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PERSPECTIVE

The internalisation theory of the multinational enterprise: A review of the progress of a research agenda after 30 years

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Abstract
This paper reviews the progress of the research agenda initiated by *The Future of the Multinational Enterprise* (1976). Focusing initially on the problem of explaining the existence of the multinational enterprise, the agenda soon broadened to encompass the analysis of alternative modes of foreign market entry, the role of international joint ventures, the impact of innovation on corporate growth, and the role of culture in international business. The core philosophy – based on the Coasian nature of the firm and on rational action modelling – has remained constant, while the widening range of applications has encouraged synthesis with theories developed in other fields of research. Success in answering any one question invariably generates new questions, which must in turn be answered through a further extension of the theory, and this dynamic continues to drive the development of the theory today. Internalisation theory has retained its validity and its vitality over the past 30 years, and is currently being extended into new fields of international business research.
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THE FUTURE OF THE MULTINATIONAL ENTERPRISE

This paper reviews the progress of the research agenda initiated by our book *The Future of the Multinational Enterprise* (Buckley & Casson, 1976, 2003). It centres on our joint work over the last 30 years, and is in some senses a riposte to Buckley's (2002) question "Is the international business agenda running out of steam?" Its answer is firmly in the negative.

This paper is an attempt to illustrate the efforts of two researchers to progress an agenda that seemed to them to be important. It was, of course, influenced by other researchers (who, we regret, we cannot acknowledge here), but essentially it has retained a unity of purpose and a coherence over time. The pursuance of an independent research agenda has become increasingly difficult since 1976, and readers might want to question just why this should be so.

Buckley and Casson (1976) analysed the multinational enterprise (MNE) within a broad-based intellectual framework based on the pioneering work of Ronald Coase (1937). The book demonstrated how seemingly unrelated aspects of multinational operations, such

as technology transfer and international trade in semi-processed products, could be understood using a single concept – the internalisation of imperfect markets.

Our book explained why MNE activity was concentrated mainly in knowledge-intensive industries characterised by high levels of research and development (R&D) expenditure and advertising expenditure, and by the employment of skilled labour. It also explained why residual MNE activity was concentrated mainly in mining and tropical agriculture.

An MNE was defined as a firm that owns and controls activities in two or more different countries. The analysis was based on the principle that the boundaries of a firm are set at the margin where the benefits of further internalisation of markets are just offset by the costs. Another principle was that firms sought out the least-cost location for each activity, taking its linkages with other activities into account. A third principle was that the firm's profitability, and the dynamics of its growth, were based upon a continuous process of innovation stemming from R&D. In this context, innovation was construed broadly, to encompass not only technology but also new products, new business methods, and other commercial applications of new knowledge. The interaction of these three principles was illustrated using a parsimonious mathematical model that was appended to Chapter 2 of the book.

The book provided a simple but radical analysis of the MNE by examining both location and internalisation strategies. Production in a multi-stage process can be characterised as a sequence of distinct activities linked by the transport of semi-processed materials. The orthodox theory of location assumed constant returns to scale, freely available and therefore standardised technology, and that firms are price takers in all factor markets. Given such assumptions, a firm chooses its optimal location for each stage of production by evaluating regional production costs and choosing the set of locations for which the overall average cost of production is minimised. Regional production costs vary according to regional price differentials in non-tradable goods (the price of tradables is standardised by trade), the relative prices of tradables and non-tradables, and elasticities of substitution between pairs of non-tradables and between tradables and non-tradables. Overall average production costs are minimised by the correct choice of the least-cost "route" from the location of raw materials through to the destination market.

This location strategy is complicated in practice by a number of factors. First, there are increasing returns to scale in many activities. Second, modern businesses perform many activities other than routine production. Two important non-production activities are marketing, and R&D. The location strategy of a firm that integrates production, marketing and R&D is highly complex. The activities are normally interdependent, and information flows as well as transport costs must be considered. Information costs that increase with distance encourage the centralisation of activities where exchanges of knowledge through teamwork are of the essence. Such activities are the "high level" ones of basic research, innovative production and the development of marketing strategy: they require large inputs of skilled labour, and the availability of skilled labour will therefore exert a significant influence on the location strategy of such firms. The third factor is that in practice firms operate largely in imperfectly competitive markets. This means that, in many cases, MNEs cannot be considered as price takers in intermediate and factor markets. Consequently, a firm that can force down input or factor prices in a particular region will tend to concentrate the production processes that are intensive in these inputs in that region. The fourth factor is government intervention. Finally, location decisions will be influenced by the extent to which the internalisation of markets in the firm modifies the above considerations.

In a situation where firms are attempting to maximise profits in a world of imperfect markets, there will often exist an incentive to bypass imperfect markets in intermediate products. The activities that were previously linked by the market mechanism are brought under common ownership and control in a "market" internal to the firm. Where markets are internalised across national boundaries, MNEs are created. Benefits of internalisation arise from the avoidance of imperfections in the external market, but there are also costs. The optimum size of firm is set where the costs and benefits of further internalisation are equalised at the margin.

Combining both internalisation and location effects allowed us to explain the division of particular markets between domestic producers, local subsidiaries of MNEs, exports from foreign-owned plants, and exports from MNEs. The division between exports and local servicing is largely the result of the economics of location. Least-cost location, influenced by regional price differentials

and by barriers to trade, largely governs the proportion of a market serviced by exports. However, this is modified by the economics of internalising a market, for not only can this affect the least-cost location of any stage of protection, but also the strategy of a MNE after having internalised a market may differ from that which external market forces would dictate. Consequently, the question of servicing a final market is inextricably bound up with the nature and ownership of internal markets – which will be dictated by the costs and benefits of internalisation.

The result was a view of the firm as a complex of interdependent activities, linked by flows of knowledge and intermediate products. These internal flows were coordinated by information flows through the "internal markets" of the firm. This was a radical departure from the neoclassical economic view of the firm as a unitary "black box" devoted entirely to production, whose inputs and outputs were related by a simple production function. The new vision of the firm emphasised the internal division of labour, involving specialised functions comprising not only production but also marketing and R&D.

According to this new vision, the firm could operate multiple plants, with some plants specialising in one type of activity and other plants in another. Different plants could be located in different countries – when different countries were involved, a multi-plant enterprise became an MNE. It was the economics of coordinating this internal division of labour, and not technology, that set the limits to the boundaries of the firm. While technology might set a limit on the size of any one plant, it was diminishing returns to managerial coordination that set the limit to the size of the firm. These limits were reflected not only in the aggregate quantity of output produced by the firm, but also in the range of locations in which this output was produced and sold.

This view had an immediate impact. Previously the market entry decision had been analysed as a simple choice between exporting and foreign investment, whereas afterwards it was analysed as a three-way decision between exporting, foreign investment and licensing. The speed of this transition can by appreciated by comparing a state-of-the art review of the theory produced just 2 years earlier (Dunning, 1974), which makes only passing reference to licensing, with a synthesis of the theory published only 3 years later, in which licensing plays a crucial role (Dunning, 1977). Our analysis was subsequently extended to cover other entry options such as franchising and subcontracting.

Despite this immediate impact, however, we were not fully satisfied with the way that we had developed our ideas. We were particularly keen to stress that MNEs should be viewed as part of a global system in which they both cooperated and competed with each other. This global system would comprise interdependent specialised facilities created through an international division of labour. Our account of the international division of labour drew upon the classical analysis of the subject developed by Adam Smith (1776), chiefly in the context of the national economy. We encapsulated some of Smith's key insights into a schematic "global systems view" of international business.

Given a global configuration of production plants, R&D laboratories and distribution centres, internalisation theory should be able to explain how the ownership of the system would be parcelled out between different firms. It would identify the external markets through which the boundaries of the firm were drawn, and also the internal markets that lay within the boundaries of particular firms. It would also predict the characteristics of the firms that internalised particular markets – in particular their size and nationality. Finally, it would identify the long-term factors – such as entrepreneurship and technological opportunity – that explain why certain types of activity are best carried out at certain types of location under the control of certain types of firm.

The power of the internalisation concept was such that we believed that, using such a global system view, it would be possible to analyse a very wide range of practical issues in international business. When applied using a global systems view, internalisation theory illustrates how the activities of different MNEs interact with each other. As a result, an MNE's decisions on how to enter a particular national market are embedded within its wider global business strategy. This paper describes how we have sought to exploit potential of this way of thinking in our subsequent work.

We have not pursued our research agenda single-handed, of course. In tackling the major theoretical problems we have been able to "stand on the shoulders of the giants" – writers who have addressed big issues that transcend the specific issues in international business that have been the focus of our work. The work of some of these giants is discussed in more detail below. We have also received a lot of support from our professional

colleagues in the Academy of International Business in developing specific applications of the theory – most particularly John Dunning, who was a mine of useful information on all aspects of international business, and who gave us his support throughout our careers. Many of these colleagues – notably Alan Rugman, Alain Verbeke, and Niron Hashai – have introduced important extensions of the theory that complement our own work. Finally, we owe a great debt to our many doctoral students – past and present – who have worked on various aspects of the topics mentioned in this paper.

This paper does not attempt to address the impact of our research on other scholars in the field. There is no citation analysis, and no attempt to identify a school of thought to which we belong. Our approach is introspective, recording our thought processes and the events that stimulated us to address particular issues. We have also tried to avoid controversy over priority with respect to the emergence of internalisation theory in the 1970s. We do not discuss in detail the work of McManus (1972), Magee (1977), Swedenborg (1979), or Hennart (1982). Nor do we offer a detailed comparison between internalisation theory and Williamson's (1975) transaction cost approach, or an assessment of the relative merits of internalisation theory and Dunning's (1977) eclectic theory. Such issues are best addressed by more disinterested parties.

The structure of this paper is as follows. The next section examines the concept of internalisation, and is followed by a discussion of the principle of rational action modelling on which internalisation theory is based. Then we examine the intellectual heritage of Ronald Coase, on which we built, and describe the historical context in which debate over MNEs emerged. The next section provides more detail on the international division of labour and the global systems view. We then review the general progress of our research, relating theoretical innovations to specific publications. We conclude with some methodological reflections, describing some of the lessons we have learned from our 30 years of research collaboration.

THE CONCEPT OF INTERNALISATION

Internalisation is a general principle that explains the boundaries of organisations; its application to the MNE is just one of its many spin-offs. It is a highly specialised principle, targeted specifically on explaining where boundaries lie, and how they shift in response to changing circumstances. By itself, it does not explain other aspects of organisations. Progress in internalisation theory is achieved by combining this core approach with other principles to generate a wide range of predictions about different aspects of organisational behaviour. As indicated above, it can be combined with trade theory to explain the location of the firm's operations, with organisation theory to explain international joint ventures (IJVs), and with theories of innovation to explain the kinds of industry in which a firm will operate. It applies not only to the geographical boundaries of the firm, but also to other boundaries, such as the boundary of a firm's product range, which is normally studied as a separate subject, namely product diversification. Combination with theories of entrepreneurship allows an analysis of culture to be developed by the theory.

Most organisations purchase inputs from independent suppliers, and so the question naturally arises as to whether they should produce these inputs for themselves. In management studies this is often called the "make or buy decision"; in economics it is referred to as the "backward integration" issue. Backward integration by MNEs is exemplified by "resource-seeking investment".

Similarly, many organisations use independent agents to distribute their product, or to add further value to it before it is passed to the final user. This is the "forward integration" issue: in the context of distribution management, for example, it is related to the "channel leadership" issue, and in particular to whether a producer should also control the wholesalers and retailers that handle its product. In the context of international trade, the question arises as to whether producers should establish overseas sales subsidiaries to monitor and control distribution operations in foreign markets.

In general, most organisations use a range of *intermediate inputs*, and generate a range of *intermediate outputs*. It is the markets for these intermediate inputs and outputs that may be internalised. Markets for factor inputs and final products cannot normally be internalised by firms, as this would be tantamount to enslaving households, but households can internalise these markets, and to some extent they do. The classic example of household internalisation is "do it yourself" production, where the owners of a household employ themselves to do a job that independent workers would normally do instead, and then purchase the output from themselves instead of selling it on to others. The popularity of the "do it yourself" principle illustrates the practical

importance of internalisation decisions, not only for large MNEs, but also for individual households carrying on the ordinary business of life.

Internalisation theory assumes rational action, for the reasons set out below. Rational agents will internalise markets when the expected benefits exceed the expected costs. The profit-seeking managers of a firm will internalise intermediate product markets up to the margin where the benefits and costs of internalisation are equalised. Within this margin, firms will derive an economic rent from their exploitation of the internalisation option, equal to the excess of the benefit over the cost.

The main focus of Buckley and Casson (1976) was on a particular type of forward integration – namely forward integration into production from R&D. This approach reflected our view of knowledge as a crucial intermediate product flowing within the firm. The fact that it was intangible meant that it had been overlooked in most standard neoclassical theory.

Two distinct forms of internalisation were identified: operational internalisation, involving intermediate products flowing through successive stages of production and the distribution channel; and knowledge internalisation – the internalisation of the flow of knowledge emanating from R&D. Subsequent writers have often emphasised knowledge internalisation at the expense of operational internalisation, but we have always been clear that both forms of internalisation have a significant role in explaining the boundaries of the MNE.

The gains from knowledge internalisation can be substantial. The most important of these gains stem from what is nowadays called "asymmetric information". In particular, the "buyer uncertainty" problem means that licensees are reluctant to pay for technology that might be flawed, or that might not be so novel as is claimed. Licensors could increase the price at which they could sell the technology by providing detailed evidence to a potential licensee, but this would be tantamount to sharing the knowledge with the licensee before any contract had been made. Unless they held a patent on the knowledge, the licensee could then exploit the knowledge for free. Even if the licensor held a patent, a potential licensee might be able to "invent around" it. Furthermore, if a patent were granted, the licensee might sell the knowledge on to a third party in competition with the licensor, or might make some improvement to the technology and patent it in their own name, thereby rendering the original technology obsolete.

In the absence of such problems, licensing would be a very attractive option. A firm that employed a creative R&D team could specialise in developing new knowledge and licensing it to independent production firms that were better equipped to exploit the technology themselves. The research-oriented firm could therefore concentrate on what it did best, and avoid diversifying into complementary activities in which it had no particular skill.

By comparing the types of industry in which knowledge flows were intensive with those in which they were not, it was possible to identify a set of industries in which knowledge internalisation gains could be substantial. Within this set, it was then possible to compare types of knowledge for which internalisation gains were high – for example, unpatentable knowledge – with those in which it was low – for example patentable knowledge. It was then relatively straightforward to demonstrate that the knowledge-intensive industries with substantial internalisation gains were the ones in which MNE operations were most commonly found.

Once the general significance of internalisation issues had been grasped, lots of different specific issues quickly fell into place. These specific issues included not only the industries in which MNEs produced, but also the timing of their international expansion, the countries in which they were headquartered, and the countries in which they invested.

A good example of a specific question is why the number of MNEs increased so dramatically after World War II. The answer is that after World War II opportunities for technology transfer increased dramatically. This was because many of the new technologies created through defence-related research turned out to have civilian applications. In addition, mass-production consumer goods technologies had been perfected in the US during the interwar period, and were now sufficiently well codified to be transferred overseas. Because the new technologies had potentially global application, production plants were established in many different parts of the world, and MNEs proliferated as a result.

MNEs did not invest in all countries, however; and they invested much more heavily in some countries than in others. Countries in Western Europe were very popular with MNEs, whereas others – particularly in Africa – were not. This raises

another set of specific questions about the characteristics that distinguish the countries in which MNEs preferred to invest from those they tended to avoid. The literature in development economics proved useful in addressing these questions. Technology was harder to transfer to some countries because their education system was not so good – it was difficult to recruit workers who could absorb technology quickly. Political risks in post-colonial societies meant that factories were prone to nationalisation or expropriation. In some Asian countries protection for patents was weak, and so on.

The importance of these different factors depended on the industry in which the MNE was engaged and the nature of the activity in which it planned to invest. When an MNE was planning to distribute its product to local consumers, the size of the market and the local standard of living were important factors. When an MNE was planning to serve a wider market, embracing neighbouring countries, then access to a local transport hub was important. When the MNE was planning a large export-oriented production plant, then cheap labour was important.

Welfare implications were not explicitly derived in the 1976 book. It was suggested that MNEs were "a two-edged sword", improving welfare by seeking and replacing imperfect external markets with more perfect internal ones, but potentially reaping rewards by reducing competition. This assessment paid particular attention to the role of MNEs in the creation and diffusion of knowledge. The indivisibility and public good aspects of knowledge make the replication of knowledge-producing activities inefficient. In the absence of free competitive auctioning of knowledge, MNEs represent a second-best solution, but one that is likely to outperform alternative, more wasteful institutional choices.

We recognised, however, that even where efficiency gains led to overall welfare improvement, the distribution of these gains between home and host countries could be most unequal. Thus an MNE that monopolises a new technology for the production of a readily tradable good (e.g., light, compact, and high-value) has a wide choice of production locations, and can therefore play off potential host countries against each other to appropriate most of the gains for itself. Conversely, if two MNEs each own a technology for producing the same product in a different way, and the product is potentially useful in just a single country, then consumers in that country can play off the firms against each other, and the gains will accrue most to the host country instead.

The welfare implications derived from internalisation theory are therefore contingent on a number of factors, which the theory itself identifies. It is therefore a mistake to claim, as some writers have done, that internalisation strategies are unambiguously "good" or "bad" from a welfare point of view.

RATIONAL ACTION MODELLING

Internalisation theory analyses the choices that are made by the owners, managers or trustees of organisations. The theory assumes that these choices are rational ones. In this context, rationality signifies that the decision-maker can identify a set of options, and has an objective by which these options can be ranked, and an ability to identify the top-ranked option and select it. The assumed form of rationality is instrumental, in the sense that it concerns not the rationality of the objective, but merely the process by which the best option is identified, irrespective of the nature of the objective.

Rationality does not imply complete information. When confronted with search costs, a rational decision-maker will collect only sufficient information to make the risks surrounding the decision acceptable, recognising that mistakes are always possible. In a similar vein, the theory does not assume that the decision-makers can identify all available options; indeed, in rational action models the number of options that decision-makers consider is often restricted, in order to simplify the model. In the context of market entry, for example, only a limited number of entry strategies are usually appraised, as explained above. However, the theory always makes the set of options considered fully explicit. Thus while rationality may be "bounded" in the sense that information is incomplete, behaviour is not irrational, in the sense that the information collected is a rational response to the information available.

Rational behaviour is not necessarily selfish, as is sometimes suggested; the decision-maker's objective may, in fact, be an altruistic one. In the context of firms, internalisation theorists normally assume that the firm's objective is to maximise profit. Profit maximisation reflects the view that the shareholders are the principal stakeholders in a firm, and that the interests of other members – in particular salaried employees – are subordinated to them, and Buckley and Casson (1976) adopted this view. It is not necessary, however, to assume

that shareholders are selfish: for example, an altruistic shareholder might wish the firm to maximise profit so that his own personal benevolence can be as generous as possible.

In the context of large firms, profit maximisation is a fairly robust assumption. Minor variations in the objective function, such as introducing sales maximisation as a subsidiary goal, do not materially alter the implications of the theory. Any substantial deviation from profit maximisation would endanger the firm's survival, especially in a very competitive industry. Even a modest deviation from profit maximisation could elicit a hostile takeover (except in a tightly held family firm).

Rational action modelling can generate parsimonious models that explain complex phenomena in very simple terms. Rational action models distinguish sharply between endogenous and exogenous variables. Where decision-making is concerned, the factors that influence the decision are exogenous, whereas the outcomes of the decision are endogenous. The outcomes include both the decisions themselves, and their consequences for the organisation concerned.

The endogenous variables in Buckley and Casson (1976) included the growth, profitability, and degree of multinationality of the firm. A substantial range of exogenous variables was introduced, including the costs of R&D, the costs of licensing, production costs at home and abroad, transport cost, tariffs, non-tariff barriers, and the parameters of product demand. The exogenous variables simultaneously determined each of the endogenous variables, and as a result the behavioural implications of the model were summarised by a set of simultaneous equations.

The exogenous variables in the Buckley and Casson model can be characterised as either firm-specific, industry-specific, or location-specific. Firm-specific variables are exemplified by the costs of R&D, which reflect the skills of the firm's R&D team; industry-specific factors by the costs of licensing, which reflect the nature of the knowledge used in the industry; and location-specific factors by production costs in different regions. A more refined analysis would recognise that some exogenous variables are both firm-specific and industry-specific – for example, the parameters of product demand reflect both demand conditions in an industry and customer preferences for a specific brand. Interaction variables can also be distinguished: thus tariff structures and trade preferences mean that levels vary according to the industry, the home-country location and the host-country location.

This classification of the exogenous variables is useful, because when data on individual exogenous variables are missing, the effect of the exogenous variables on firm behaviour can be captured by dummy variables representing industry and location characteristics, while firm-specific characteristics can be captured by residual effects estimated from regression equations.

Rational action modelling can be applied to a wide range of international business issues, including:

(1) extending the theory of the firm;
(2) dynamic market entry;
(3) IJVs;
(4) international entrepreneurship (Casson, 2000), dynamics, and innovation;
(5) business culture (Casson, 1991), and strategic complexity in international business.

When internalisation theory is combined with other theories, it is necessary to ensure that these other theories are consistent with internalisation theory in their methodological approaches: otherwise, the resulting synthesis will become a confusing concoction of incompatible ideas. In particular, complementary theories must be consistent with rational action principles. Trade theory satisfies this condition, since its economics pedigree means that it has followed rational action principles from the outset. Neoclassical economic theories of innovation also satisfy this condition, although behavioural theories and sociological theories of innovation generally do not. In certain areas, such as strategic management, it is sometimes unclear whether rationality is postulated or not, and even where it is postulated, it is not always clear that the postulates are consistently applied. For these reasons internalisation theorists have been circumspect in combining the internalisation principle with other bodies of theory. Rather than seeking to explain every conceivable phenomenon in international business through promiscuous liaisons with other branches of theory, they have focused on explaining those phenomena that internalisation theory and other rational action theories explain best.

As more disciplines have embraced rational action modelling, the scope of internalisation has increased, because a wider range of complementary theories has become available. Our own research agenda has exploited the increasing scope of

rational action modelling in order to widen the range of issues addressed by internalisation theory, as explained in more detail below.

THE COASIAN HERITAGE: INTERNALISATION AS A GENERAL THEORY OF THE FIRM

Returning to our earlier description of the interrelated activities carried out by an MNE, it might well be asked why these different activities located in different countries activities needed to be coordinated by a firm. Why not use Adam Smith's "invisible hand" to coordinate these activities through impersonal markets? Why is the "visible hand" of management preferred to the "invisible hand" of the market?

Indeed, why not coordinate the operations of an ordinary domestic firm using market forces? If a small firm employs two people, they could make contracts directly with each other instead of through a third party – their employer. Economies of internalisation provide the answer. Employment with a firm provides an independent monitor – the employer – who ensures that the workers do not impede each other. The employer has an incentive to monitor well, because the stronger is the cooperation the higher is his profit. Furthermore, the monitoring need not be intrusive; loyalty to the firm may encourage spontaneous hard work.

This is an example of operational integration in a small firm. Knowledge internalisation may be important too. The employer may have discovered a new product and, while he cannot license his knowledge of this product to his workers, because they do not share his good opinion of the product, he can employ them for a wage and then direct them to produce it. Working for a fixed wage insures them against a loss should their employer's judgement turn out to be bad.

Internalisation therefore holds the key to the formation of any firm, whether multinational or not. Typically, an entrepreneur recognises a product market opportunity, hires a team of workers to exploit it (knowledge internalisation), coordinates the work of the team, possibly through a manager or supervisor (operational internalisation), and makes a profit if his judgement is correct. A team can be configured in all sorts of ways. It does not have to be concentrated in a single plant, or even a single country. The most appropriate configuration depends upon the entrepreneur's idea and the best means of exploiting it.

As indicated above, this line of argument goes back to Coase (1937). Coase had noticed that in lectures on price theory markets were said to coordinate the economy, and in lectures on business studies managers were said to coordinate the economy. Furthermore, he might have added, in lectures on socialism, planners were said to coordinate the economy. There seemed to be "overkill" where coordination was concerned. Coase concluded that, given the existence of alternative coordination mechanisms, economic principles suggested that the cheapest form of coordination would be selected in any given circumstances (Coase, 1937). In arriving at this verdict, he assumed that the economy was basically market driven, and that firms would arise only when managerial coordination proved itself superior to the market. In a similar vein, as Cheung (1983) later argued, government would emerge in a free society only when state planning provided better coordination than either markets or private firms.

Following Coase's line of argument, we may therefore conclude that:

- Firms do not have to internationalise incrementally; they can be born globally. Firms are created when entrepreneurs identify profit opportunities and set up firms to exploit them. While small ideas may incubate purely local firms, big ideas will incubate multinational firms, because the knowledge possessed by the entrepreneur is of potentially global application.
- Economies of internalisation are not specific to licensing decisions nor, indeed, to the internationalisation of the firm. They provide the basic logic for the formation of the firm, and remain of strategic importance throughout its life.
- The advantages exploited by multinationals are created, not endowed. They begin with the initial inspiration of the founder entrepreneur, and are refined through continuous knowledge development. This process of knowledge development involves continuous feedback effected through the circulation of information between production, marketing and R&D. In this context R&D represents any organised activity that converts ideas and experience into incremental innovations in the design, production, or marketing of the product range.

A wider point of research methodology is suggested by this view: namely that the solution to an intellectual problem – in this case explaining the international expansion of a firm – is sometimes best achieved not by breaking down the problem

into a set of smaller issues, but rather by raising the level of generality and subsuming the problem under a wider issue – in this case, the rationale for the firm itself. Breaking down a problem into sub-problems can be effective when the basic intellectual framework is sound; but when the framework is too limited, or even flawed, the method is likely to fail.

A related point is that the solution to a problem is sometimes found outside the field in question – often in an apparently distinct but actually closely related field. As explained below, the theory of the firm required to address unresolved problems in the theory of the MNE was already in existence when industrial economists were addressing the issue in the 1960s, but by failing to look outside the narrow confines of their discipline they failed to exploit a theory that was ready to hand. Even today, some devotees of standard industrial economics have not yet come to terms fully with the internalisation approach and the challenge it poses to their preconception that there is something obvious about the existence of firms, rather than something fundamental that actually needs to be properly explained.

Historical Context to the Emergence of the Theory

When economists first began to look seriously at the MNE in the early 1960s, they naturally focused on those aspects of the MNE to which existing theory drew their attention. The dominant theory in international economics at the time was Heckscher–Ohlin trade theory. According to this theory, each country had a fixed endowment of labour and capital, and specialised in producing a mix of products that made the best possible use of its endowments. Each country had access to the same technologies, and all markets worked perfectly. Countries with relatively large endowments of labour specialised in producing labour-intensive products, whereas countries with large endowments of capital specialised in producing capital-intensive products. Each country exported the products in which it specialised. There was no room in this theory for the MNE; it was purely and simply a theory of trade.

The natural way to introduce MNEs appeared to be to relax the assumption that each country had a fixed endowment of capital. MNEs would then emerge as conduits of capital flow between countries. Capital would flow from countries with a low rate of return on capital to countries with a higher rate of return on capital, and MNEs would profit from the increase in the rate of return. The problem was that, on balance, capital flows involving MNEs flowed in exactly the opposite way – from countries with a high rate of return (such as the US) to countries with a low rate of return (such as the UK). A further complication was that capital flowed between countries in both directions at once. This conflict with the evidence was fatal to the theory.

Indeed, on reflection the theory made little sense anyway, as capital could be transferred between countries very easily by the purchase and sale of bonds in the international capital markets. There was no need to route capital transfers through MNEs – especially once postwar capital exchange controls had been abolished. In modern parlance, the capital flow theory had confused indirect (or portfolio) investment with direct investments made by MNEs.

Having ruled out capital as the explanatory factor, economists turned to technology. By the 1960s a number of investigators claimed to have identified a "technology gap" between the US and other countries. Other countries needed to catch up with the US and close this gap, it was said, but they were finding it difficult to do so. This assumption of a technology gap clearly conflicted with the assumptions of Heckscher–Ohlin trade theory. Furthermore, economists who believed in perfect markets could not believe that a technology gap could persist because enormous profits could be made by closing it. In popular terminology, closing the gap looked like a "free lunch".

With trade theorists wedded to the assumption of uniform technology, it was left to industrial economists to develop the technology gap approach. The key to multinationality, they correctly argued, was technology transfer rather than capital flow. The theory of market structure, developed during the interwar period by Chamberlin (1927) and Robinson (1934), was the dominant paradigm in industrial economics, and this theory argued that superior technology was a source of monopoly power. This monopoly power could be sustained in the long run if barriers to entry, such as patents or trade secrets, deterred potential competitors (Bain, 1956). Conventional industrial economists took the national market as their basic unit of analysis, however, and it was therefore a significant breakthrough when the young Canadian economist Stephen Hymer (1976) began to analyse monopoly as a global phenomenon.

The political instability of the interwar period had meant that new technologies were normally exploited globally through patent pools between "national champion" firms in the leading economies, but postwar US hegemony reduced these risks, and encouraged foreign investment instead. Hymer therefore argued, correctly, that the wave of US investment in postwar Europe was a consequence of US technological supremacy, as revealed by the technology-based monopolies of its leading industrial firms.

Hymer's approach was popularised by his supervisor Charles Kindleberger (1969), who toned down the Marxist elements in Hymer's work, and diluted its intellectual force. It was common practice at that time to postulate the existence of costs of doing business abroad. Kindleberger postulated the existence of some advantage possessed by the foreign investor that more than outweighed the penalty of being foreign. In addition to Hymer's monopolistic advantage, he described other advantages, such as superior access to capital. While Hymer's advantage was specific to the firm, some of these other advantages were not; they were shared by all firms headquartered in a given country – in particular the US. Subsequently Caves (1971) suggested another source of monopolistic advantage – brands – while Aliber (1970, 1971) suggested another non-monopolistic advantage in the form of a currency premium.

The difficulty with the advantage approach, however, was that it failed to explain why firms did not license their advantage to local firms abroad, thereby generating economic rents through license fees while avoiding the costs of doing business abroad. The answer, as Buckley and Casson (1976) pointed out, was that the costs of licensing were usually even greater than the costs of doing business abroad. The industrial economists accepted this proposition as a "quick fix" for their problem, but they continued to emphasise the costs of doing business abroad, and the necessity for a compensating advantage to overcome this.

We took a different view, however. Hymer and Kindleberger, we believed, had prejudged the issue of why there was a firm to begin with. Industrial economists regarded it as self-evident that there were firms already operating in the domestic economy that had reached a point in their growth at which they sought to enter overseas markets. The costs of doing business abroad constituted a barrier to their growth, and the firms could continue to grow only if the advantages on which they were based were big enough. This view suggested that:

- firms established themselves abroad only if they were already operating at home – a view made quite explicit in Vernon's (1966) product cycle theory; there was therefore no room for "born global" firms;
- internalisation issues were important only in international expansion, and had no significance for the firm's domestic operations; and
- some firms were born with advantages that would allow them to later expand abroad and others were not; however, there was no explanation of why some firms possessed such advantages and other did not, or how they were obtained.

Industrial economists, it seemed to us, were simply interested in internalisation theory as a device for patching up an unsatisfactory theory of the domestic firm in order to internationalise it. They should instead have been addressing the fundamental shortcomings of their theory by developing a general theory of the firm that encompassed both domestic and multinational firms. Such a theory was already sketched out in the work of Ronald Coase (1937), but the significance of this work was not appreciated at the time. Its significance for domestic firms was spelled out by Williamson (1975), and for multinational firms in Buckley and Casson (1976). While Williamson focused on operational integration as the key to analysing vertical integration in domestic industries, Buckley and Casson showed how both operational integration and knowledge integration worked together to explain the growth of both domestic and multinational firms. While domestic firms profited mainly from operational internalisation, as Williamson implicitly assumed, MNEs profited more from knowledge internalisation because, in general, they were more entrepreneurial and, specifically, they were more successful at organising R&D.

There were therefore three contending theories of the MNE in the mid-1970s: a trade theory with international capital movements, a monopoly theory based on industrial economics, and internalisation theory. There were two main questions to be resolved:

- What explains the existence of the firm?
- What explains the existence of the MNE?

Trade theorists had no interest in the first question; they simply postulated a representative firm that operated a single plant that combined labour and capital inputs. Their failure to address the first question undermined their answer to the second; they wrongly believed that MNEs could be explained by capital mobility in a world of perfect markets.

Industrial economists were not interested in the first question either (Scherer, 1975). They took the existence of domestic firms for granted – as an obvious fact that required no explanation. Once again, their failure to address the first issue undermined their ability to tackle the second issue. They treated MNEs as a special phenomenon on account of the costs of doing business abroad that they were assumed to face. They postulated a compensating advantage to explain the viability of the MNE. By the mid-1970s this advantage comprised a mixture of firm-specific and non-firm-specific advantages. But they overlooked the licensing option, and turned to internalisation to patch their theory up.

Internalisation theorists regarded the first question as fundamental and the second question as derivative. By answering the first question they were able to answer the second question too. There was no need to assume special costs of doing business abroad – a significant advantage when analysing the modern globalised economy. Knowledge internalisation explained why firms were set up and how they acquired a degree of monopoly power, while operational internalisation explained why it was natural for successful firms to evolve a network of foreign subsidiaries.

Of the three strands of theory, therefore, internalisation is the only one to really "hit the nail on the head". It reveals the theory of the MNE as a special case of a general theory of the firm that embraces both domestic and multinational firms. In this theory, profit opportunities are identified by founder entrepreneurs who then build sustainable global markets supported by global production systems and a commitment to continuous R&D.

THE INTERNATIONAL DIVISION OF LABOUR IN A GLOBAL ECONOMY: A GLOBAL SYSTEMS VIEW

In the 1980s evidence began to suggest that some MNEs were evolving systematically into global firms. Instead of serving just a selected set of overseas markets, they were beginning to serve all the markets to which foreign governments permitted access. Some writers therefore asserted that the expansion of MNEs was the cause of globalisation. Others argued that the reverse was the case, and that the increasing reach of MNEs was a consequence, and not a cause, of globalisation; globalisation, they suggested, was a wider phenomenon than the growth of MNEs. Others "hedged their bets", and claimed that globalisation and MNEs were "co-evolving".

Evidence also showed that during the early 1980s many mature MNEs had begun to restructure their operations. They acquired new facilities, often through mergers and acquisitions, and divested themselves of other activities – sometimes by selling them to rival firms. How were these changes to be explained, and why they were occurring at this time? What was the link, if any, between globalisation and restructuring?

Because a number of changes were occurring simultaneously, there was plenty of scope for confusion. Unfortunately, little formal modelling was done in the international business literature, and so much of the discussion remained opaque. We therefore developed a "systems view" of international business that was designed to provide greater clarity on these issues. We visualised a world production system, based on a configuration of facilities, including R&D laboratories, production plants and distribution warehouses, spread across the world, and serving a range of different industries. Under a hypothetical socialist world system all these facilities would be owned by a single world super-state. Under the kind of free-market capitalism that characterises modern globalisation, these facilities are owned instead by a range of different firms – mostly private, but some owned by individual nation-states. Because the world is partitioned into separate states, many of these firms are MNEs, because the facilities they own are based in different countries.

Internalisation theory was then applied to explain why certain clusters of related facilities were owned by the same firm. Different clusters, owned by different firms, would interface through external markets, where different firms would trade with each other.

A key insight of this systems view was that the internalisation decisions are interdependent. Furthermore, they are interdependent in two distinct ways.

First, firms are typically involved in multiple internalisation decisions. These decisions are interdependent; the outcome of one decision cannot be fully understood without reference to other decisions. Consider, for example, an MNE that operates

three facilities – R&D, production, and marketing. Internalising one linkage, say between R&D and production, involves the firm in the ownership of two facilities, but internalising a second linkage – say between production and marketing – automatically internalises a third – between marketing and R&D. While acquiring a second facility internalises only one linkage, acquiring a third facility internalises two. This demonstrates that internalisation decisions taken as part of a restructuring operation need to be analysed holistically. Focusing exclusively on a single linkage, such as the link from R&D to production, rather than the full set of linkages, can create a misleading picture.

The second interdependence concerns the internalisation decisions of different firms. From a systems perspective, a facility that is wholly owned by one firm cannot be simultaneously wholly owned by another firm, because the principle of private property does not permit this. As a consequence, if one firm internalises a linkage to a given facility, then other firms cannot internalise linkages to that facility, because to do so they would have to own it as well. They may have linkages to it – but only external ones. Thus the internalisation decisions of different firms are interdependent when they compete to internalise linkages to the same facility.

Early writers on international business ignored this interdependence because they implicitly assumed that MNEs always invested in greenfield facilities. They ignored the fact that it is not always economic to add to capacity in an industry when expanding overseas, and that for this reason it is sometimes better to make acquisitions instead. When greenfield expansion is uneconomic, firms can gain strategic advantage by being the first to acquire a target facility. A pre-emptive acquisition benefits themselves and disadvantages their rivals at the same time. Such pre-emption is possible only when greenfield investment is not an option for rival firms.

Having set out the systems view, we then examined how the forces of globalisation shaped the world production system. Following the lead of other economists, we argued that globalisation arose from a combination of exogenous factors, the most important of which were policy changes and technological improvements in international transport and communications.

Abolition of exchange controls and the deregulation of domestic capital markets encouraged international capital flows, making it easier for MNEs to borrow in one country in order to finance investment in another. Relaxation of border controls promoted migration, and gave MNEs greater freedom to post employees overseas. Most importantly, multilateral tariff reductions negotiated under UN auspices reduced the effective protection of manufacturing and encouraged the concentration of assembly in cheap-labour locations. Advances in transport reduced the cost of shipping both intermediate and final products, and advances in communications made it easier to coordinate trade flows – whether internal or external to the firm. As these factors changed, so the shape of the world production system changed as well. This induced changes in internalisation, which altered the boundaries of firms.

Some exogenous changes directly affected internalisation decisions. The spread of international manufacturing standards and the strengthening of intellectual property rights improved the performance of external markets relative to internal markets, and led to a significant growth in international licensing, franchising, and subcontracting. These were all policies that had been considered very risky in the 1960s.

Our analysis showed how changes in the exogenous drivers of globalisation simultaneously affected the structure of the world production system and its degree of internalisation. It thereby explained both the growth and the restructuring of MNEs. It provided a logically coherent interpretation of the changing structure of the international business system from the early postwar period down to the end of the century.

According to our interpretation, the traditional high-technology MNE of the 1960s had a relatively simple structure. R&D was conducted in the home country, under the watchful eye of headquarters, and the technology generated was then diffused internally to production plants in each market. Each major market had its own production plant that used the technology in the same way, with only minor adaptations to suit local conditions. Exports from these plants were usually destined for smaller, neighbouring countries. Tariffs on finished products were generally higher than on intermediate products such as components, and finished products were often bulkier and difficult to transport as well. As a result, there was a high level of "effective protection" for assembly operations, and trade by MNEs was confined mainly to key components exported from the home country to foreign assembly plants.

By the early 1980s all this was changing, owing to the exogenous factors described above. The consequent rationalisation of international production led to the run-down or closure of assembly operations in some of the larger and richer countries. With fewer assembly plants, the new generation of plants exported, on average, a much higher proportion of their output. These new-generation plants helped to drive economic development in the "newly industrialising countries". Local firms in these countries began to take on component production too. South East Asia was particularly attractive to MNEs because of its good maritime links, and a well-educated non-unionised workforce with a strong work ethic. Mass production of precision components migrated from MNE home countries to specialised overseas plants.

Strategic interactions between restructuring firms help to explain some of the apparent anomalies in international business behaviour at this time – such as "follow the leader" investments. Business strategy in mature industries became concerned more with rationalising existing capacity than with building new capacity, and therefore favoured mergers and acquisitions rather than greenfield investments. The globalisation of capital markets facilitated the financing of large international mergers and acquisitions. Races therefore developed to acquire strategic facilities in newly liberalised markets, with firms acting defensively in order to avoid being locked out once all the target firms had been acquired.

During the 1980s a new elite of "systems integration" or "flagship" firms emerged in many industries. These firms expanded rapidly through merger and acquisition, building global procurement and distribution networks. These networks linked the integrator to an international supply chain of licensees and subcontractors on the one hand, and a group of distributors and resellers on the other. Sometimes described as "network" firms, or as being "hollowed out", these firms ruthlessly exploited the profit opportunities for restructuring created by globalisation. The scope of their operations, and their successful performance, are well explained by the systems view.

THE PROGRESS OF THE RESEARCH AGENDA

The progression of this research agenda has covered at least five key areas. These are:

(1) formalising and testing the theory;
(2) refining the analysis of foreign market entry and development strategies;
(3) IJVs;
(4) dynamics: innovation and real options; and
(5) the role of culture in international business.

Each of these areas is examined below, with particular attention to joint Buckley and Casson publications. Table 1 examines subsequent publications, and classifies their contribution according to the scheme above. Table 2 classifies papers by contribution.

Formalising and Testing the Theory

It was always the intention to provide a theory that was testable. To this end, efforts have been made to formulate an approach that is rigorous and that can, as far as possible, be confronted with empirical data. Buckley and Casson (1985) adopted a "compare and contrast" approach to placing internalisation theory into the corpus of economics and business thinking. Chapters compared the internalisation approach with other theories of the MNE, with other forms of international cooperation (involving partial rather than full internalisation), and with international cartels. In addition, the nature of transaction costs was examined in relation to market-making, and the role of entrepreneurship was related to foreign direct investment decision-making. This emphasis on innovation – technical, managerial, and entrepreneurial – is a recurring feature of the research agenda. One of the chapters presented a computable model of the behaviour of a vertically and horizontally integrated multinational operating a rationalised production system where activities are linked in a network through international trade (anticipating the "global factory" structure described by Buckley, 2007). The final chapter sought to test the predictions of the theory using extant data.

Buckley and Casson (1998a) introduced a "dynamic new agenda" for the investigation of the development of MNEs in more flexible forms. The agenda focused on: uncertainty and market volatility; flexibility and real options; cooperation through JVs and business networks; entrepreneurship and corporate culture; and organisational change including the mandating of subsidiaries and the empowerment of employees. Flexibility referred to the boundaries of the firm, which were rendered more permeable through networks and JVs, and to "flatter" organisational structures. It was noted that flexibility is not costless, and in particular it increases transaction costs. This trade-off

Table 1 Buckley and Casson contributions

Date and area of contribution	*Contribution*
1981 2 (Entry)	A rigorous analysis of foreign market entry strategy under determinate conditions of market growth based on fixed set-up and variable operational costs predicting the timing of shifts in foreign market servicing strategy (e.g., export to licensing to foreign direct investment). The missing "short-run decision-making" chapter of *The Future of the Multinational Enterprise.*
1985 1 (Theory)	Development of theory and testing – compared and contrasted internalisation with alternative approaches to the MNE, developed comparative institutional analysis vs cartels, and integrated intermediate product trade and entrepreneurship into the theory. Reviewed the evidence on theoretical frameworks of the MNE.
1988 3 (IJVs)	The internalisation theory of IJVs. IJVs are determined by three key factors: internalisation of key markets, indivisibilities, and barriers to merger. Described JVs as "first and foremost, a device for mitigating the worst consequences of mistrust". In the language of internalisation theory, IJVs represent a compromise contractual arrangement that minimises transaction costs under given environmental constraints. JVs provide a context in which the parties to the JV can demonstrate *mutual forbearance* and build up trust. Going on from this to provide a *commitment* to cooperation strengthens the JV. These novel concepts were introduced and amplified in the paper.
1991 5 (Culture)	Multinational enterprises in less-developed countries examined the cultural and economic interaction between the MNE and the local economy. The performance of a given MNE in a given less developed country (LDC) is governed by the degree of entrepreneurship in the culture of the firm, the degree of entrepreneurship in the culture of the host country, and an interaction term. Some simple predictions about comparative economic development were derived.
1992 4 (Dynamics)	Organising for innovation was argued to be the key factor governing the long-run success of MNEs. The paper examined the pressures on managers in MNEs to innovate, and the process of innovation (from a knowledge management perspective). This was related to internalisation and to the internal organisation of skilled workers in the MNE. Source country institutions were argued to be influential in this process.
1996 3 (IJVs)	Provides a rigorous economic model of intentional JVs, using key factors suggested by internalisation theory in the strategic choice among JVs, licensing agreements and mergers. This paper explains the increasing use of IJVs in terms of the accelerating pace of technological innovation and globalisation of markets. If offered a range of predictions on the formation of JVs within and across industries, across locations and over time.
1998a 1, 4 (Theory, dynamics)	Identified flexibility as the hallmark of modelling the MNE as a response to the rationalisation and restructuring of the global economy. Flexible firms are attracted to locations with flexible host governments. Introduced the notion of "real options" into internalisation theory as a dynamic modelling technique.
1998b 2 (Entry)	A rigorous extension of the internalisation approach to foreign market entry strategy, providing a testable model of entry strategy, and identifying key parameters that determine the choice of modes of entry.
2001a 5 (Culture)	Examines the long-run development of the capitalist system, and pays particular attention to its moral basis and the problems arising from a culture of "excessive individualism" and its social costs.
2001b 1, 2, 3, 4 (Theory, entry, IJVs, and dynamics)	Shows that the rational action approach can be widely applied to produce simple analytical solutions to problems alleged to be excessively complex. "Economy of coordination calls for a division of labour in information processing and this in turn calls for cooperative behaviour of a social nature". This echoes a quote from *The Future of the Multinational Enterprise* that "social interactions will follow different rules in different places".
2002 with Gulamhussen 3, 4 (IJVs and dynamics)	This paper uses the real options approach to rationalise many practical aspects of decision-making in multinationals, including information gathering, procrastination and commitment. It encompasses incremental entry (as in the Uppsala approach) as a legitimate strategic variant in internationalisation processes.
2007 1, 4 (Theory and dynamics)	Provides a formal model of Edith Penrose's *Theory of the Growth of the Firm* and derives an analysis of the trade-off between product diversification and foreign market penetration that also makes a contribution to the understanding of speed of entry into foreign markets. The elaboration of Penrose's model advances our knowledge of the internationalisation of the firm by incorporating geographical expansion patterns, sequential decision-making and learning into the theory.

Area of contribution – key:
1 Theory: Formalising, extending and testing the theory.
2 Entry: Foreign market entry and development strategies.
3 IJVs: International joint ventures.
4 Dynamics: Innovation and dynamics.
5 Culture: The role of culture in international business.

Table 2 Buckley and Casson contributions by area

1	Formalising, extending and testing the theory 1985, 1998a, 2001b, 2007
2	Foreign market entry and development strategies 1981, 1998b, 2001b
3	International joint ventures 1988, 1996, 2001b, 2002 [with Gulamhussen]
4	Innovation and dynamics 1985, 1992, 1998a, 2001b, 2002 [with Gulamhussen], 2007
5	The role of culture in international business 1991, 2001a

(higher flexibility vs higher transaction costs) can be reduced by engineering trust, which substitutes for monitoring expenses. This implies increased costs in promoting a corporate culture that reinforces moral values.

The links between the morality of capitalism and the theory are multiple. Modelling of the global economy is best done by postulating a set of exogenous shocks that impact on the firm. The firm's response to this increase in uncertainty can be modelled using rational action approaches – this brings in real option modelling, which explains how the firm reacts to uncertainty through information gathering and entrepreneurial decision-making. This agenda is pursued in Buckley and Casson (2001b), where the issues are firmly placed in a systems theory perspective. Rule-driven behaviour is shown to be a rational managerial response to information costs. However, in other types of environment, entrepreneurial innovation is shown to be superior. Economy of coordination calls for a division of labour in information processing, and this (again) requires cooperative behaviour of a social nature. Penrose's model is formalised in Buckley and Casson (2007). In contrasting Penrose with Buckley and Casson, a trade-off is discovered between product diversification and foreign market penetration. This formalisation incorporates geographical expansion patterns, sequential decision-making, and learning into internationalisation theory.

Foreign Market Entry and Development

Much of international business theory has focused on the foreign market entry and development decisions of multinationals. Of crucial importance here is not only the direction of change but its timing, or what factors trigger a change in modes of foreign operation. Buckley and Casson (1981) provided a model of the timing of switches in foreign market servicing modes (export, licensing, foreign direct investment) under determinate conditions, depending on the growth of the individual foreign market and cost conditions. By positing a fixed set-up cost and differential variable costs of each entry mode, a sequential strategy is predicted.

This type of modelling was developed in Buckley and Casson (1998b). The model covered all the major market entry modes, distinguished between production and distribution, and took account of strategic interactions between the foreign entrant and its leading host country competitor. Suggestions for extending and improving the model concluded the paper.

IJVs

JVs represent a partial form of internalisation. They are popular at times of industrial restructuring, because they allow two or more firms to share access to a key resource without merging their entire business operations. The ambiguity of control involved in a JV had led some scholars to question their value. We argued, however, that the costs incurred by ambiguity of control are finite, and can be offset by a range of significant benefits. These benefits are linked to the flexibility of JVs, which is particularly valuable at times of global volatility: JVs allow firms to make incremental changes in one field of their operations without disturbing their other fields of operation. By embedding the theory of JVs within a general theory of the costs and benefits of alternative contractual arrangements we were able to show that JVs are chosen, like any other arrangement, in response to a trade-off that is governed by the same factors that affect other internalisation decisions (Buckley, 2002).

The internalisation approach to IJVs sees them as determined by three key factors: the internalisation of one or more key markets in intermediate good and services, indivisibilities in operations, and barriers to merger (Buckley & Casson, 1988). In these circumstances IJVs are an optimal solution to external conditions and a vital component in international strategy. IJVs are test-beds of new concepts because they are a classic device for mitigating mistrust between the parties who are cooperating for the first time. The exercise of mutual forbearance allows the build-up of trust, which is, in itself, a transaction cost-economising investment. The venture then takes on a life of its own as a result of the mutual commitment to cooperation. Investment in cooperative behaviour can generate a reputation for cooperation, which

can lead to future cooperative opportunities and enhanced value for the firm. This paper was produced (like the 1976 book) in opposition to current orthodoxy. Cynicism about cooperation was the order of the day, and JVs were widely perceived to be devices to exploit partners, dupe customers, and steal technology. Much of the interest of the research agenda arises because it has, at key points, challenged conventional wisdom (Davis, 1971).

This basic approach was extended and formalised in Buckley and Casson (1996). IJVs were explained in terms of the accelerating rate of technological innovation and the globalisation of markets. The strategic choice among JVs, licensing agreements, and mergers (the closest neighbours of IJVs) was explained by key factors arising from internalisation theory. A range of predications on the formation of IJVs within and across industries, across locations and over time was provided.

Dynamics: Innovations and Real Options

Right from the inception of this research agenda, innovation has been a fundamental feature of the analytical framework. Indeed, the emphasis on innovation can be contrasted with the monopolistic returns approach derived from Hymer (Buckley, 2006; Hymer, 1976). Buckley and Casson (1992) argued that the long-run success of MNEs will be determined by their ability to cope with the accelerating pace of innovation. Top management attention needs to be shifted from the management of routines to the management of innovation. Strictly Fordist management, reliant as it is on the precise synchronisation of operations within a continuous flow process, is unable to cope with the chance and surprise that is intrinsic to the innovation process. A key success factor in innovation is a high-trust culture that reduces the costs of supervision. The managerial challenges of innovating in a global economy are highlighted in Buckley and Casson (1998a). Flexible firms are attracted to locations with flexible host governments precisely because this is the ideal context for experimentation and innovation, not just in technical aspects of operations but also in marketing and organisational arrangements. The 1992 paper argues forcefully that source-country institutions (cultural attitudes to entrepreneurship, education, and training) have an important influence on the innovative ability of the firms.

Real options are an important analytical device for the understanding of the dynamics of multinationalisation (Buckley, Casson, & Gulamhussen, 2002). Real options reduce risk by giving decision-makers flexibility to respond to new information as it becomes available. This requires identifying information, foreseeing change, and putting into place a system that transfers information from its immediate recipients to the key decision-makers. IJVs can be identified as real investments that are contractual options for MNEs. Given that sources of supply, costs of supply, the intensity and location of demand are all uncertain, there are many states of the world where JVs (as real options) are optimal solutions to governance choices in MNEs. The modelling of such option structures explains the seeming irrationality of procrastination and delay in committing resources to new foreign ventures, and the cautious incremental approach to investment in many foreign markets.

The Role of Culture in International Business

One of the features of this research agenda is its concerted attempt to bring a rigorous analysis of cultural differences, at both firm and national levels, into its remit. One obvious place to look for cultural differences is between MNEs from developed countries and the less-developed countries in which they invest. The remit of Buckley and Casson (1991) was to examine both cultural and economic interactions between the entrepreneurial MNE and a traditional less-developed country. This paper paid particular attention to the geographical features that influenced entrepôt potential and therefore the development prospects of the host country (including coastlines, climate, trade routes, and natural endowments). This was combined with both the technical and moral elements of an entrepreneurial culture (including a scientific outlook and systems thinking) to predict comparative economic development. The dynamics of both entrepreneurship and culture are acknowledged. Globalisation modifies both entrepreneurial behaviour and culture. These interdependences were analysed by using the rational action approach to synthesise a traditional economic approach to the issues with modern sociocultural analysis.

The paper on the moral basis of global capitalism was completed just after the traumatic event of 11 September 2001 (Buckley & Casson, 2001a), and the subsequent attention to the clash of civilisations which that event brought about (Huntington, 1997). The 2001 paper investigated the view of human nature that underlies judgements of morality. It argued that morality is a vital underpinning of the efficient working of an integrated global

economy, because it is a substitute for monitoring, legalism, and mistrust in companies and other organisations – including government. The moral ambiguities of capitalism are still evident in 2009. Reconciliation of entrepreneurial individualism with virtue (moral behaviour) was a key project of the Scottish enlightenment, and remains so today (Herman, 2001). The analysis of international business is not, nor can it be, a purely technical matter; cultural differences, morality, and welfare issues remain at its heart.

CONCLUSION: THE IMPORTANCE OF MULTILEVEL ANALYSIS

This paper has reviewed the results of more than 30 years of research collaboration, and has set this in the context of research in international business in general. In our first book we began with a problem – how to explain the existence of the MNE and the way that it behaves. We found an answer, in conjunction with other scholars. But the answer to that question only raised new questions. As these questions were answered, so new questions multiplied, and we soon found ourselves with many more questions than we had started with.

This was progress of sorts, because the questions that we are now asking – 30 years on – are much smarter than the ones that we were asking to begin with. They are certainly more tightly focused. Instead of a single general and rather ill-defined question, we now have a set of specific, well-defined problems. The big problem has been broken down into little problems that are easier to solve. We know how to tackle the specific problems, but it still takes a long time to work through all of them.

Progress of another kind has been achieved as well. Just as every problem consists of a set of more specific problems, so that problem itself is a special case of an even bigger problem. If we can understand the bigger problem then we can solve lots of different specific problems in a single step. But how do we find out what the bigger problem is? One way is to explore analogies and metaphors. We may be able to find seemingly unrelated problems that are nevertheless fundamentally similar so far as their logic is concerned. By extracting the common logic of these problems, and examining it carefully, each individual problem can be viewed in a new light.

There are therefore two distinct problem-solving techniques: one is to break down a problem into smaller and more manageable sub-problems; the other is to embed the problem within a more general problem of which it is a special case. These two approaches are often regarded as conflicting. Thus "detail addicts" who focus on the specifics distrust "big picture thinkers" who go for generality, on the grounds that their speculations go beyond the available evidence, while big-picture thinkers distrust detail addicts on the grounds that "they cannot see for the wood for the trees".

In our view, the two approaches are complementary. It pays the problem-solver to go up to a higher level of generality in order to solve the fundamental issues, while at the same time driving down to a greater level of specificity in order to address practical outcomes. Looking at a problem simultaneously at different levels helps to put it into perspective, and thereby makes it easier to solve.

In pursuing our research agenda, we have engaged with several distinct but related problems. Each problem has been analysed as a subset of a wider problem. This produced an answer – but an answer of a very general nature. Having solved the problem in general terms, we then resolved the problem into a set of specific sub-problems that addressed particular issues arising at the empirical level. Using the solution to the general problem, these specific problems were then addressed in turn.

The careful reader of our work over the years will note that we have modified our opinions on a number of issues as we have progressed. We have not changed our views on fundamental issues, however, because we have seen no need to do so. In some respects, the theory of internalisation is quite unusual as a social science theory in the sense that it really works. There is no need to disguise weaknesses, or obfuscate difficulties; weaknesses can be acknowledged because they can be remedied, and difficulties can be recognised because they can be overcome. Failing systems of thought often degenerate through steady attrition; qualifications and complexities are added to salvage the system until it becomes more complicated than the phenomena it claims to describe, and it no longer has any heuristic value. Internalisation theory, by contrast, has, in our judgement, retained its vitality. It is as incisive today as it was when first put forward by Ronald Coase.

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