nation-states. Moreover, it requires their analysis to be made in terms of strategic rather than efficiency/equilibrium behaviour. Strategic behaviour has, at times, been considered in the literature on firms and TNCs. But it is usually in the context of strategies towards rival firms. Hymer's, Dunning's and Cantwell's analyses of firms' advantages can be seen in the context of advantages and strategic behaviour towards rival companies. These are certainly very important. However, it is also worth stressing advantages with respect to other players in the economic system from labour to governments to suppliers. Advantages with respect to any of those will result in higher profits and thus also in advantages with respect to rivals.

4. Key Elements in the Theories and their Context

As with theories in any other field, the ones we discussed above must be seen in the economic and social context in which they were developed. They must also be seen in the context of the ideas and theories prevalent at the time. These elements have been pointed

[18] Here we focus on regulatory regimes only. There are, however, other differences between nation-states as discussed in Ietto-Gillies (2012). See Cantwell (2014) and Ietto-Gillies (2014), both in this issue, for further discussions on cultural and regional differences.

out in the subsections above. Nonetheless there are also elements specific to the TNC theories and to some of these elements we now turn.

The theories here presented are only a subset of all those developed to explain the TNC and its activities. However, they are the ones which have been most successful in terms of acceptance by the research and pedagogy community[19]. Such a community does not coincide with the economics academic community. In fact, theories of the TNC have been most successful within the wider international business community. This is a very large and active community mostly clustered around Business Schools or a variety of Business Departments from Marketing and Strategy to Organisational Analysis to Economic Geography. Economics Departments have – largely – ignored the theory of the TNC following the very first rejection of Hymer's work. Why should that have been so? Why the neglect of an institution that has been so relevant to economies and societies particularly after WWII? I can only attempt to guess possible reasons: perhaps the feeling that there is nothing special about the TNC over and above the large corporation; or the difficulty of analysing messy institutions characterised by various locations and types of activities and slotting them into neat categories and analyses particularly of the mathematical type. It is interesting, therefore, to note that the strictly economics community has taken an interest in the TNC and developed the New Trade theory applied to TNCs when they were able to develop neat, equilibrium models of it. These are not very realistic but they can be taught as part of the general economic curriculum[20].

Against economics-only theories there have been theories developed with reference to other disciplines from marketing – Vernon as well as the Scandinavian School – to sociology of organisations – Kogut and Zander and, to some extent, Cantwell. One effect of the multidisciplinary contexts is the fact that the methodologies used tend to be more wide ranging and diversified compared to that which one normally sees in the economics-only type of theories. They range from traditional econometrics to qualitative methods based on large scale or on selected, in-depth interviews.

Moreover, the emphasis of theories developed in multidisciplinary contexts tends to be wider than the purely efficiency/equilibrium analysis of economics. Strategic elements are brought in, usually with reference to company's strategies towards rivals. However, strategies towards other players in the economic system – labour, governments and suppliers – can also be brought in to reflect their relevance for the pattern of internationalisation.

Whether developed in the context of Economics or Business studies, the theories can differ in terms of their dynamic versus static approaches. Those developed by Vernon, the Scandinavian School and Cantwell have definitely more dynamic elements; in the case of Vernon and Cantwell the dynamic elements are endogenous to their theories.

Most theories emphasise – directly or indirectly – market imperfections and market power. However, these can be of two types: structural imperfections in which large TNCs operate in imperfect markets and have varying degrees of market power sometimes endogenously built by their own strategies (as in Cantwell's theory). Imperfect markets can be – directly or indirectly – traced down to oligopolistic structures (Hymer; Dunning; Cantwell) or to monopolistic competition (Vernon; New Trade theories). Imperfections may also be of the transactional type, à la Coase. The internalisation theory – Buckley and Casson; Dunning – falls into the latter category.

It should also be noted that the theories vary in terms of what it is that they are trying to explain: from FDI only; to a variety of modalities of international business; to the TNC as a

[19] This statement does not apply to the theory presented in the last sub-section.

[20] A very clear textbook (Barba Navaretti and Venables, 2004) has been developed explaining TNCs and their activities entirely in terms of the New Trade theory applied to the MNCs. No mention is made of the historical development of TNCs nor of other explanations for their emergence, development and activities.

firm; to patterns of FDI; to the position of different countries vis-à-vis FDI and transnational companies. Earlier theories and writers – Hymer, Vernon, Dunning – straddled between micro, meso and macro analyses (Cantwell, 2014); an approach consistent with the fact that one is dealing mostly with very large companies. However, other writers and theories moved the focus almost exclusively towards the micro level (the internalisation and the Scandinavian theories as well as Kogut and Zander). This writer's view is that the micro and macro are never as interrelated as when we study the behaviour and strategies of TNCs. It follows that we must consider them together – as in the last subsection of Section 3 – if we want to understand what is going on in contemporary economies.

5. Summary and Conclusions

The paper briefly summarises the historical evolution of TNCs and their activities. It then introduces the major theories developed to explain the TNC. The presentation is in historical sequence. There is also an attempt to place each theory in its socio-economic and history of ideas contexts. The following theories are discussed. Hymer, market power and control; Vernon's international product life cycle; the internalisation theory; Dunning's eclectic framework based on: Ownership, Location, and Internalisation (OLI) advantages; the Scandinavian School; the evolutionary approaches of Cantwell and of Kogut and Zander; the New Trade theory applied to the TNC; the role of nation-states in the strategic behaviour of TNCs. There are some critical comments at the end of each presentation. A brief analysis of key elements in the theories, their differences and commonalities follows in Section four. It is pointed out that the pattern of development shows tensions between the following interconnected elements: (1) contents and methods of interest to Business Schools and to Economics Departments; (2) static versus dynamic approaches; (3) emphasis on efficiency versus strategic elements; (4) strategies towards rivals as well as towards other players in the economic system such as labour, governments and suppliers; (5) and single- versus multi- and interdisciplinary approaches; (6) micro versus meso versus macro level analyses.

The transnational companies dominate our economies and more research should be devoted to them by the economics community. I firmly believe that such a community would benefit from multi- and interdisciplinary links with relevant fields as well as from a historical and history of ideas approach to the field. I also believe that equilibrium analyses may be inappropriate to such institutions and that reality should be at the forefront of analysis. It may also be time for economists working in paradigmatic approaches, other than the neo-classical one, to take a more active interest in this key actor of contemporary economies.

Acknowledgements

The welcome Commentary by John Cantwell in this issue has led to some modifications of the original paper. I would like to thank the editors of this journal for very helpful suggestions.

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SUGGESTED CITATION:

Ietto-Gillies, G. (2014) 'The Theory of the Transnational Corporation at 50+'. *Economic Thought*, 3.2, pp. 38-57.
http://www.worldeconomicsassociation.org/files/journals/economicthought/WEA-ET-3-2-Ietto-Gillies.pdf