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COMPETITIVE ADVANTAGE AND THE EXISTENCE OF THE MNC: EARLIER RESEARCH AND THE ROLE OF FRICTIONS

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Abstract

This paper provides a counterpoint to Buckley and Hashai's paper "Is competitive advantage a necessary condition for the emergence of the Multinational Enterprise?". We agree with their conclusion that it is, in fact, *not* a necessary condition, but argue that the theoretical reasons behind this are different and more diverse than the ones they propose. We suggest that much extant economic theory is in fact consistent with their view that firms may internationalize without owning or achieving competitive advantages, and model various other ways in which imperfections can drive their overall result. We strongly applaud Buckley and Hashai's attempt to add more rigor to International Business theory and call for future work to extend this debate.

Keywords: Multinational corporation, competitive advantage, formal theory.

JEL Code: D23: F23; F61

INTRODUCTION

We are grateful for this opportunity to comment on Peter Buckley and Niron Hashai's (BH) paper, "Is competitive advantage a necessary condition for the emergence of the Multinational Enterprise?" (this issue), which partly summarizes and partly extends their earlier article (Buckley & Hashai, 2009). Overall, we are fully sympathetic towards attempts to add more rigorous reasoning to our field, both in terms of making assumptions and deductive chains fully explicit, and in terms of adopting a formal (mathematical) approach. We are particularly sympathetic of such exercises when they show that deeply ingrained ideas are special cases or not correct at all. We therefore certainly applaud the aim of BH. Nevertheless, management research inherently deals with highly complex phenomena (Hayek, 1964) and management researchers are typically less patient with the often heroic assumptions that characterize much of economics (Foss & Hallberg, 2014). In this commentary we bring this discord to the forefront of the debate about the emergence of MNCs, and at the same time present some challenges to the specific form of the modeling effort of BH, including some of the assumptions they make as part of this effort. We describe these in some detail in the following and discuss some ways in which their model can be taken a bit further. However, we begin by discussing the motivating assumptions or claims in the BH paper.

EXTANT RESEARCH ON COMPETITIVE ADVANTAGE AND THE EXISTENCE OF THE MNC

The motivation for BH (2014: 1) is that the "view that the possession of a competitive advantage is a necessary condition for the emergence of the multinational enterprise (MNE) is a cornerstone of the international business and international strategy literatures," which they also characterize as an "axiom for international business and international strategy scholars." Indeed, as we will explain below, we agree with BH than MNCs can, and do, arise independently of competitive advantages. In fact, we would even argue that, while many MNC scholars may indeed hold this view, they do so against what should be their better knowledge. The MNC arises when a national firm takes ownership of productive asset in a foreign country for the purpose of setting up production (broadly defined) in that country while still operating in the domestic country, and extant literature suggests that this may happen for a number of reasons.

First, internationalizing firms may seek to secure advantages by means of asset ownership that they currently *do not* have, and which are not available at functioning markets at reasonable cost.

Markets may not exist for the relevant advantages (e.g., firms establishing subsidiaries to benefit from positive technological externalities in a geographical cluster); or, firms may face monopolist suppliers (so that setting up production becomes a means of circumventing the exercise of market power); or, the market may be fraught with transaction costs. Such "asset-seeking" motives for foreign direct investment do not presuppose the possession of a competitive advantage, in fact, quite the contrary. As BH acknowledge, the possibility of asset-seeking FDI is by now a well-established component of the "competitive advantage" view of MNCs. We would add to that by suggesting that the counterexamples they evoke—in particular, the rise of emerging market MNCs—might in fact be explained by such motives¹.

Second (and more critically), linking competitive advantage and the existence of the multinational corporation virtually always involves horizontal integration or diversification across national borders. Typically, the firm is argued to possess some knowledge that while perhaps tacit and complex nevertheless is "fungible" within the MNC; thus, given the scalable nature of this asset, the direct resource costs of utilizing it as an asset that underpins a foreign direct investment are small. Moreover, given the characteristics of the relevant knowledge, it is often the case that integration across borders is preferable to capturing rents from the knowledge by means of, for example, licensing arrangements (e.g., Teece, 1986). However, this story mainly accounts for the boundaries (across borders) in the horizontal dimension, and firms also have boundaries in the vertical dimension. Thus, it is entirely conceivable (and for empirical evidence, see, e.g., Gatignon & Anderson, 1988; Hanson et al., 2005) that firms may integrate vertically across national borders in order to reduce ex post haggling costs with foreign suppliers or customers (Williamson, 1985) or cope with problems of inefficient ex ante investments (Grossman & Hart, 1986). None of these motives for forming a vertically integrated multinational corporation necessitate the possession of competitive advantage. In fact, our dominant theories of firm boundaries are entirely silent about such advantage.

Third, it is quite possible that MNCs can arise *not* as a result of competitive advantage but as a result of specialization in certain market segments that can be served globally. As described by New Trade Theory (Krugman, 1979), this type of specialization is a likely outcome when the industry structure is characterized by monopolistic competition and production technology by high

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¹ To be precise, one may ask two seemingly similar but fundamentally different questions: (1) "Is a pre-existing competitive advantage a necessary condition for a domestic firm to become multinational?" and (2) "Is a competitive advantage a necessary condition for the existence of a Multinational Enterprise?". Asset-seeking motives imply that the answer to (1) is "No", but does not say much about (2). We argue below that the answer to (2) is also "No", for different reasons.

economies of scale. Paul Krugman won the Nobel Prize in 2008 for this and other insights, but scholars of the MNC have so far been surprisingly reluctant to pick up on it and draw out the full implications of this model for the theory of the MNC. Yet, if global market servicing requires horizontal FDI, perhaps because of prohibitive transportation costs (Helpman, Melitz, & Yeaple, 2004)² or transaction costs that necessitate geographical proximity to customers (Cannon & Homburg, 2001), intra-industry trade may be translated into intra-firm trade as well and thus lead to the emergence of the MNC. Admittedly, fusing these results with the idea of competitive advantage is difficult due to a broader lack of integration that still exists between the economics literature in which rivalry is defined by industry structure (monopoly, oligopoly, monopolistic competition, and perfect competition) and the RBV in which it is defined by resource positions (competitive advantage and disadvantage). Hence, in a monopolistic competition setup, can a firm that addresses a particular global market segment be said to have a competitive advantage? Which other firms constitute the benchmark for such an advantage? If the benchmark consists of the non-existent firms that could potentially have served the same market segment, one might indeed argue that a competitive advantage (or at least an absence of competitive disadvantage) is necessary for the firm's internationalization and in fact for its existence. However, if the benchmark is the firm's (imperfect) competitors in its broadly defined industry, then the MNC need have no competitive advantage, and may in fact have a disadvantage in the form of higher costs: it will still be able to serve its global segment because it is protected from the other firms by the horizontal differentiation in the market.

Fourth, and finally, we contend that the whole debate about the conditions that lead to the emergence of the MNC may have taken place at a too high level of abstraction, because it lumps together two vastly different ways in which firms internationalize, namely through greenfield investments and through acquisitions. It can be argued, as we will show below, that greenfield investments in foreign countries where superior competitors exist is an uphill battle and that this would indeed prevent MNCs without competitive advantage from arising. However, the examples that BH initially evoke are not greenfield investments, but mergers and acquisitions between developed and emerging market firms. Buying a foreign firm in a horizontal acquisition has two performance-enhancing effects: it eliminates a competitor, which tends to increase profits for all remaining firms in the industry (Kim & Singal, 1993), and it allows the resulting merged firm to

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² Interestingly, in the model of Helpman et al. (2004), if transportation costs are low enough it will only be the most productive firms that engage in FDI. This suggests that, while competitive advantage is not a necessary condition for the emergence of a MNC, it might make it more likely.

lower its average costs by integrating fixed costs and achieving economies of scale (Krugman, 1979). These two effects may offset the costs of internationalizing without a competitive advantage.

EXTENDING BUCKLEY AND HASHAI: TAKING TRANSACTION COSTS INTO ACCOUNT

Implicit and Explicit Assumptions

Because their approach is formal, BH make most of their assumptions explicit. Yet, we would argue that as always a few of these assumptions remain implicit, in particular assumptions about transaction costs. Thus, BH argue that considerations of maximizing total utility across entrepreneurs and workers show that multinational firms may be the utility maximizing alternative. However, a utility maximizing organizational alternative will only be chosen if the relevant parties can bargain and transfer utility among them at zero or low cost (Milgrom & Roberts, 1990). Otherwise, transaction costs will block utility-increasing "Coasian" trade (Coase, 1960). Given that BH adopt total utility maximization (and do not say that this is net of transaction costs) as the relevant criterion, one might infer that they must assume that transaction costs in general are zero. However, this is at variance with their explicit assumption of high transaction costs in the markets for knowledge. Thus, their assumptions about transaction costs are not only somewhat implicit, but also "asymmetrical" (Foss & Hallberg, 2014).

Introducing imperfections selectively in an otherwise "perfect" model (e.g., perfect competition) is, of course, conventional in the context of formal modeling, particularly in information economics, contract theory and similar fields of applied microeconomics, and has the advantage of highlighting *the* specific "imperfection" or "friction" (*aka* transaction costs) that drive a given result. In the specific context of BH's model, their assumption that markets for knowledge are fraught with imperfections is necessary to their result. However, as we demonstrate in the following, other imperfections, notably imperfections in product markets, can also do the job. We first build a simple model of perfect product markets and show that the "conventional wisdom" that BH criticize hold true under these conditions, but that imperfections in such markets is another way to generate the overall result of BH, namely that national firms without a competitive advantage can gain from internationalizing.

Perfect Product Markets

We extend BH's reasoning by considering greenfield investments which seem to be left out of BH's theory (they seem to rather consider cross-border M&As). Consider first a potential greenfield investment by a firm (firm 2) that possesses a competitive disadvantage relative to a competitor (firm 1) in the foreign country. Suppose that the degree of product market rivalry between these two firms is very intense if they are exposed to each other. A very simple way to model this is using the Value-Price-Cost framework (Hoopes, Madsen, & Walker, 2003) and applying Bertrand-style competition; that is, all consumers always choose the best value proposition (V-P). Suppose that the two firms have costs C_1 and C_2 , respectively, with $C_1 < C_2$. Suppose that both firms have identical values V in their respective home countries. However, due to a liability of foreignness (Zaheer, 1995) they only have $V-L_1$ and $V-L_2$ (L>0), respectively, as soon as they enter a foreign market. Finally, we assume that exports are prohibitively costly for the reasons mentioned in the introduction, and that there is a (possibly very small) fixed entry cost of F.

Will it ever be in the interest of the competitively disadvantaged firm (2) to internationalize by forming a MNC? To answer this, we first need a solution concept for the model. The general result given the type of competition assumed here is that the firm with the highest V-C span wins, because it can offer a slightly higher value proposition to consumers than the other firm can, taking the entire market, while still retaining positive margins and thus making a profit. With this condition, firm 2 is competitive in firm 1's market if $V-L_2-C_2>V-C_1 \Leftrightarrow L_2< C_1-C_2$. Clearly, this is impossible given the specification of the parameters, so the competitively disadvantaged firm cannot internationalize since it would not be able to recoup even an infinitesimally small entry cost (F). Not even asymmetric liabilities of foreignness (e.g. $L_1>L_2$) change this fact: as long as L_2 is non-negative, the condition above can never be fulfilled and so the firm will remain a domestic one (and in fact the other firm's liability of foreignness will not matter for that decision at all).

The competitively advantaged firm, on the other hand, may internationalize if it can win over the other firm in the foreign market: $V - L_1 - C_1 > V - C_2 \Leftrightarrow C_2 - C_1 > L_1$ —a formal expression of the well-known tenet that the size of the internationalizing firm's competitive advantage needs to be larger than the liability of foreignness for which it must compensate. If this inequality is satisfied, the firm sets a price in the foreign market of $V - L_1 - (V - C_2) - \varepsilon = C_2 - L_1 - \varepsilon$, where ε is a very small amount. For $\varepsilon \to 0$, it has margins of $P - C = (C_2 - L_1) - (C_1) = (C_2 - C_1) - L_1$, thus earning

profits proportional to the gap between its competitive advantage and the offsetting liability of foreignness (before paying the fixed entry cost).

These results largely reflect what BH call the conventional wisdom in IB. Yet, the formalization of them provides the benefit that it brings the implicit assumptions to the surface, and they turn out to be strong ones indeed, as they limit the outcome to greenfield investments under conditions similar to perfect competition. As soon as we relax any one of those two assumptions, the conventional wisdom falls on its face.

Competitive Imperfections: Transaction Costs in Product Markets

One way to relax the assumption of extreme rivalry is to introduce what Chatain and Zemsky (2011) call "frictions" in the product market. These are various kinds of transaction costs that may hinder mutually beneficial trade from taking place, illustrating our earlier point that transaction costs are key to the reasoning of BH. Whereas they introduce transaction costs in markets for knowledge to drive their results, we show that similar results can result from introducing transaction costs in product markets; thus, given transaction costs or "frictions" in product markets, firms that do not possess a competitive advantage may still find it profitable to establish a MNC.

Following Chatain & Zemsky (2011) we construe the market as a situation of free-form bargaining between consumers and sellers, and assume that each supplier fails to make it to the negotiation table with probability f. We normalize the size of each market to 1 and further assume that, when there is a surplus to be bargained over, the firm has all the bargaining strength vis-a-vis the consumers. With these assumptions, firm 2 would earn expected profits of $f(1-f)(V-L_2-C_2)-F$ from entering the market of firm 1 (whereas firm 1 would earn $f(1-f)(V-L_1-C_1)+(1-f)^2(C_2-C_1-L_1)-F$ entering firm 2's home market). It can quickly be verified that the perfectly competitive model described above is a special case of this model with f=0. More importantly, with frictions f>0 it is possible that the competitively disadvantaged firm can make a profit entering the market of its superior competitor. For example, with V=10, $L_1=L_2=2$, $L_1=4$, $L_2=6$, and $L_1=1$, this firm's entry profit becomes $L_1=1$, which is positive at moderate levels of friction $L_1=1$, thence, competitive imperfections allow competitively disadvantaged firms to internationalize into the markets of superior rivals. The parallel to New Trade Theory is obvious, since the horizontal differentiation in the monopolistic competition model is just another way to model competitive imperfections.

Mergers and Acquisitions: Hymerian Reasons for the Existence of the MNC

Even (and especially) if the degree of competition between the firms is extremely high, internationalization by acquisition is an altogether different value proposition compared to the greenfield expansion option. Suppose that the two firms in the original example merge. If the competitive advantage of the strong firm is based on technological knowledge which is both fungible (Teece, 1986), scale-free (Levinthal & Wu, 2010) and transferable within the firm, the resulting MNC will create more value than the two individual firms could, evoking the theory of the MNC as a vehicle for knowledge transfer (Teece, 1986; Kogut & Zander, 1993). However, even if this knowledge is completely "sticky" within the firm (Szulanski, 1996)—for example, because it is tacit or causally ambiguous (Lippman & Rumelt, 1982) or because of resistance towards the knowledge in the recipient unit, there are strong competitive motivations for the firms to merge.

Thus, the resulting MNC would be a monopolist in both markets, and be able to set a price just below V, earning $V - C_1$ and $V - C_2$ in the two markets, respectively. While this is no different from the situation before the two firms had an opportunity to internationalize, it may be better than the situation that would arise if firm 1 internationalized into firm 2's market, in which case it would earn $C_2 - C_1 - L_1$ in that market. Hence, if $V - C_2 > C_2 - C_1 - L_1$ —essentially, if there is enough consumer value to appropriate—the merged firm would be more valuable than the sum of the two individual firms, not because of synergies but because the merger prevents 'organic' internationalization and the associated increase in rivalry. This example, while admittedly highly stylized, comes uncomfortably close to the Hymerian notion that the MNC arises, not as a vehicle for exploiting or creating competitive advantages, but as an "instrument of restraining competition between firms from different nations" (Hymer, 1970: 443).

Which Firm is Internationalizing?

The question is which firm is internationalizing here? Arguably both are, but the tendency is to see the acquiring firm as the internationalizing one. BH motivates their paper in part with examples of emerging market firms acquiring firms that have superior technological and marketing assets, suggesting perhaps that these are internationalizing firms without competitive advantages and thus warrant a theoretical explanation. Yet the strategy literature offers relatively few predictions about "who buys whom", the most salient one emerging from property rights theory (Grossman & Hart, 1986). According to this perspective, it is actually not the relative competitive (dis)advantage of the two firms, but, given incomplete contracts, rather the relative incentive effects on their owner-entrepreneurs in terms of investment behaviors, that determine the direction of the acquisition.

Thus, if firm 1 integrates firm 2, this strengthens the incentives of the owner-entrepreneurs of firm 2

(they can now appropriate the surplus from investing in the combined operation) while it weakens those of the owner-entrepreneurs of firm 1 (they are now salaried managers). We began by assuming that $C_1 < C_2$. It seems natural to assume that the competitive advantaged firm should integrate the disadvantaged one. However, this may not be the case, as it is entirely conceivable that strengthening the incentives of the entrepreneur-owners of firm 2 matter more to the profitability than strengthening the incentives of the entrepreneur-owners of firm 1. For example, it may be easier to reduce costs in firm 2 (where they are high) than in firm 1 (where they are already low).

Also, realistically, capital market imperfections may add to that story since the financial capacity of firms from rapidly growing emerging markets may exceed that of credit-crunched Western firms during the financial crisis. Capital market imperfections, like the incomplete contracts that drive the above property rights reasoning, are results of transaction costs. Therefore, these examples reinforce our earlier point that being explicit about what exactly is assumed about transaction costs is necessary to a clear discourse in the MNC field, a point forcefully made by David Teece (1986) almost three decades ago.

CONCLUSIONS

In sum, BH have done us all a great service by challenging what may be an ingrained assertion in large parts of the IB research community that competitive advantage is a necessary condition for the emergence of MNCs. We concur with their overall position, but also argue that the theoretical mechanisms behind this fact are more diverse and nuanced than what they suggest, and that a fuller integration of economics into the strategy literature than what currently exists would have made that more salient. We hope that future work, by extending the approach of BH or drawing on the perspectives we have evoked in this commentary, can shed further light on the boundary conditions for the internationalization of firms.

REFERENCES

- Buckley PJ, Hashai N. 2009. Formalizing internationalization in the eclectic paradigm. *Journal of International Business Studies*, **40**(1): 58-70.
- Cannon JP, Homburg C. 2001. Buyer–supplier relationships and customer firm costs. *Journal of Marketing*, **65**(1): 29–44.
- Chatain O, Zemsky P. 2011. Value Creation and Value Capture with Frictions. *Strategic Management Journal*, **32** (11): 1206-1231.

- Coase RH. 1960. The problem of social cost. *Journal of Law and Economics*, **3**: 1-44.
- Foss NJ, Hallberg N. 2014. How symmetrical assumptions facilitate theoretical advance in strategic management: the case of the resource-based view." *Strategic Management Journal* (forthcoming).
- Gatignon H, Anderson E. 1988. The multinational corporation's degree of control over foreign subsidiaries: An empirical test of a transaction cost explanation. *Journal of Law, Economics, and Organization*, **4**: 305-326.
- Grossman SJ, Hart O. 1986. The costs and benefits of ownership: A theory of vertical and lateral integration. *Journal of Political Economy*, **94**: 691-719.
- Hanson GH, Mataloni RJ, Slaughter MJ. 2005. Vertical Production Networks in Multinational Firms. *Review of Economics and Statistics*, **87**: 664-678.
- Hayek FAv. 1964. The theory of complex phenomena. In idem. 1967. *Studies in Politics, Philosophy and Economics*. London: Routledge and Kegan Paul.
- Helpman E, Melitz MJ, Yeaple SR. 2004. Export Versus FDI with Heterogeneous Firms. American Economic Review **94**, 300-316.
- Hoopes DG, Madsen TL, Walker G. 2003. Guest Editors' Introduction to the Special Issue: Why is There a Resource-Based View? Toward a Theory of Competitive Heterogeneity. *Strategic Management Journal*, **24**: 889–902.
- Hymer S. 1970. The efficiency (contradictions) of multinational corporations. *American Economic Review*, **60**(2): 441-448.
- Kim EH, Singal V. 1993. Mergers and market power: Evidence from the airline industry. *American Economic Review*, **83**: 549–569.
- Kogut B, Zander U. 1993. Knowledge of the firm and the evolutionary theory of the multinational corporation. *Journal of International Business Studies*, **24**: 625-645.
- Krugman PR. 1970. Increasing Returns, Monopolistic Competition, and International Trade. *Journal of International Economics*, **9**: 469-79.
- Levinthal DA, Wu B. 2010. Opportunity costs and non-scale free capabilities: profit maximization, corporate scope, and profit margins. *Strategic Management Journal* **31**(7): 780-801.
- Lippman SA, Rumelt RP. 1982. Uncertain Imitability: An Analysis of Interfirm Differences in Efficiency under Competition. *The Bell Journal of Economics* **13**(2): 418-438.
- Milgrom P, Roberts J. 1990. Bargaining cost, influence cost, and the organization of economic activity. In Alt, J, Shepsle K, eds. *Perspectives on Positive Political Economy*. Cambridge: Cambridge University Press.

- Szulanski G. 1996. Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic Management Journal*, **17**: 27-43.
- Teece, D.J. 1986. Transaction Cost Economics and the Multinational Enterprise: An Assessment. *Journal of Economic Behavior and Organization*, **7**: 21-45.
- Williamson, OE. 1985. The Economic Institutions of Capitalism. New York: Free Press.
- Zaheer, S. 1995. Overcoming the liability of foreignness. *Academy of Management Journal*, **38**(2): 341–363.

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