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## **Macromarketing and International Trade: Comparative Advantage versus Cosmopolitan Considerations**

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### **ABSTRACT**

Within the context of international trade the case study method is used as an analogue of a natural experiment to contrast the economic concept of "comparative advantage" with the social network "cosmopolitanness" construct. Specifically, a conceptual reconciliation between these macro/micro theories is developed and then rival propositions are derived pertaining to the initiation of new export ventures. These alternative explanations are juxtaposed in an empirical setting and this not only provides an approximation of a "crucial test" but also demonstrates the rather unusual situation (in marketing) of hypothesis testing with the qualitative case study method on macro to micro translations. The findings favored the social exchange cosmopolitan explanation and led to the rejection of the hypothesis derived from comparative advantage.

## INTRODUCTION

In the introduction to their article on “Methodological Issues in Macromarketing” Venkatesh and Dholakia (1986, p.36) state that although macromarketing is now accepted as a “legitimate” field of enquiry and while the debate “as to what constitutes macromarketing” continues, “we can expect a growing discussion on how to deal with methodological and measurement issues.” Yet, as they recognize, the two issues are inexorably linked and one delimits and defines the other. While for our purposes it is unnecessary to enter into undue enumeration (see, for example, Hunt 1976 and Hunt and Burnett 1982) it is clear as stated by Moyer and Hutt (1978, p.5) that there are two aspects that capture the essence of macromarketing. First, micromarketing “deals with small, individual units, the latter (macro) with aggregations;” and second, micro activities are focused on “enterprise welfare” while macro is concerned with “social welfare.” Essentially this broad conceptualization has implications for both the topic areas addressed and the methodological issues faced by macromarketing scholars (Venkatesh and Dholakia 1986). It is our purpose to contribute to the methodological development in macromarketing by illustrating the use of the case study method as an analogue of a natural experiment in the general context of international trade – an activity crucial to human welfare. Specifically, we develop a conceptual reconciliation between the macro/micro theories pertaining to the initiation of exports. We then juxtapose the derived theoretical propositions and conduct an analogue of the “crucial experiment” (Armstrong 1979, Chamberlin 1897, Platt 1964, Sternthal, Tybout and Calder 1987) using the case study method. In doing so we will provide not only an approximation of a “strong test” (Platt 1964) of the theoretical explanations, but demonstrate the rather unusual situation (in marketing) of hypothesis testing with the qualitative case study method on macro to micro translations (Kelle 1995, Lee 1989, Miles and Huberman 1994, Venkatesh and Dholakia 1986).

This paper is organized around a “crucial test” of two rival explanations relating to the formation of international trading ventures. In the first part of the paper existing macro-level theories are reviewed and their testable micro-level implications are derived. Next, case study research is presented as the methodology of choice when the aim is to investigate some causally-complex phenomenon within its contextual setting. Finally, data relating to 31 export initiations are evaluated against the rival theoretical patterns and some conclusions are drawn in light of the study’s inherent limitations.

## CONCEPTUAL DEVELOPMENT

Whatever the definitional controversies, macro scholars face conceptual and methodological problems that, although perhaps not unique, are nonetheless daunting (Bollen, Entwisle and Alderson 1993, Klein, Tosi and Canella 1999, Venkatesh and Dholakia 1986). Theory development and empirical research in macromarketing requires a movement across levels (macro to micro and micro to macro) which brings with it problems associated with conceptual imprecision, aggregation, disaggregating, small samples and populations that often preclude strong generalizations. Venkatesh and Dholakia (1986) have provided a framework and a challenge for macromarketing theory development and research. Taking this as a point of departure, it is our purpose to address an important “social welfare” issue – international trade and the initiation of exports – and to develop a macro to micro theoretical basis for its evaluation. Further, we propose to illustrate the use of the case study method in a natural experiment-like framework (Lee 1989) to develop a basis for a “crucial test,” of two rival explanations for the phenomenon of export initiation. A “crucial test” involves the

development of alternative explanations for a phenomenon and juxtaposing these in an empirical context so as to determine which one provides the better fit to real world conditions. This approach is consistent with “multiple working hypotheses” as proposed by Chamberlin (1897) and Armstrong (1979), “strong inference” as suggested by Platt (1964) and the comparative approach as advocated by Sternthal, Tybout and Calder (1987). The use of the case study method in this “hypothesis testing” context is important for macromarketing scholars who often must work with small samples sizes in contexts that are difficult to quantify (Kelle 1995, Lee 1989, Miles and Huberman 1994). The first step in this process is the articulation of a theoretical basis for the study.

In this part of the paper we propose to contrast two explanations for the initiation of exports, a process that involves a translation of macro theories to their micro implications. The first explanation comes from the traditional economics paradigm where trading decisions are seen as being determined by the relative attractiveness of conditions in the domestic market, and where the merits of initiating new ventures are assessed on the basis of optimising returns (Root 1977; Young et al. 1989). The second conceptual framework will be developed from the social exchange paradigm that highlights the social context of the export exchange. In this *cosmopolitan* explanation, based on the empirically derived insights of diffusion and social network theories, export initiation is presented as a function of the extent of communication through the interpersonal networks linking the transacting parties.

### **Conceptual Foundations I – Comparative Advantage & National Competitive Advantage**

Historically the dominant logic explaining international trade has been framed by economists in terms of the classical theory of comparative advantage (and its neoclassical derivatives), and, more recently, the revolutionary new trade theory. Management theorists have also considered the reasons for trade and, among this group, Porter (1990) has made the most significant contribution to date with his theory of national competitive advantage. In this context the focus of analysis shifts from macro-level theories that explain trade between nations, to the micro-level focus relating to the export behavior of the individual firm. Typically these differences are indicated by the dependent variable discussed; the macro-level literature pertains to *international trade*, while the micro-level research relates to *exporting*. These differences are not irreconcilable. The trade theories, for example, explain trade between nations with reference to *microeconomic* phenomena within nations, such as firms and industries. This point will be taken up below.

#### *Comparative Advantage*

The determinants of international trade have been of scholarly and political interest since the eighteenth century when Smith (1776) laid the axiomatic foundation captured by the paraphrased statement, “trade makes possible the gains from specialization.” This observation became the foundation of classical and modern trade theories. The three theories reviewed below – comparative advantage, new trade theory, and national competitive advantage – all begin with the premise that international trade is the result of specialization. Ricardo (1817) made the next significant contribution by stating the law of comparative advantage, that is, “countries tend to export those goods which have the lowest relative costs - and therefore prices - in autarky” (Deardorff 1984, p.470). However, while Ricardo, and later Mill (1848), presented a powerful and rational argument for free trade and effectively showed that trade was the result of differences in a countries’ production functions, neither attempted to explain why these differences existed in the first place.

The classical doctrine of comparative advantage may be thought of as comprising both the law of comparative advantage (as developed by Ricardo), and a collection of assorted sub-theories or models that attempt to explain those differences between nations that lead to trade. Economists generally regard the factor proportions model developed by Heckscher (1919) and Ohlin (1933) and its eponymous theorem as being pre-eminent of these (Ethier 1988). The Heckscher-Ohlin (1991) or H-O theorem explains the basis for specialization, and hence trade as the result of differences in the factor endowments of nations: “a country has a production bias towards, and hence tends to export, the commodity which uses intensively the factor with which it is relatively well endowed” (Jones and Neary 1986, p.15). However, while the logic underlying the H-O interpretation of comparative advantage is intuitively appealing, empirical measurement of the theory has proven difficult.

### *New Trade Theory*

The growing discontent amongst economists with the inability of the neoclassical trade theories to explain both the volume and composition of real world trade, has led some scholars to question the assumptions underlying the various models. Significantly, economists have realized that by relaxing the assumption of constant costs, or constant returns to scale, required of the neoclassical theories, many empirical anomalies can be resolved. For example, by recognizing the existence of *increasing returns* (or decreasing costs) to scale, it becomes possible to account for the existence of intra-industry trade.

The eclectic theoretical work examining the relationship between increasing returns to scale and international trade has come to be collectively referred to as “new trade theory” (Krugman 1990). Unlike the theory of comparative advantage, new trade theory is characterized by diverse empirical research that is not incorporated into any general, overarching theory. Instead, new trade theory refers to a body of work built around the law of increasing returns and encompassing a variety of theoretical models (Helpman and Krugman 1985; Leamer 1994). (The law of increasing returns states that “an increase in labor and capital leads generally to improved organization, which increases the efficiency of the work of labor and capital” (Marshall 1920, p.265).) The distinguishing feature of new trade theory is that it considers increasing returns as a sufficient basis for trade independent of any *ex ante* differences in factor endowments (Ethier 1979; Helpman 1984; Krugman 1987; Melvin 1969; Romer 1987). The existence of increasing returns will even give rise to trade between countries that are “identical in taste, technologies, and factor endowments” (Helpman and Krugman 1985, p.261). Thus, while the insights of Ricardo and Mill have stood for years as the prevailing model of international trade, these explanations, while valid, are only partial (Krugman 1988). New trade theory supplements comparative advantage by suggesting a relationship between the scale of production and the propensity to export.

Despite the theoretical progress made in the area of increasing returns, further advances are hindered by the lack of a general theory of imperfectly competitive market structures. Under such conditions the strategic moves of individual firms become important (Krugman 1986). The relationship between firm strategy and industry structure has historically been the domain of industrial organization (IO) research. While economists have clearly benefited from the adoption of IO concepts, greater progress in the strategy-structure debate has been made in the area of management research. Management theorists, unlike economists, typically place more emphasis on imperfect competition and firm strategy and adopt a more empirically grounded approach to theory building. From the management literature the work on the determinants of international trade by Porter (1990) has given rise to the concept of a *competitive*, rather than comparative, advantage as a basis for trade. Whereas comparative advantage refers to the allocation of scarce resources to their most

productive uses, competitive advantage refers to the management of resources such that an advantage (yielding profits) over rivals is established. Whereas comparative advantage is determined by considering the various opportunity costs associated with different production alternatives, competitive advantage can only be defined in comparisons with other rival producers.

Traditionally the concept of competitive advantage has been applied at the level of the individual firm. Firms compete for profits with others in the same industry and achieve competitive advantage, or superior returns, by relentlessly improving and upgrading their productivity. Porter (1990) extended the scope of competitive advantage by applying the concept at the level of the nation and arguing that the benchmark of productivity can be used to explain the variation in national economic performance. Porter reasons that the productivity with which a nation's resources are employed is the "prime determinant" of a nation's standard of living. Thus, national competitive advantage is created, rather than inherited, as the direct result of the nation's firms achieving high levels of productivity relative to foreign rivals. To explain trade, therefore, implies an understanding of those domestic conditions which determine productivity levels in specific industries.

### *National Competitive Advantage*

The theory of national competitive advantage is directed towards the goal of explaining those national attributes that determine "productivity and the rate of productivity growth" (Porter 1990, p.9). For Porter national competitiveness is synonymous with national productivity: A nation attains its primary economic goal of a high and rising standard of living for its citizens by increasing the productivity with which the nation's limited resources are transformed into output. However, the pursuit of productivity growth is constrained by the reality that resources are limited (as per the dictates of comparative advantage), and so Porter emphasizes the role of transformation by introducing the concept of innovation into the relationship as an intervening variable. Innovation is defined broadly in terms of productivity growth and although innovation occurs within the firm, it is the inducement of innovation by sources external to the firm that interests Porter. Porter's (1990) central thesis can be stated as follows: National competitive advantage results when conditions in the nation collectively provide an environment that supports improvement and innovation at the level of the firm. Put another way, the unique historical and cultural context of a nation exerts a direct influence on the innovating activities of the individual firm. Thus, productivity levels are to be explained as the result of innumerable cultural traits.

Although every nation is different, Porter (1990, p.71) proposes four broad constructs or "determinants" through which a nation's unique cultural traits act and interact to "create the context in which a nation's firms are born and compete." The four broad attributes describe; "(1) the nation's position in factors of production, (2) the nature of home demand for the industry's product or service, (3) the presence or absence in the nation of supplier industries and related industries that are internationally competitive, and (4) the conditions in the nation governing how companies are created, organized, and managed, and the nature of domestic rivalry." Collectively these four determinants interact in a mutually reinforcing system that Porter labels the "diamond" of national advantage.

Before an empirical assessment of the theory of national competitive advantage on the determinants of international trade is considered, it is necessary to first explicitly identify those relational statements that link the core concepts of the theory. First, the influence of *factor conditions* in the theory of national competitive advantage may be observed through the efficient deployment of existing factors, and the creation of specialized and advanced factors. Second, the influence of *domestic demand* conditions on the innovating activities of

the firm is evident in the pressures that stimulate investment when local buyers are among the world's most sophisticated and demanding, and in the shaping of the direction of the subsequent innovation when the needs of local buyers anticipate international needs. Third, the influence of internationally competitive *supplier and related industries* present within the nation is apparent in the efficient and sometimes preferential access to inputs provided by world-class suppliers and, more importantly, in the exchange of information that results from coordination with firms in both supplier and related industries. The fourth broad attribute, *firm strategy, structure, and rivalry*, describes the influence of the industry on the innovating activities of the firm. The influence of the industry is felt in two, related ways. First, Porter (1990, p.108) argues that "nations will tend to succeed in industries where the management practices and modes of organization favored by the national environment are well suited to the industries' sources of competitive advantage." Insofar as competitive strategy is embodied in the notion of positioning within industries, industry structure can be seen to determine competitive outcomes by directing the investment activities of firms. Second, the influence of the industry is felt by creating pressures for innovation through domestic rivalry. However, it is the intensity of industry rivalry, and not the number of rivals as such, that is important: "If there is no effective rivalry among competitors the advantages of domestic competition are nullified" Porter (1990, p.122).

These four broad determinants are not the only influential variables in Porter's explanation of innovation but they are the most fundamental, while the theoretical statements linking them with national competitive advantage, the dependent variable, are the most frequent and explicit. Two other concepts (chance and government) are included by Porter in his theory, but these variables are treated as exogenous or givens operating largely outside of the theoretical system. In addition, other concepts, such as invention and entrepreneurial behavior, which Porter says "are at the heart of national advantage," are also discussed (Porter 1990, p.125-126). However, these variables are defined with direct reference to the national diamond – "the determinants play a major role in locating where invention and entrepreneurship are most likely to occur" – and thus may be taken as Porter's own theoretical derivations. Collectively the four broad determinants interact to create the context in which innovation is predicted to occur. Having identified the causal statements linking the determinants with the dependent variable, the task now becomes one of identifying the implications of the theory that pertain specifically to the determinants of international trade.

For Porter, the determinants of international trade are, like the determinants of national competitive advantage, to be found in the context defined by the national diamond. It can be inferred that the propensity to trade, like the propensity to innovate, is influenced by the relative "favorableness" of the national diamond. The validity of such an inference rests on the similarity of the roles played by both "trade" and "innovation" as variables affecting national productivity growth. Given that innovation includes "both technology and methods, encompassing new products, new production methods, new ways of marketing, identification of new customer groups, and the like" (Porter 1990, p.70), it can be inferred that international trade (i.e., the export of products to *new* foreign markets) is one particular kind of innovation that, like any innovation, leads to productivity growth. Based on a careful reading of Porter's work this seems to be a legitimate association to make. The implication for this study is, however, that the determinants of innovation will similarly be the determinants of trade.

The theory of national competitive advantage thus explains international trade as the result of productivity differences between nations. These underlying differences are themselves defined in terms of the context of the national environment or diamond. Moreover, trade is a mechanism for reinforcing advantages that have already been developed at home. "The nation whose firms gain (competitive advantages) in an industry are able to

export” (Porter 1990, pp.70-1). Thus, for Porter, international trade is determined by conditions in the domestic market, such as sophisticated and demanding buyers and fierce domestic rivalry. For example, “vigorous local competition... pressures domestic firms to sell abroad in order to grow” (p.119), while a saturated home market results in “vigorous efforts by a nation’s firms to penetrate foreign markets” (p.96). In the absence of these determinants, the inference is that trade will not take place: “With little domestic rivalry, firms are more content to rely on the home market” (p.119).

To summarize the discussion so far, we have first outlined the factor proportions interpretation of *comparative advantage* provided by Heckscher (1919) and Ohlin (1933) that explains trade as the result of differences in the factor endowments of nations. Under comparative advantage specialization is based on relative factor abundances given an inverse relationship between the price and quantity of a commodity. Second, by assuming the existence of *increasing returns* to scale, Young (1928), Kaldor (1972), Krugman (1990), and others have acknowledged that international trade could also be based on the inherent advantages of specialization itself. Finally, Porter’s (1990) contribution shows that specialization may also be the result of innumerable cultural differences, which he aggregates into four broad national attributes. For Porter (1990, p.71) international trade is based on the relative favorableness of those conditions which collectively define a nation’s *competitive advantage*.

### *Reconciling the Macro Theories*

Although the three theories offer different explanations for international trade, they share the common denominator provided by Smith’s axiom. Fundamentally trade is based on specialization but the basis for specialization may be attributed to the relative cost of inputs (comparative advantage), the relative efficiency with which those inputs are transformed into goods (new trade theory), or other differences in the domestic production environment (national competitive advantage). Further evidence indicating a common foundation is found in the observation that the three theories, despite their idiosyncratic differences, concur regarding the gains from trade. That is, in each theory, trade is presented as a means by which the division of labour can be further specialised leading to increased productivity and wealth.

Of the three trade theories reviewed, the theory of national competitive advantage is the most comprehensive. Its breadth of scope thus renders it suitable for combining the distinguishing characteristics of comparative advantage and new trade theory. Moreover, a strength of Porter’s theory lies in its synthesis of classic economic ideas. Porter (1990) has brought the insights of Adam Smith and David Ricardo into the modern era and he has used them to account for contemporary differences in national productivity levels. In short, the bases for specialization that are germane to both comparative advantage and new trade theory are captured in the conceptual framework provided by the theory of national competitive advantage, as shown in Figure 1. The inherited factor endowments of comparative advantage are included in Porter’s treatment of factor conditions while the significance of increasing returns to scale is reflected variously in the discussion on firm strategy, structure, and rivalry, (internal and external economies), supplier and related industries (external economies), and demand conditions (the division of labour is limited by the size of the market). Thus, a logical reconciliation of the three trade theories can be made.

Insert Figure 1 about here

To allow the development of an unambiguous test it is necessary to identify the relevant logical and empirical implications arising from the trade theories – in Venkatesh and

Dholakia (1986) terms, to establish the macro-to-micro link. Two issues are relevant: First, the macro-level theories explain trade as being determined by differences between nations. These underlying differences evoke a set of postulated preconditions proposed as being necessary for international trade. In the absence of these domestic conditions, international trade will not take place, that is, exports will not be initiated. Second, international trade is an exchange process, as by definition, trade cannot take place in the absence of trading parties. Historically the trade theories have not been explicitly concerned with how this exchange process is initiated, but instead have relied on assumptions of profit maximization and rational conduct regarding decision-maker behavior. That is, the identification of viable opportunities abroad is assumed to be the exercise of some formal planning activity on the part of the initiating decision-maker.

With regard to the first point, the theory of national competitive advantage explains international trade as the “natural” consequence of productivity differences between nations. These differences are captured in each industry’s national diamond that collectively describes the relative attractiveness of competing in that industry. The relationship predicted by the theory of national competitive advantage is that of an association between strong domestic diamonds and international competitiveness (as measured by world export share). Industries with strong diamonds are expected to be internationally competitive whereas industries with weak or fragmented diamonds are expected to be minimally involved in international competition. *Within* industries, the relationship between diamonds and firm competitiveness is less clear. While Porter recognises that “firms, not nations, compete in international markets”, the level of analysis adopted is the industry, or “group of competitors” (Porter 1990, p.33). It does not follow that the relationship used to explain the performance of the group can be used to differentiate on the basis of *within*-group performance. Thus, to apply the theory of national competitive advantage at the level of the individual firm requires some logical extension.

First, Porter recognises that not every firm in an industry will benefit from having a competitive advantage. Indeed, the concept of a competitive advantage is, by definition, relative and can only be determined in comparison with others in the industry. This leads to the first inference regarding firm behavior: *in an industry, firms with a competitive advantage will tend to be the first to go abroad*. Or, alternatively, those firms that are the first to go abroad will tend to be the better performers in the industry because, according to Porter, going abroad requires firms to meet the “absolute productivity standard” set by international competition (Porter 1990, p.8). According to Porter’s reasoning, it would be illogical to observe uncompetitive local firms entering the highly competitive international arena.

Second, the observation that some firms in industries develop competitive advantage and go abroad earlier than other firms, indicates that the national diamond exerts a differential effect on firms within the same industry. That is, the pressures for investment and innovation are not felt equally by all industry participants. Thus, the better performers within an industry can be expected to benefit from more intense rivalry, more demanding buyers, and so on, than their more mediocre rivals. Given the determinist assumptions underlying the theory of national competitive advantage this inference is the only way to account for within-industry performance differences.

Combining these two inferences leads to an explanation for international trade based on the theory of national competitive advantage that is applicable at the level of the individual firm. In short, the propensity to export will be related to the microeconomic context defined by the relative attractiveness of the conditions present within the domestic diamond. Specifically, within industries, the firms that go abroad will tend to be the better performers who have a differential advantage prior to going abroad (so as to be able to



compete with the world's best rivals), and their productivity edge will be attributable to the more favourable conditions observed in their respective national diamonds.

From Porter's perspective, trade at the level of the individual firm is explained in terms of capabilities: a firm without a competitive advantage will not survive long in the global marketplace. But to consummate an exchange across borders requires more than a competitive product. Also needed is an opportunity to trade and an entrepreneurial motive to seize that opportunity (Reid 1983). Consequently, the initiation of trade (or exports) would seem to require the coexistence of three necessary but not sufficient conditions, that is, firm capabilities, a motive to export, and the knowledge of some foreign market opportunity. Exports will not occur until all three conditions are present within the firm (Cavusgil and Nevin 1980). Given Porter's (1990, p.72) view that nations succeed in industries where the national diamond "is the most favorable" the following proposition can be derived from the theory of national competitive advantage:

- P1: Exports will be initiated when the conditions of firm capabilities, managerial motive, and an awareness of a viable foreign market opportunity coexist, and firm capabilities will be positively related to the relative "favorableness" of the national diamond.

### **Conceptual Foundations II – Cosmopolitaness**

To form a framework for a crucial test an alternative, *cosmopolitan* explanation for trade will be developed. As a first step towards developing such an explanation it will be expedient to make two simplifying assumptions. First, it will be assumed that firm capabilities, the first precondition for trade identified above, are an either/or situation: A firm either has the capabilities to export or it doesn't. Capabilities are defined broadly to include a competitive or unique product, available resources (such as sufficient funds for expansion), and production capacity. Second, the motivation for exporting will also be assumed as given. This is warranted when one considers that there is a potentially infinite number of motives (e.g. unloading excess inventories and competitive pressures) that could influence the exporting decision. Assuming the existence of both a motive and the capability for exporting leaves the third and final precondition regarding the awareness of foreign market opportunities. Exports will not occur until after the would-be exporter perceives the existence of a viable opportunity in some foreign market, where "opportunity" in this case refers broadly to the unmet needs or wants of a potential exchange partner. Thus to explain the process by which new trading ventures are initiated requires an understanding of how potential exporters come to learn of entrepreneurial opportunities abroad.

Many scholars in international marketing consider the initiation of new export ventures as being analogous to the adoption of an innovation in the sense that it represents a new or novel marketing experience for the firm (Reid 1981; Saimee, Walters, and Dubois 1993; Simmonds and Smith 1968). Like any new marketing practice, the firm's entry into a brand new market can be characterized terms of a sequence of stages beginning with an initial awareness of some external idea or opportunity, followed by intention, trial, evaluation and ultimately acceptance. Accordingly, the propensity to innovate, or to enter an entirely new foreign market, will be related to the cosmopolitaness of the individual (Rogers 1962, 1995). A consistent finding from diffusion theory research is that innovator *cosmopolitaness* is explicitly concerned with how the individual comes to learn of the innovative idea or, in this application, how the potential exporter comes to perceive the existence of an opportunity to trade. It is proposed, therefore, that there is a relationship between the cosmopolitaness of

the decision-maker and the perception of opportunities abroad. This proposed relationship is based on those empirically derived insights relating to boundary-spanning communications behavior that were originally made by organization sociologists and later added to by diffusion theorists. In addition, recent developments in social network theory yield relevant implications regarding the transmission of information about entrepreneurial opportunities. With the aim of laying a theoretical foundation for the current conceptualization of cosmopolite decision-maker behavior, a brief but focused overview of the evolution and application of the cosmopolitan construct and related ideas is warranted.

### *Evolution of the Cosmopolitan Construct*

Despite the prevalence of the cosmopolitan construct in the early diffusion writings, the term “cosmopolitanism” has rarely been defined, except in very broad terms, by diffusion theorists. Rogers (1962, p.17; 1995, p.274), for example, defined the construct as simply “the degree to which an individual’s orientation is external to a particular social system” and subsequent definitions within the diffusion literature have basically been variations on this theme. But Rogers’ definition fails to capture the diverse and eclectic theoretical heritage of the construct. The construct itself was not an invention of the diffusion theorists but was originally borrowed from the established sociology milieu. In Merton’s (1957) seminal work, small-town influentials were classified as “locals” or “cosmopolitans” depending on their frame of reference. Similarly, in his study of latent social roles in organizations, Gouldner (1957, p.290) was able to contrast “cosmopolitans” (i.e., those low on organizational loyalty, high on commitment to specialized role skills, and *likely to use an outer reference group orientation*), with “locals” (i.e., those high on organizational loyalty, low on commitment to specialized role skills, and *likely to use an inner reference group orientation*). Subsequent studies within organization sociology (and later in diffusion theory research) expanded on this emerging idea that some people could be labeled cosmopolite by virtue of their orientation to some environment external to their own host environment. Whether oriented towards the Great Society, as in Merton’s study, or the invisible college, as in Gouldner’s study, these cosmopolites are, in the language of psychologists, *biculturally competent* in that they are able to maintain an active membership in separate social groups (LaFromboise, Coleman and Gerton 1993). Membership in disparate groups can yield informational benefits in the form of exposure to new ideas leading to innovation. Consequently, an underlying premise of diffusion theory concerns this linkage between cosmopolite ties and the propensity to innovate (Becker 1970; Bennis et al. 1958; Robertson and Wind 1983; Rogers 1962; Tushman and Scanlan 1981).

Simmonds and Smith (1968) were the first to suggest that cosmopolite connections could be used to explain the adoption of an export strategy (being a particular kind of firm-specific innovation). They reasoned: “Entry into the export market is just as much an innovation as the adoption of a new production process, for example, so there is every reason to suspect that many of the findings concerning other types of innovation will apply to it” (1968: 94). If this analogy holds, it follows that potential exporters with existing ties to foreign markets may be exposed to informational benefits not available to those without such ties. This is consistent with the claim of social network theorists that information diffuses unevenly through society (Mitchell 1969; Weedman 1982) and, consequently, the spread of information about new ideas and opportunities typically comes through those ties that link people in *separate* social clusters: “Such ties are essential to the flow of information that integrates otherwise disconnected social clusters into a broader society” (Burt 1992, p.26).

Cosmopolite individuals are so labeled by virtue of their orientation towards certain external social groups *and* by their interpersonal ties to others situated in those social

clusters. It is the tie itself which is critical in the transmission of information between the two groups while it is the underlying orientation that facilitates the extrapolation of meaning from the information being communicated. In the context of exporting, the salient ties are those which link potential exporters with distinct, identifiable social clusters that are in some way connected to a particular foreign market. It is these ties, where they exist, that provide information benefits in the form of knowledge regarding opportunities to trade.

The relationship between cosmopolitanism and the propensity to innovate is an established one dating to Ryan and Gross's (1943) investigation into the adoption of hybrid seed corn in Iowa. By extension it will be inferred that the adoption of a new export venture (an innovation) is similarly related to the cosmopolitanism of the potential exporter (the innovator) where cosmopolitanism, in this application, describes *the degree to which the decision-maker is linked by social ties to others in foreign markets*. The inferences made regarding cosmopolitanism and the initiation of exports can be expressed in the following propositional statement:

- P2: Exports will be initiated when the conditions of firm capabilities, managerial motive, and an awareness of a viable foreign market opportunity coexist, and the awareness of a foreign market opportunity will be positively related to the cosmopolitanism of the initiating decision-maker.

### **Conceptual Foundations III – The Crucial Comparison**

Two rival explanations have been presented to account for the formation of international trading ventures. The first explanation, derived from the established trade theories, emphasizes the impersonal nature of market transactions and relates the initiation of exports to conditions in the domestic market. In contrast, the rival cosmopolitan explanation emphasizes the social process by which opportunities abroad are communicated to the potential exporter via existing network ties. The next task is to explicitly compare and contrast these two rival explanations on the basis of the previously derived propositional statements. The proposition derived from the trade theories relates firm capabilities with conditions in the domestic market and *assumes* the existence of a motive and an awareness of a viable opportunity abroad. Conversely, the cosmopolitan proposition relates the awareness of foreign market opportunities to the antecedent ties of the decision-maker and *assumes* the existence of firm capabilities and managerial motive. Thus, at face value, the two rival explanations could be construed as being *complementary*, as illustrated in Figure 2. It would not be implausible to conceive of the situation where the firm exported because of both favourable conditions in the home environment (which generated the capability to export) *and* because of the cosmopolite contacts of the decision-maker (which led to the recognition of an export opportunity). However, our primary interest is in the precise differences in theoretical emphases, and, fortunately, each explanation under-emphasizes those very aspects of the trade formation process that are salient to the other. Thus, one of the research aims is to consider the relative usefulness of each conceptual framework and to assess whether one of the explanations suffers from a misplaced emphasis.

Insert Figure 2 about here

Based on the rival explanations outlined in the propositions above, two testable hypotheses are derived:

H1: The capability to export is positively related to the “favorableness” of the national diamond (where favourableness implies; (1) the relatively efficient deployment of specialised and advanced factors of production, (2) sophisticated and demanding local buyers whose needs anticipate the needs of foreign buyers, (3) coordination with firms in internationally competitive supplier and related industries, and (4) an effective match between firm strategy and the sources of competitive advantage for an industry combined with fierce domestic rivalry).

H2: The awareness of opportunities abroad is positively related to the cosmopolitanism of the initiating decision-maker.

If the relationship predicted in H1 is valid, it would be expected that exporters are endowed with firm-specific capabilities that can be directly attributed to the presence of favourable conditions, such as fierce domestic rivalry, within the national diamond. This claim, that exporters will have a firm-specific advantage *prior* to going abroad and will tend to be the better performers within their domestic industries, is entirely consistent with the core tenets of national competitive advantage theory. The alternative relationship predicted in H2 relates to the social network explanation for export initiation. If the predicted relationship is valid, it would be expected that knowledge of foreign trading opportunities will be communicated to the potential exporter via his or her existing social ties with others.

Given the different emphases of the two rival explanations, predictions based on each conceptual framework can be made regarding the efficacy of the other. Specifically, if H1 is valid and the initiation of exports *is* related to conditions in the national diamond, then, by implication, no relationship would be expected between the cosmopolitanism of the decision-maker and the awareness of opportunities abroad. The theory of national competitive advantage emphasizes the fundamental role of market mechanisms in allocating resources to their most productive uses. Given the microeconomic assumptions inherent in this explanation, it would be expected that the behavior of decision-makers approximates the rational ideal when it comes to identifying foreign opportunities. That is, given the capability to export (which will be attributable to conditions in the domestic market), the identification of a viable opportunity abroad, and hence, the initiation of exports, will be based on the decision-maker’s systematic and objective evaluation of all possible alternatives according to predetermined criteria aimed at optimising returns. Under this formal planning model all the relevant information required to make an informed decision will be gathered via market research and no role is accorded to the decision-maker’s antecedent social ties.

Alternatively, if H2 is valid and the initiation of exports *is* related to the antecedent social ties of the initiating decision-maker, then no relationship would be expected between the conditions in the home nation and firm capabilities. The cosmopolitan framework emphasizes the awareness of opportunities abroad and thus exporters will be distinguishable from non-exporters by virtue of their existing connections with others abroad. The difference in export behavior will thus be primarily attributable to the inherent informational benefits of each decision-maker’s social network and not to conditions in the domestic market. The national diamond will provide a poor basis for discriminating differences in export behavior. Based on the rival conceptual frameworks, two predicted patterns have emerged (Table 1), and these form the basis for the “crucial test” described in the next section.

Insert Table 1 about here

## THE RESEARCH METHOD

The choice of a research design is dictated by the nature and purposes of the study. Given that we are concerned with a “crucial test” and “strong inference with multiple working hypotheses” (Chamberlin 1897; Platt 1964), it would normally be expected that an experimental design would be employed. However, our context, which is a real life situation with inherent complexities that preclude isolation and manipulation, demands an alternative approach. In seeking to approximate the ideal methodological design standard set by the experiment, Ragin (1987) notes that social scientists have opted for one or the other of two basic research strategies; case-oriented research and variable-oriented research. Case-oriented research typically involves a relatively small set of cases and has as its goal the interpretation or explanation of social phenomena that are recognised as being inherently complex. Case-oriented research “attempts to approximate experimental rigour by identifying comparable instances of a phenomenon of interest and then analysing the theoretically important similarities and differences among them” (Ragin 1987, p.31). Case studies, therefore, are not limited to theory-building applications but are also useful for theory testing and confirmatory research (Eckstein 1975; Kelle 1995; Lee 1989; Yin 1989, 1993). While some, imbued in the quantitative tradition of using statistics to test hypotheses, would object to the idea of theory confirmation using the case study method, examples exist where the iterative use of “crucial cases” was consistent with the Popperian falsifiability criteria (Kelle 1995, p.107). Further, social scientists often wish to study phenomena occurring in their natural environment and many research problems are not amenable to experimental manipulation. Nevertheless, such phenomena may have multiple and conjunctural causes and therefore require the use of research tools that emulate the experimental design. As Ragin (1987, p.29) explains: “Only when naturally occurring data approximate experimental designs is it possible to decipher the order-in-complexity that seems apparent in these phenomena.”

By sacrificing complexity for generality, variable-oriented research techniques render themselves as inappropriate for assessing causal complexity in non-experimental data. As Ragin (1987, p.32) observes, such techniques “do not decipher causal complexity but eliminate perplexing elements of it.” Clearly then, when the phenomenon of interest is presumed to be the result of the conjunction of various preconditions, case-oriented research, with its holistic focus on the combination of conditions that define the case, is the preferred method. So while the experimental *design* remains the ideal basis for scientific comparison, the case study stands as the *method* of choice given the need to investigate some phenomenon within its contextual setting. In this context techniques for ensuring the quality of case study research and confirming findings have been suggested by Yin (1989), Eisenhardt (1989), and Miles and Huberman (1994, pp. 262ff). These techniques have been incorporated into the research design of this study. The use of case study research in strategic and international marketing is also a response to repeated calls for researchers to gain direct experience with the organizations that they study. (e.g., Bonoma 1985; Parkhe 1993).

### *The Sample*

Replication logic demands that cases be selected from a specified population for theoretical rather than statistical reasons (Eisenhardt 1989; Yin 1989). The relevant population in this study was defined as small to medium-sized enterprises (SMEs) producing elaborately transformed manufactures (ETMs) or simply as any manufacturing firm with either an annual turnover of less than \$20 million or with less than 200 employees. The identification of a suitable sample of firms emerged as the field work progressed in what Miles and Huberman (1994, p.27) label “conceptually-driven sequential sampling.” That is, each case studied was

purposely selected with the aim of either repeating the results of a prior study (a literal replication), or producing different results for predictably different reasons (a theoretical replication). The relationship of the individual cases to the overall research design is shown in Appendix 1. The final sample consisted of eleven firms (eight exporters and three non-exporters) representing five diverse industries.<sup>1</sup> The firms and industries can be fitted into the sampling frame as in Appendix 2.

During data collection, observation and analysis proceeded on more than one level of analysis (Klein, Dansereau, and Hall 1994). That is, to explain how new trading ventures were initiated, individuals within the firm (micro-level) as well as certain conditions within the firm's environment (macro-level) were observed. Thus, there is a difference between the measurement or observational units of analysis, and the explanatory units of analysis (Ragin 1987, pp.8-9). Empirically this translates into a *nested* research design where the various levels of analysis are embedded within the context of other, broader levels of analysis. For example, although there were only eleven firms in the sample, 31 export initiations were recorded. This within-case sampling decision was justified on the grounds that "the marketing of a specific product in a specific export market" constitutes a discrete event that can be analyzed independently of other exchanges (Cavusgil and Zou 1994, p.1).

### *Operationalization*

Evidence for the macro-level competitive advantage explanation was demonstrated by the conditions in the domestic market that were present at the time of export initiation. Although Porter (1990) did not explicitly identify the specific operational definitions for the four broad determinants of national advantage (for example, he never specified how he measured buyer sophistication or industry rivalry), it is likely that his measures were perceptually based rather than archival. Consistent with Porter's research then, the emphasis on observing the relative strength or favourableness of conditions in the national diamond was based primarily on the perceptions of employees, industry experts, and most importantly, the chief decision-makers themselves. Perceptions of domestic conditions were then weighed in light of the available objective evidence. For example, when interviewed the owner of Sterile Products reported his business as being in a very competitive industry. Following the interview other data sources were examined to ascertain the level of objective support for this stated perception. First, licenses issued by the Therapeutic Goods Administration were compared and 13 Australian firms holding the same license as Sterile Products were identified. This supported the emerging idea that the local industry is characterized by a number of firms all making substitute products. Second, as Sterile Products primarily manufactures basic hospital supplies, the purchasing procedures of the local hospital supply system were examined. It was found that the nature of the supply system is such that the smaller, local firms strive to reach the critical mass required to be accepted as genuine suppliers and the only way to win tenders is by undercutting everyone else in the market. Furthermore, the historically low entry barriers into the industry (prior to the enactment of the Therapeutic Goods Act 1989) have resulted in over-capacity which, when combined with the high bargaining power of both buyers (state-run and private hospitals) and suppliers (typically foreign multinationals), creates conditions of intense, price-based domestic competition. Thus, in this case example, secondary data clearly supported the perceptually-based finding and led to the conclusion that the domestic industry is characterized by intense rivalry.

Evidence for the cosmopolitan explanation was identified by examining the nature of the interpersonal links between the trading parties. An exporter was labeled cosmopolite *if and only if* the awareness of the foreign opportunity was communicated via existing social

ties. Further explanation of this process, supplemented with evidence from the case studies, is provided below.

### *Data Collection*

The specifics of data collection were carried out using a replicable field guide or protocol, an important technique for establishing the reliability of case study research (Miles and Huberman 1984; Yin 1989). The case study protocol consisted of: (1) a one page overview of the project written in jargon-free language, (2) a list of field procedures, (3) the research questions, (4) an interview guide, and (5) an outline for the case study report. The research design was directed by six general research questions that were derived directly from the rival hypotheses being investigated. Three of the questions were descriptive and related to the firm, its products, and its export history. The remaining three questions were explanatory and related to the awareness of opportunities abroad, the motive for exporting, and the conditions perceived to be present in the firm's domestic environment. These six general questions, were then broken down into a number of specific, operational questions. The complete list of research questions is available from the authors.

In all, 100 in-depth, semi-structured interviews were conducted. These interviews were categorized as "case specific," "industry specific," and "other exporters." Case specific interviews were those directly relating to the data collection at one of the eleven sites, however, they were not limited to individuals from within the firm and frequently included others in the industry or government with special knowledge or experience. Industry specific interviews were those relating to one of the five industries studied and typically included interviews with competitors, suppliers, buyers, and industry "experts". Additional interviews were held with other exporters, who were not included in the final sample but who, nevertheless, contributed insights into the nature of exporting.

The average length of each interview was around one hour and multiple interviews were necessary at each site. The primary emphasis was placed on the interviews with the chief decision-makers. The initial interview with the CEO of a prospective case study was especially important as it provided both a basis for relationship building to ensure cooperation and a further screening opportunity for the suitability of potential candidate firms. Of the 50 formal, case-specific interviews conducted, 30 were with either the CEO or equivalent of the firms studied. All formal, case-specific interviews were tape-recorded with the permission of the respondents. Converging lines of inquiry were developed through the use of multiple respondents, both within and outside of the firm. When supplemented with the other data sources it became possible to triangulate onto the "facts" of the case.

The average engagement period at each site (the time between the first and final interviews) was 46.2 days. Collected data were transcribed and field notes were translated following the "24-hour" rule used by Eisenhardt and Bourgeois (1988). As an important validity check, the Chief Executive Officers of the eleven firms each reviewed the final draft copies of their respective case reports. This review process led to minor corrections and revisions regarding the facts of each case. This review process required an additional two months. In total, the data collection period lasted 12 months. Collectively the audiotapes, interview transcripts, and field notes comprise the bulk of the evidentiary database. The study followed the ethical guidelines for research with human subjects as prescribed by the university.

### *Evidentiary Database and Database Management*

The retrievable database contains 150 pages of organised field notes, 25 audiotapes, 287 pages of single-spaced interview transcripts (200,000 words), and other related documents

such as industry reports, government publications and press articles. An effort was made to ensure that an audit trail existed independently of the eleven individual case reports and contains enough information to allow another researcher or auditor to infer their own independent conclusions about each case (Yin 1989).<sup>2</sup> NUD\*IST, a specialized software package designed “to aid users in handling non-numerical and unstructured data in qualitative analysis” (NUD\*IST 1993, p.1) was used for data management. NUD\*IST facilitated the coding of transcribed interviews which was done in accordance with the theoretically derived categories that also corresponded with the nodes on the main “index tree.” Some of the early interviews were independently coded by another researcher so as to achieve an acceptable level of inter-coder agreement (around 80 per cent) on both the codes used to code a given chunk of data, and on the size of those codable chunks of data (Miles and Huberman 1994). The ensuing comparison and discussion of the coding decisions made, led to definitional clarification of the 24 codes and the procedures for using them.

The eleven standardized case reports form the evidence contained in the database. They contain basic descriptive information as well as, for the exporting firms, the histories of the various export initiations and, particularly for the non-exporting firms, evidence relating to export capabilities. The number of export market entries recorded for any given firm ranges from one (Second Skin) to seven (Go Medical and Seekers Australia). The purpose of the export stories was to reconstruct the events that led to each export initiation with particular emphasis on how the trading parties first came into contact and to develop a thorough understanding of the conditions present within the firm’s domestic environment in terms of the four broad attributes relating to the theory of national competitive advantage. The final section of each report includes analyses of the reasons behind the firm’s exports, or lack of exports.

## **ANALYSES, RESULTS AND DISCUSSION**

For the analysis of qualitative data in case study research Yin (1989) recommends the use of an overarching analytic *strategy* from which various analytic techniques may be drawn (Eisenhardt 1989; Miles 1990; Miles and Huberman 1994). In this study the general analytic strategy used was based on the underlying theoretical propositions. These rival propositions influenced the data collection by defining the boundaries of the study. It was a logical step, therefore, to analyse the data in accordance with these underlying propositions. This “pattern-matching technique” involved the comparison of the predicted theoretical patterns against the empirical observations on the independent variables (Campbell 1966). Comparisons were made on the basis of the similarities amongst different cases exhibiting the same outcome (the exporters), and on the basis of the differences amongst similar cases displaying different outcomes (the exporters and non-exporters within an industry).

The results of the analyses are described in three sections. In the first part, the export initiation stories provided by the eight exporting firms (literal replications) are examined across the sample. Specifically, the empirical patterns described by the macro and micro conditions leading up to the formation of each new venture are compared against the rival hypotheses with the aim of identifying that explanation which best fits the data. In the second part, findings from the three non-exporting firms (theoretical replications) are compared and the reasons for their lack of exports are considered. Finally, the different analytic emphases are amalgamated into an empirically grounded discussion of the context-dependent phenomenon of initial exports.



### Literal Replications - the Exporters

Eight exporting SMEs were investigated yielding a database of 31 different export initiations. In the first part brief descriptive details of the complete sample of export initiations will be provided. Second, the export initiations will be examined from the perspective of the theory of national competitive advantage to assess the empirical fit of the predicted relationship between domestic market conditions and export behavior. This level of analysis is thus directed towards confirming or disconfirming hypothesis one. Finally, the data will be considered from the alternative social network perspective to assess the empirical fit of the predicted relationship between the cosmopolitanism of the initiating decision-maker and export behavior so providing a basis for confirming or disconfirming hypothesis two.

A brief overview of each firm's business and export activity is presented in Table 2. Across the sample the eight firms exported 12 products to 21 different countries located on 5 continents.

Insert Table 2 about here

#### *The Influence of Conditions in the National Diamond*

At each site the evidence was examined to determine the relative influence of the four broad attributes postulated by the theory of national competitive advantage. The aim was to assess whether a firm's trading activity could be correlated with the conditions in the domestic market. In each case numerous indicators were considered in measuring the sophistication of local buyers, the intensity of domestic rivalry, and so forth. While the emphasis was on perceptual measures, objective archival data were used wherever possible to add weight to the emerging findings. For each case the analysis of the domestic environment followed first a reductionist approach, whereby the relative influence of the individual attributes was evaluated, and second, a holistic approach, whereby the domestic environment as a whole was considered. In this way the relative influence of the individual attributes could be compared. To illustrate by an example, for domestic demand conditions to be rated as having a strong positive influence, as in the case of Tiger Engineering, then the supporting evidence might include indicators such as the following: (1) the CEO's perception that Australian miners (local buyers) are the most demanding customers in the world, and that the Australian mining industry is "the toughest mining industry in the world;" (2) objective evidence that the harsh operating environment affecting the Australian mining industry requires a high level of product quality and performance (in terms of reliability and durability); (3) historical evidence that the product in question (the wheel-dozer) was stimulated directly by the needs of a local buyer (Mt. Newman Mines); and (4) subsequent evidence that this local need anticipated the global trend for larger mining equipment generally and the broader international need for bigger wheel-dozers specifically. The first two points listed establish that local buyers for Tiger's wheel-dozers are amongst the world's most sophisticated and demanding buyers, while the latter two points demonstrate that, in the case of the wheel-dozer, the needs of local buyers did anticipate the needs of foreign buyers. Thus, domestic demand conditions could be shown to have had an unequivocally strong influence on the international competitiveness of Tiger's exports.

However, Tiger's example is the exception to the rule. In most other cases domestic demand conditions were rated as having a weak to no influence on the firm's export behavior. For example, the evidence provided by Linmac's case, another manufacturer of industrial equipment, led to the conclusion that domestic demand conditions had no positive influence on the export of the mini-crawler crane. In this case: (1) the mini-crawler crane was

developed in direct response to the needs of a Japanese (not an Australian) buyer, (2) early improvements to the design came from feedback provided by the foreign buyer, and (3) the managing director perceived that “international buyers... are more interested in (product) quality than the Australian buyers are.” The domestic demand conditions affecting Linmac are in stark contrast to the demand conditions relevant to Tiger Engineering. In this case local buyers were not perceived as being particularly quality conscious and the needs of local buyers did not anticipate the needs of foreign buyers. Thus, domestic demand conditions could be shown to have had unequivocally no positive influence on the international competitiveness of Linmac’s exports of mini-crawler cranes.

Across the sample of exporting firms no complete national diamonds were observed (Table 3). Indeed, a simple quantification of each corner of the diamond on a nominal scale of one to four, representing no- to strong-influence, shows that none of the exporters benefited from even half a complete diamond. This empirical pattern suggests that the predicted relationship between strong domestic diamonds and export behavior is not supported by any of the cases studied. None of the exporting firms benefits from having a favourable national diamond and all have entered foreign markets in spite of this deficiency. The evidence presented here is inconsistent with the predictions of the theory of national competitive advantage and the lack of a match between the predicted pattern and the empirical pattern observed means that hypothesis one must be rejected.

Insert Table 3 about here

#### *The Influence of Prior Social Ties*

A critical part of the research process in this study centered on the determination of whether information regarding the opportunity to trade had been acquired via existing social ties or gleaned as a result of a systematic search process. For each exporting venture studied, this required the explication of the ties linking the transacting parties. If it could be shown that these ties both preceded the exchange initiation and were instrumental in the formative stages of the new venture, a role for cosmopolitanism was inferred. The extent of reliance on antecedent ties was gauged on a scale ranging from strong to no influence. An example of a strong role for decision-maker cosmopolitanism is provided by Australian Lens Laboratories’ (ALL) entry into New Zealand where the firm’s foreign buyer happened to be an ex-apprentice of the company. When looking for an export market, one of ALL’s partners simply picked up the phone and called their former employee now living in that market. Similarly, existing ties played a strong role in stimulating exports of Linmac’s mobile cranes to Nigeria. In this case the foreign buyer happened to be an Australian contractor who had had previous business dealings with Linmac in the domestic market. In contrast, no role for cosmopolitanism was observed in those cases where trading partners had merely encountered each other at a trade fair (e.g., Tiger’s exports to Belgium). In between these two extremes, the influence of existing ties could be gauged as having either a weak (e.g., Seekers entry into South Africa) or moderate (e.g., Go Medical’s entry into Germany) influence depending on whether these ties had steered the initiating actor towards a particular foreign market or channel respectively.

In assessing the relative influence of the cosmopolite ties of the initiating actor on the subsequent perception of an opportunity abroad, two tests were applied in each case. First, would the reported export venture have taken place in the absence of an existing tie? For example, it is unlikely that Seekers would have considered South Africa a wise choice in the mid-1980s (given the political uncertainty of that time), in the absence of the CEO’s family connections with that market. Thus, *some* role for cosmopolitanism was inferred. Second,

would the specific buyer have been identified in the absence of a prior link? For example, it is unlikely that Seekers would have selected the Thai buyer in the absence of their mutual affiliation with the Jantzen network. Thus, a *strong* role for cosmopolitanism was inferred.

The ties linking the trading partners in each of the 31 export initiations are listed in Table 2. Except for the two trade-fair initiated examples, some role can be attributed to the antecedent social ties of the initiating decision-maker in every single market entry reported. Moreover, a *strong* role for decision-maker cosmopolitanism was observed in 80 per cent of the export initiations. The evidence from the case studies thus provides strong support for the predicted relationship between the cosmopolitanism of the decision-maker and the initiation of new export ventures.

The cross-case data provides strong support for the predicted relationship between the cosmopolitanism of the potential exporter and the awareness of new opportunities to trade. As implied by social network theory, exports were most frequently initiated on the basis of the decision-maker's existing network and these bridge ties served to provide a direct or indirect link between the buyer and seller *prior* to the communication of information regarding the foreign opportunity. Applying the aforementioned tests it can be shown that the majority of export initiations reported would not have taken place in the absence of the initiating decision-maker's prior social ties.

### **Theoretical Replications - The Non-Exporters**

Three antecedent conditions were identified as being logically necessary for the initiation of exports; firm capabilities, managerial motive, and an awareness of foreign market opportunities. While the coexistence of these preconditions may be held to be self-evident in the case of exporting firms, the absence of one or more of these antecedent conditions can also be used to explain why *non*-exporting firms exist. Consequently, a component of the research activity undertaken at each non-exporting site was directed towards establishing the presence or absence of each antecedent condition. None of the non-exporters recorded the presence of all three preconditions. In Hof Pottery's case none of the three antecedent conditions was observed. Unlike Hof Pottery, Sterile Products, a medical devices manufacturer, does have the capability to export. Although Sterile's owner under-emphasized the firm's capabilities, several pieces of evidence support the idea that the firm could export *if* there was a motive and an awareness of foreign market opportunities. For example, Sterile's factory is currently running at 40 per cent of full capacity and the factory manager observed that they could easily double production without having to add to the existing facilities. Moreover, a recent export deal that fell through at the last minute is *prima facie* evidence that the firm has both a competitive product and the ability to export – should another opportunity present itself. Of the three non-exporting firms, Top Optical, an optical laboratory, is the most likely to begin exporting as it has both the capability and the motive to export. In this case capabilities are defined as a well-developed and highly efficient business system, under-utilised production capacity, and the recent arrival of two differentiated products, the Easy Lite lens and the hyper-index Asahi lens. There is also a clear motivation to export. Top Optical is a rapidly growing firm in a saturated and intensely competitive domestic market. The CEO perceives that the only way for the firm to expand is by going abroad. However, the coexistence of firm capabilities and managerial motive is insufficient to initiate exports and the key reason why Top Optical does not export is because the CEO has failed to identify any suitable opportunities abroad. The three non-exporting cases have demonstrated the requirement for the coexistence of all three preconditions before exports will be initiated. Taking the analysis a step further, the cross-case findings reveal that the

three pre-conditions are not independent, but are inter-related. The existence of a motive, for example, may spur a decision-maker to seek out opportunities and develop the necessary capabilities for export (as evidenced in Tiger Engineering's case). Conversely, the awareness of an opportunity may engender a motive (that previously did not exist) to capitalize on the perceived opportunity (as seen in AFC's exports of tableware to Indonesia). However, the awareness of opportunities abroad seems to be the critical factor in initiating exports. Awareness of foreign opportunities was the only antecedent condition whose absence was common to all three non-exporters.

### **The Empirically Grounded Discussion**

The empirical evidence presented in the case studies provides an in-depth grounding for understanding the process by which SMEs form new trading ventures. In the final part of this analysis, the 31 export initiations, combined with the discussion of the reasons for non-exporting, will be incorporated into the conceptualization of the phenomenon and context introduced in the theory part of this study. This synthesis of the theoretical predictions and empirical findings thus constitutes the contribution made towards resolving the research problem.

#### *Decision-Maker Cosmopolitanism and the Awareness of Opportunities Abroad*

The search for trading opportunities is not conducted in a social vacuum. Rather, the evidence presented here provides a compelling picture of the information benefits inherent within social networks. Across the sample a common pattern emerged: when searching for opportunities to form new trading relationships, the exporters in this study generally relied on their existing social ties with others in foreign markets. In every case studied, decision-maker cosmopolitanism was evident in both the form of an underlying orientation to some external social group, and in the form of personal ties to that group. The obstetrician who runs Go Medical, for example, is active in the international community of medical researchers and often makes presentations at conferences. It is not surprising to learn, therefore, that in his role as inventor and exporter of medical devices, it is his links with this borderless community of fellow doctors that has provided an entry point into markets such as Italy, Sweden and Switzerland. In other cases studied the salient ties were those that linked the exporter with former employees or customers, as well as family members and friends, living in foreign markets.

The communication of information across existing social ties has emerged as a common independent variable leading to the awareness of foreign market opportunities and the subsequent initiation of exports. However, given the highly idiosyncratic nature of each person's social network, the entry of a firm into any new export market can only be explained with direct reference to the social ties of the individuals involved. Thus, while cosmopolitan decision-makers are, by definition, linked by social ties to others in foreign markets, the relevant frame of reference for any given export initiation can only be defined on a case by case basis. This reflects the context-dependent nature of the phenomenon and was the basis of the argument used to justify the choice of research method. However, while the explanation of any particular export initiation may be situation-specific, the various case analyses nevertheless provide concrete lessons that can be applied to other situations. Most of all, the cases illustrate how the cosmopolitan construct can be applied to induce a degree of explanatory order into what has historically been viewed as a complex problem.

## CONCLUSION

The primary thrust of this research has been to identify and explain the antecedent conditions that lead to the formation of trading ventures and in doing so to illustrate the application of the case study method in a crucial experiment-like context involving difficult multilevel translations (Klein, Tosi and Canella 1999, Venkatesh and Dholakia 1986). In order to address this research problem two rival explanations were developed. In the first place, exports were seen as being determined by the relative favourableness of conditions in the domestic market as derived from the contemporary theory of national competitive advantage Porter (1990). An alternative explanation emphasized the influence of the social relations linking the transacting parties. The theoretical templates provided by these rival hypotheses and their associated predictions were compared against the empirical data from eight exporting and three non-exporting SMEs. The evidence led to the rejection of the hypothesis relating export behavior to conditions within the domestic market. None of the 31 export ventures was correlated with favorable conditions in the national diamond, while the three theoretical replications showed no significant differences in those environmental conditions affecting both exporting and non-exporting firms from the same industry. The mismatch between the predicted and empirical patterns suggests national diamonds are the correlates and not the causes of international competitiveness in an industry.

In contrast, the hypothesis that the awareness of foreign opportunities is communicated via existing social ties, was strongly supported by the case studies. All but two of the trading ventures studied were based on existing social ties and in the majority of cases these prior social ties exerted a strong influence on the subsequent perception of the trading opportunity. Moreover, this empirical pattern was evidenced across a range of cases drawn from different industrial settings.

The formation of new trading relationships across international borders logically requires the coincidence of three antecedent conditions - firm capabilities, managerial motivation, and an awareness of a viable foreign opportunity. Although the traditional trade theories are useful for explaining differences in exporting capability, the evidence from this study would suggest that it is the awareness of opportunities abroad that is the critical catalyst in the initiation process. International trade would seem to be more pulled by opportunity than driven by capability. In any case, when searching for opportunities to trade, the decision-makers in this study rarely selected trading partners on the basis of formal scanning and market research: When faced with the uncertainty in venturing abroad, these cosmopolite decision-makers typically minimised that uncertainty drawing on their known contacts and connections with others abroad.

### *Limitations of the Study*

As with any study, certain trade-offs were made with regard to the research design. While measures were taken to build rigor into this study's design, the inherent strengths and weaknesses of the methodology may limit the confidence in the validity of the reported results. Two general limitations can be noted. First, the choice of the case study research method was justified on the basis of the need to understand the causal processes affecting a phenomenon embedded in a causally-complex context. Case study research permits causal inference as opposed to the statistical inference associated with variable-oriented research. However, while case studies aim for analytical rather than statistical generalization, the confidence in the external validity of the results is limited by the size of the sample. In determining the size of the sample in this study the emphasis was placed on developing a rich database of export market entries at the cost of limited generalizability across industry types.

A compounding aspect was that all the firm's studied were localized within one country. Generalizations to other geographic settings should thus be made with caution.

A second weakness stems from the operationalization of hypothesis one. That is, while the hypothesis relating to domestic conditions was rejected, this study does not constitute a conclusive test of the theory of national competitive advantage, no single study does. For example, unlike the original research reported by Porter (1990), the unit of analysis was the firm and not the industry, while the sample itself was not based on the nation's top 50 exporting industries.<sup>3</sup> (It is worth adding, however, that Porter's own methodology also did not constitute a test of the hypothesized relationship between national diamonds and competitive advantage (Davies and Ellis 2000; Yetton et al. 1992).) Nevertheless, the findings of this study are at least suggestive of the limited influence of the national diamond on the export decisions of SMEs.

### *Directions for Further Research*

The main findings and limitations of this study reveal several directions for future research. First, in this study one antecedent variable, the awareness of foreign market opportunities, was explained with reference to the decision-maker's social ties. Subsequent research could examine in greater depth the inter-relationships between the three antecedent conditions and social exchange. For example, is there a relationship linking the decision-maker's network ties with the development of firm capabilities in entrepreneurial SMEs? What role, if any, do social ties exert on the inducement of exporting motives?

Second, research is also needed to assess whether a link between cosmopolitanism and international trade exists at the macro level. Some researchers have attempted to measure the relationship between cosmopolitan citizenry and national innovativeness. For example, Gatignon, Eliashburg, and Robertson (1989) have found that cosmopolitan countries such as Sweden exhibited an above average propensity to adopt innovations. Presumably so-called "cosmopolitan societies" will also be more open to trade than more parochial societies. Existing research investigating the relationship between ethnic diversity in a nation and export participation is certainly suggestive of a broader role for cosmopolitanism (e.g., Stanton and Lee 1994). Moreover, a crucial test between cosmopolitanism and national competitive advantage conducted at the purely macro-level would provide a closer approximation of Porter's (1990) original study than the approach adopted here. Such a test might involve examining the trading patterns (direction, composition and volume) of various nations in light of their domestic diamonds (as per Porter) and ethnic participation (as per cosmopolitanism). Insofar as ethnic diversity is a surrogate for cosmopolitanism, a relationship with international trade at the macro level can be intuitively posited. This is because migrants sometimes display a unique form of bicultural competence that we shall label the *Marco Polo effect*. In this study the Marco Polo effect was evident in a number of cases and can be used to explain Australian Fine China's entry into Indonesia (via the expatriate restaurateur), Australian Lens Laboratories' entry into New Zealand (via the expatriate apprentice), and Linmac's entry into Nigeria (via the expatriate mining contractor). In each of these cases the entry of the firm into the foreign market was facilitated by the boundary-spanning connections of a cosmopolitan migrant. The role of migrants in promoting international trade has long been recognized but very little research has been done to explain the dynamics of such trade. As Aislabie et al. (1994, p.39) have noted:

Entrepreneurs with an export culture and knowledge of a specific country's market conditions drawn from experience and/or retained ties have an incentive to exploit this knowledge advantage. Potential exporters without this knowledge must incur costs in obtaining it, or as partly occurs in the Australian case, governments may seek to meet this cost through the

provision of such knowledge. Encouraging the better utilization of Australia's cultural, family, linguistic and other ties with potential export markets may be a cheaper and more successful way of proceeding with market identification, export planning, entry and market development.

### *Summary*

This study is part of a research trend emphasising the social context that provides the backdrop to business activities (Burt 1992; Granovetter 1985; Webster 1992). This trend reflects the widespread departure from the neoclassical model of the firm that is evident in a number of disciplines, ranging from marketing (Easton and Araujo 1994), to strategic management (Rumelt, Schendel, and Teece 1991) and international business (Ellis 2000). Indeed, having observed the significance of social relations in the specific research setting of foreign market entry, it is hard to avoid the suspicion that social structures have played a dominant, if largely unobserved, role in the history of economic development. For example, in their explanation for the economic ascendancy of the Western Hemisphere, Rosenberg and Birdzell (1990) observe that economic growth in the West has been characterised by a general increase in both international trade and the sizes of markets, which in turn were a cause and effect of technological advances. An alternative hypothesis is that the diffusion of knowledge regarding both entrepreneurial opportunities and technological prospects, was influenced by the social relations linking the individuals involved. This might explain the rapid industrialization of the West, which was largely united under the imperial regimes of those few European nations where the industrial revolution had been born. In contrast, those parts of the Oriental world not connected by colonial connections to the Continent, were relatively late adopters of industrial innovations.

By focusing on the middle ground between sociology and economics, this study has provided some practical information which, if acted upon, may be used to stimulate international trade with the beneficial consequence of a rising global standard of living. The support for social network explanations of the initiation of trade present strong argument against national isolationism and for an open international environment. It is our hope that this study will contribute to an improved understanding of a particular social and economic behavior that is a defining characteristic of all human civilizations. For these reasons research endeavours at the nexus of the economic and social spheres are to be encouraged, for the results promise to make a practical contribution to the understanding and improvement of our way of life.

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### NOTES:

<sup>1</sup> The sample forms part of a case study database more extensively described in Ellis & Pecotich (2001).

<sup>2</sup> Access to the evidentiary database and the full case reports is available through the authors.

<sup>3</sup> As Rooney (1990) has observed, Australian manufacturing industries generally would not satisfy Porter's (1990) test of international competitiveness (based on relative share of domestic exports) given the significant share of world exports held by Australian commodities. The only two ETMs that were included in Australia's top 50 industries in 1987, for example, were beer and petroleum lubricants.

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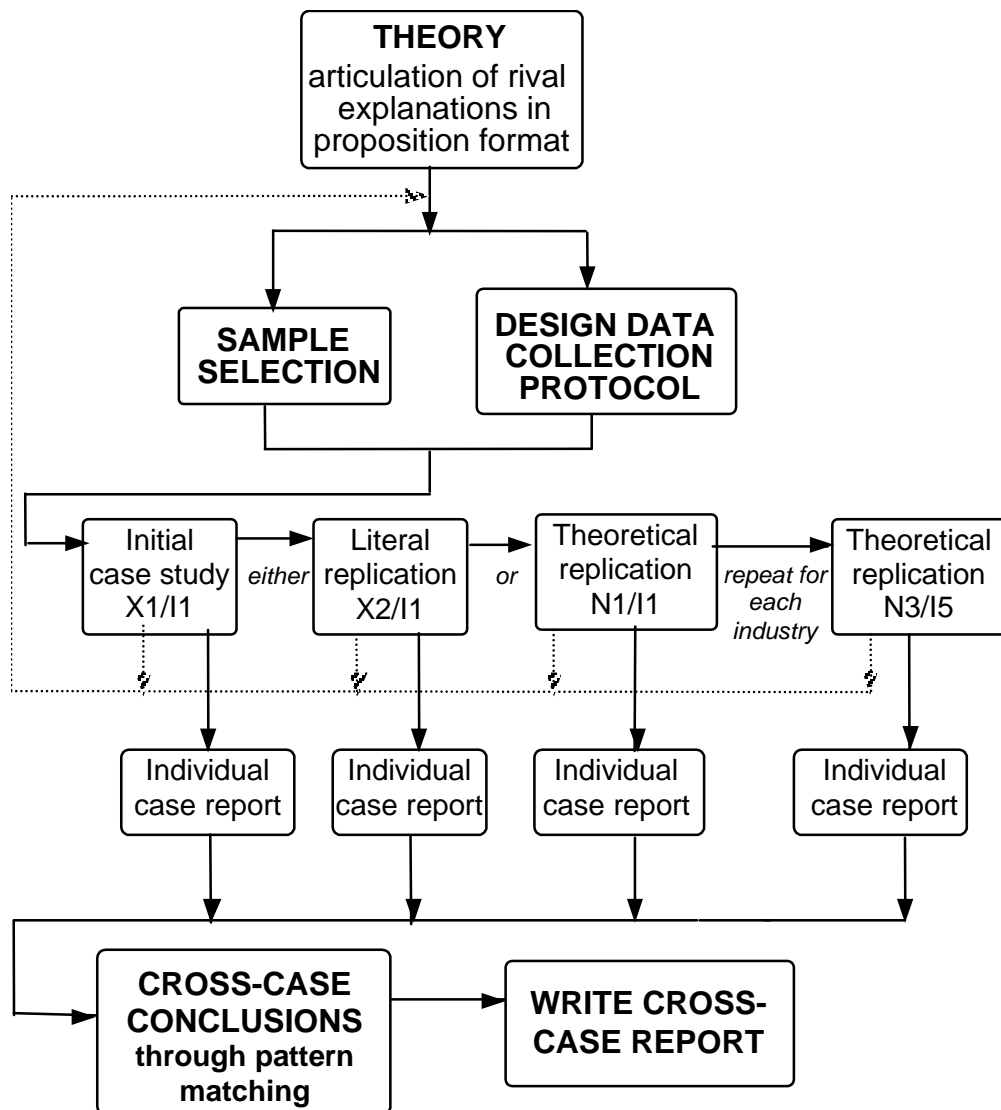


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## APPENDIX 1: The Research Design



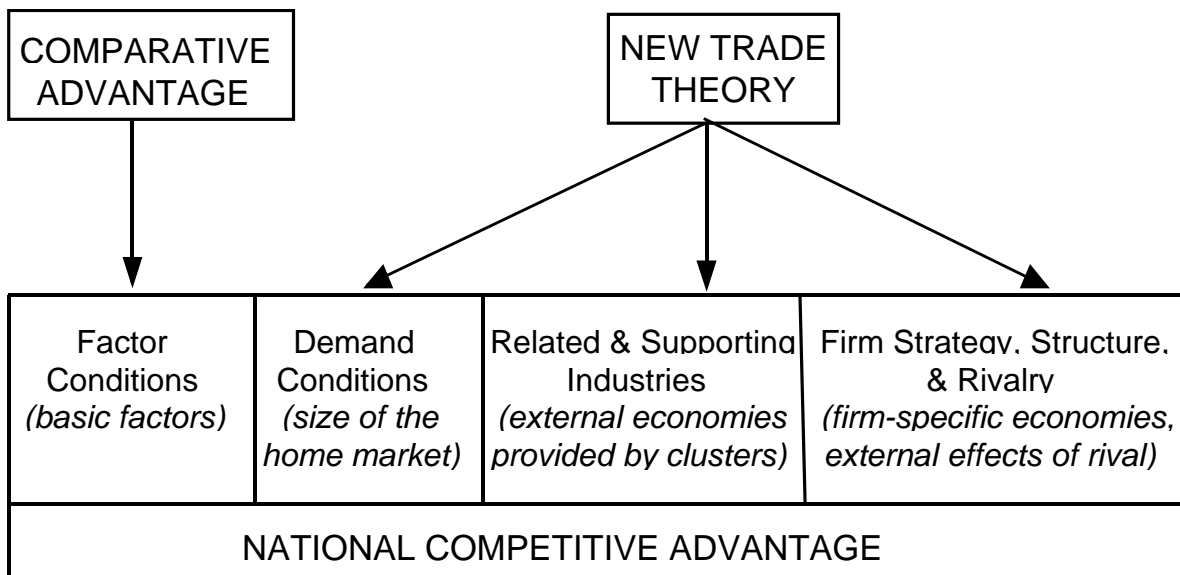
Source: Adapted from (Yin 1989).

NOTE: X = exporting firm; N = non-exporting firm; I = industry

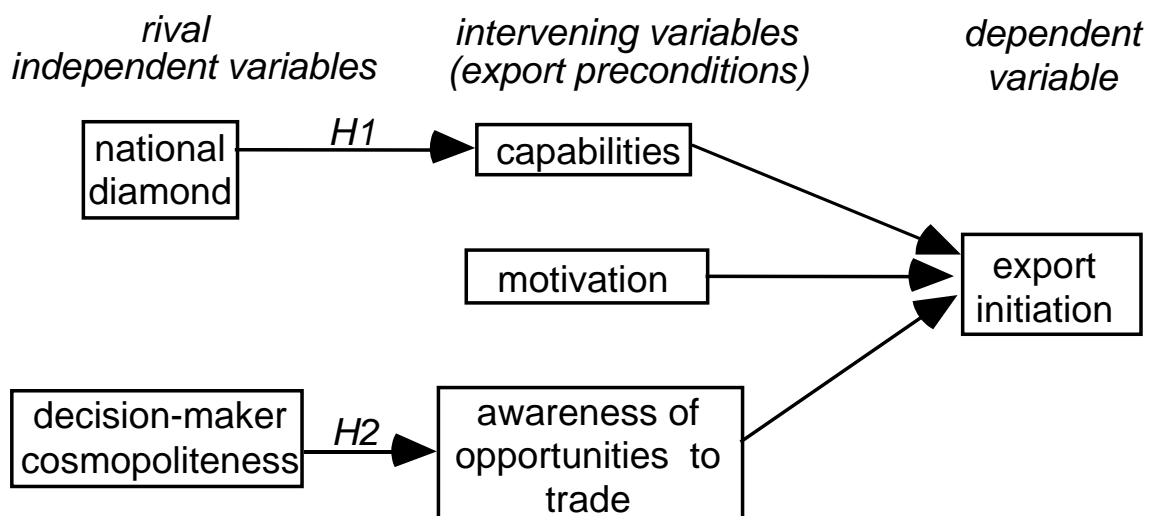
## APPENDIX 2: The final sample

	<i>Lycra garments</i>	<i>industrial equipment</i>	<i>medical devices</i>	<i>ceramic tableware</i>	<i>optical lenses</i>
<i>Exporter</i>	Seekers Australia (fashion swimwear)	Tiger Engineering (wheel-dozers)	Go Medical (medical devices)	Australian Fine China (commercial tableware)	Australian Lens Labs (spectacle lenses)
<i>Exporter</i>	Second Skin (pressure garments)	Linmac (mobile cranes)			Gelflex Laboratories (contact lenses)
<i>Non-exporter</i>			Sterile Products (medical devices)	Hof Pottery (domestic tableware)	Top Optical (spectacle lenses)

**FIGURE 1: Conceptual Framework: Alternative Bases for Specialization**



**FIGURE 2 Complementary antecedents leading to the initiation of exports**



NOTE: While the three preconditions are distinct, complex interaction effects, not shown, are recognised. For example, the existence of export capabilities (such as a competitive product and under-utilised resources) may *induce* a motive for exporting. Similarly, the recognition of a viable opportunity abroad may likewise *induce* the motive to capitalise on that opportunity. For the purposes of clarity and comparison however, the indirect relationships between the rival independent variables and managerial motive have been omitted.

**TABLE 1: Rival Predictions**

<i>EXPLANATION</i>	<i>PREDICTION</i>	
	<i>Capabilities</i>	<i>Awareness of foreign opportunities</i>
National Competitive Advantage	<ul style="list-style-type: none"> <li>• based on strong national diamond; exporters relatively better performers and have a firm-specific advantage prior to going abroad</li> </ul>	<ul style="list-style-type: none"> <li>• based on formal planning procedures and market research and <i>not</i> antecedent social relations</li> </ul>
Cosmopolitanism	<ul style="list-style-type: none"> <li>• no relationship with national diamond; no significant differences between exporters and non-exporters in terms of domestic market conditions</li> </ul>	<ul style="list-style-type: none"> <li>• relevant information sourced via decision-maker's <i>existing</i> social ties with others abroad; foreign market opportunities not identified as the result of objective market research</li> </ul>

TABLE 2: Summary of Export Initiations

Case	Business description	Market entry	Ties Linking Trading Partners	Tie Strength
1 Seekers Australia	<ul style="list-style-type: none"> <li>➤ the design and manufacture of ladies' fashion swimwear and beachwear; Seekers produces the US-label Jantzen brand under license plus four of its own brands (including Sunseeker)</li> <li>➤ stretch-fabric manufacturing is done in-house while woven garments are produced cheaply offshore</li> </ul>	a: New Zealand (1976) b: South Africa (1986) c: Japan (1988) d: UK (1989) e: Thailand (1992) f: Hong Kong (1992) g: USA (1993)	none (met at trade fair) seller's family ties to foreign market via common designer via common confirminghouse via common licensor (Jantzen) former local buyer now living abroad buyer's brother crewed on a yacht with seller's agent	- weak strong strong strong strong
2 Second Skin	<ul style="list-style-type: none"> <li>➤ medically-prescribed pressure garments and splints</li> </ul>	a: New Zealand (1991)	foreign burn unit had ties with seller's expatriate colleague	moderate
3 Tiger Engineering	<ul style="list-style-type: none"> <li>➤ the manufacture of specialized mining equipment, notably, the Tiger 690D, the world's largest wheel-dozer; wheel-dozers are built using Caterpillar parts and are sold and service through Caterpillar dealers</li> </ul>	a: USA (1986) b: Belgium (1992) c: Canada (1993) d: Venezuela (1993) e: Chile (1993)	former local buyer now living abroad none (met at trade fair) via Caterpillar grapevine (mutual supplier) via Caterpillar grapevine (mutual supplier) former local buyer now living abroad	strong - strong strong strong
4 Linmac	<ul style="list-style-type: none"> <li>➤ the design and manufacture of mobile cranes, shunting tractors, and telescopic forklifts</li> </ul>	a: Netherlands (1991) b: Japan (1993) c: Nigeria (1992) d: Indonesia (1992)	via common customer former business association former local buyer now living abroad former local buyer now living abroad	strong strong strong strong
5 Go Medical	<ul style="list-style-type: none"> <li>➤ the design and manufacture of medical devices (urinary products, obstetrical-gynaecological products, and intra-venous products)</li> </ul>	a: Germany (1983) b: Italy (1985) c: Sweden (1987) d: Switzerland (1987) e: USA (1984)* f: USA (1985)* g: UK (1991)	seller's family ties to foreign channel colleagues researching catheterization colleagues researching catheterization colleagues researching catheterization colleagues researching IVF techniques members in College of Obstetricians former business associate	moderate strong strong strong strong moderate strong
6 Australian Fine China	<ul style="list-style-type: none"> <li>➤ the design and manufacture of commercial tableware for the hospitality industry</li> </ul>	a: NZ (1976) b: Indonesia (1993)	common distributor buyer's friend was seller's local customer	strong strong
7 Australian Lens Laboratories	<ul style="list-style-type: none"> <li>➤ fabrication of glass, CR39, and high-impact resistant macrolite polycarbonite spectacle lenses</li> </ul>	a: Seychelles (1994) b: Singapore (1994) c: NZ (1994)	buyer's friend was seller's local customer previous business experience buyer was seller's former apprentice	strong strong strong
8 Gelflex Laboratories	<ul style="list-style-type: none"> <li>➤ manufacture of contact lenses (notably, high-water content soft hydrogels) and implants (IOLs)</li> </ul>	a: Malaysia (1978) b: Indonesia (1978)	friends with seller's former patient medical colleagues researching contact lenses	strong strong

\* IVF needles were exported in 1984; amnicots were exported in 1985.

**TABLE 3: Influence of the National Diamond**

	<i>factor conditions</i>	<i>demand conditions</i>	<i>related &amp; supporting industries</i>	<i>firm strategy, structure, &amp; rivalry</i>
Seekers Australia	<p><u>weak influence</u></p> <ul style="list-style-type: none"> <li>• key inputs and designs sourced overseas</li> <li>• specialized knowledge resources (technical expertise relating to manufacture of stretch-fabric swimwear) created through investment</li> <li>• managements' perception of the unfavourableness of producing in Australia has led to the establishment of offshore production sites</li> </ul>	<p><u>weak influence</u></p> <ul style="list-style-type: none"> <li>• cultural attachment to the beach</li> <li>• Japanese buyers are very demanding; European consumers perceived to be world's most sophisticated and fashionable</li> <li>• local needs do not reflect needs overseas; exports require product adaptation</li> <li>• Australian retailers perceived as less professional and experienced</li> </ul>	<p><u>no influence</u></p> <ul style="list-style-type: none"> <li>• most important suppliers in the firm's value system are foreign firms</li> <li>• domestic suppliers generally provide only basic fabrics and simple prints; relationships with domestic suppliers are arms-length only</li> <li>• no internationally competitive and related industries within Australia</li> </ul>	<p><u>strong influence</u></p> <ul style="list-style-type: none"> <li>• differentiation strategy is suited to the high costs of production and price-based competitive threat posed by new entrants</li> <li>• Australian fashion swimwear industry is characterized by fierce rivalry which has created pressures to innovate and to sell abroad in order to grow</li> </ul>
Second Skin	<p><u>moderate influence</u></p> <ul style="list-style-type: none"> <li>• prescription, design, and manufacture of a pressure garment characterized by a high service component</li> <li>• the selective factor disadvantage of high labor costs (relative to pressure garments produced in volume offshore) has stimulated investment into the skills base of the company</li> <li>• CEO's entrepreneurial talent and therapist expertise is the product of local factor-creating mechanisms; however formative periods were spent working in foreign healthcare systems</li> </ul>	<p><u>moderate influence</u></p> <ul style="list-style-type: none"> <li>• local healthcare system characterized by world-class burns-care management and active research into burns related areas</li> <li>• sophisticated local buyers influenced development of the pressure garment and gave feedback leading to improvements</li> <li>• significant opportunities for growth in the local market; exports were not stimulated by a saturated domestic market</li> </ul>	<p><u>no influence</u></p> <ul style="list-style-type: none"> <li>• Second Skin's domestic supplier firms (arm's length ties) are not world-class competitors</li> <li>• there are no value-chain connections with related firms; Second Skin has not benefited from the presence in the nation of an internationally successful related industry</li> </ul>	<p><u>weak influence</u></p> <ul style="list-style-type: none"> <li>• Second Skin's differentiation strategy is suited to the high costs of production</li> <li>• CEO's personal goals support sustained investment into the company's skills base</li> <li>• the only directly substitutable product is made by a foreign rival</li> <li>• selective factor disadvantages have not induced the rationalization of the firm's production activities which is inhibited by the customized nature of each garment</li> </ul>
Tiger Engineering	<p><u>weak influence</u></p> <ul style="list-style-type: none"> <li>• physical resources are all imported from foreign suppliers; Australian steel perceived to be comparatively expensive</li> <li>• fabrication of the Tiger front-frame is a labour-intensive activity; no specialized skills are required; high relative labor cost has not stimulated rationalization of production</li> <li>• base of local engineering expertise is the result of investments made into apprenticeship programs</li> </ul>	<p><u>strong influence</u></p> <ul style="list-style-type: none"> <li>• Australian mining industry perceived to be the toughest in the world; the harsh climate and rugged terrain has compelled Australian miners to be particularly demanding in terms of product quality</li> <li>• the invention of the Tiger wheel-dozer was stimulated by the request of a local mine</li> <li>• Tiger's export performance indicates that local needs were anticipatory of foreign needs</li> </ul>	<p><u>no influence</u></p> <ul style="list-style-type: none"> <li>• no close-working relationships with domestic suppliers</li> <li>• Tiger's most important supplier is a foreign firm</li> <li>• no evidence of any benefit arising from Tiger's links with other internationally competitive firms in related industries in Australia</li> </ul>	<p><u>no influence</u></p> <ul style="list-style-type: none"> <li>• Tiger competes by offering a specialized product for a niche market; highly specialized demand (25 units per year) limits the potential for scale economies</li> <li>• there are no direct substitutes; indirect product substitutes (wheel-tractors and track-dozers) are all foreign made</li> <li>• no domestic rivalry; the decision to export was not influenced by competitive pressures in the home market</li> </ul>
Linmac	<p><u>no influence</u></p> <ul style="list-style-type: none"> <li>• key inputs used are imported from abroad</li> <li>• fabrication of cranes does not require any specialized skills beyond those of a boilermaker/welder</li> <li>• Australian crane prices are the highest in the world; CEO perceives that ultimately manufacturing will be done offshore in foreign markets where Linmac cranes are demanded</li> <li>• invention of the tractor crane in Australia is suggestive of local factor-creating mechanisms affecting the pool of engineering talent</li> </ul>	<p><u>no influence</u></p> <ul style="list-style-type: none"> <li>• local buyers perceived to be less demanding in terms of product quality than buyers in Europe and Japan and have not pre-empted the needs elsewhere; exports of the tractor crane have only come about as a result of requests from Australians in foreign markets</li> <li>• the development of the mini-crawler was stimulated by the needs of the foreign buyer</li> <li>• the domestic market is not saturated; significant sales growth opportunities were perceived</li> </ul>	<p><u>no influence</u></p> <ul style="list-style-type: none"> <li>• no close-working relationships with world-class domestic suppliers</li> <li>• domestic suppliers perceived to be unreliable and inconsistent in terms of the quality and quantity of materials supplied; key inputs sourced from foreign suppliers</li> <li>• no evidence of any connection between Linmac's own innovating activities and the presence in the nation of other internationally competitive firms</li> </ul>	<p><u>no influence</u></p> <ul style="list-style-type: none"> <li>• variations in demand limit the potential to benefit from economies of scale</li> <li>• high local manufacturing costs have not induced the rationalization of the firm's production activities; products are exported despite low production volumes and "inefficient" local manufacturing activities</li> <li>• Linmac is the only Australian manufacturer tractor cranes and mini-crawlers; there is no direct competition for either product in the domestic market</li> </ul>



			in related industries	
Go Medical	<p><u>weak influence</u></p> <ul style="list-style-type: none"> <li>• key physical inputs are sourced from foreign suppliers</li> <li>• labour intensive manufacturing process involving semi-skilled workers with high labour costs</li> <li>• good knowledge base for medical research and new product development, but commercialization of new products constrained by heavy regulatory charges and licensing costs</li> <li>• CEO's perception of the unfavourableness of producing in Australia has compelled him to investigate offshore production satellites</li> </ul>	<p><u>no influence</u></p> <ul style="list-style-type: none"> <li>• most innovative changes to products' designs have come as a result of feedback from foreign buyers</li> <li>• Australian healthcare system bureaucratic and perceived to be characterized by inertia</li> <li>• Australian buyers are used for testing new products simply because they are close by</li> <li>• significant opportunities for domestic sales growth perceived</li> <li><i>exception</i> - IVF needles: <u>strong influence</u></li> <li>• local pioneering work into IVF research directly stimulated development of Go Medical's IVF needles</li> <li>• American IVF clinics adopted research techniques developed in Australian clinics</li> </ul>	<p><u>no influence</u></p> <ul style="list-style-type: none"> <li>• critical suppliers are all foreign companies</li> <li>• domestic suppliers are generally small firms supplying basic componentry</li> <li>• quality of locally supplied inputs perceived to be generally inferior to foreign sourced inputs</li> <li>• no connections with related firms affecting Go Medical's export activities</li> </ul>	<p><u>no influence</u></p> <ul style="list-style-type: none"> <li>• Australian medical devices environment not favorable for new business formation; high barriers to entry due to TGA fees and licensing requirements</li> <li>• CEO does not perceive any domestic rivalry; the only effective competition for sales occurs in the export markets</li> <li>• selective factor disadvantages have not induced rationalization of the firm's production activities</li> <li>• new products are exported soon after introduction whilst production levels are still low volume</li> </ul>
Sterile Products	<p><u>no influence</u></p> <ul style="list-style-type: none"> <li>• a significant proportion of inputs are purchased at high cost from multinationals importing from foreign manufacturers</li> <li>• labour intensive manufacturing process involving semi-skilled workers at high labour cost; CEO perceives a disadvantage vis-a-vis rivals that import from low labour cost countries</li> <li>• manufacturing activities dominated by obsolete sterilization technology (ethylene oxide)</li> </ul>	<p><u>moderate influence</u></p> <ul style="list-style-type: none"> <li>• intense pressures created by domestic buyers (public hospitals) for cost competitiveness; private hospitals are consolidating their purchasing power further intensifying pressures for competitiveness</li> <li>• an internationally viable innovation (laparoscopic camera bag) was made at the request of a local buyer</li> <li>• a saturated home market has created pressures to sell abroad in order to grow</li> </ul>	<p><u>weak influence</u></p> <ul style="list-style-type: none"> <li>• Sterile's suppliers are all multinational firms that source mass-produced components from low-wage developing nations; cost savings are not passed down the value system</li> <li>• Sterile's close relationship with a local supplier aids in production of cost-competitive camera bag</li> </ul>	<p><u>strong influence</u></p> <ul style="list-style-type: none"> <li>• CEO perceives intense rivalry within the Australian market; small, domestic rivals are especially fierce competitors</li> <li>• rivalry is maintained by existing competitors, some suppliers, and buyers with high bargaining power</li> <li>• high degree of substitutability of rival products further intensifying competition</li> <li>• intense domestic rivalry has created pressures to sell abroad in order to grow</li> </ul>
Australian Fine China	<p><u>weak influence</u></p> <ul style="list-style-type: none"> <li>• access to abundant local resources (China clay, feldspar, silica) used in the manufacture of pottery</li> <li>• original expertise sourced from the United Kingdom</li> <li>• labour intensive manufacturing processes are perceived to be a disadvantage relative to foreign rivals producing in low labour cost nations</li> </ul>	<p><u>no influence</u></p> <ul style="list-style-type: none"> <li>• sophistication of Australian commercial-ware buyers (food and beverage managers) attributed to experience gained in other countries (eg; Switzerland)</li> <li>• most demanding buyers for cost competitiveness have been Chinese buyers in Southeast Asia</li> <li>• domestic market not saturated; opportunities for domestic sales growth perceived</li> </ul>	<p><u>no influence</u></p> <ul style="list-style-type: none"> <li>• AFC mines much of its own raw materials due to the lack of domestic suppliers</li> <li>• lack of supporting infrastructure (relating to the whole value-system) perceived to be a disadvantage relative to foreign rivals</li> </ul>	<p><u>weak influence</u></p> <ul style="list-style-type: none"> <li>• intense rivalry within the Australian market has created pressures to sell abroad in order to grow; however, rivalry is entirely with foreign firms; there are no domestic competitors in the Australian commercial-ware market</li> <li>• AFC's differentiation-based strategy is not supported by a recognized reputation and brand-name; the firm's competitive position in the industry is being undermined by well-known foreign brands that are being produced in low-cost countries</li> </ul>
Hof Pottery	<p><u>weak influence</u></p> <ul style="list-style-type: none"> <li>• physical resources (China clay, ball clay, feldspar, and silica) available in relative abundance in Australia</li> <li>• due to the high cost of investment capital Hof Pottery has not sought to innovate around the selective factor disadvantage of the high cost of labour in Australia</li> </ul>	<p><u>no influence</u></p> <ul style="list-style-type: none"> <li>• local buyers perceived to be somewhat loyal to local manufacturers; however Australian buyers are also perceived to have a very low level of awareness of Hof Pottery</li> <li>• no evidence of a connection between domestic demand conditions and firm innovation; local demand characteristics have</li> </ul>	<p><u>weak influence</u></p> <ul style="list-style-type: none"> <li>• the firm has benefited from its closer-than-arms-length working relationship with Australian Fine China, its most important materials supplier; AFC has provided advice leading to improvement in the quality of Hof's products</li> <li>• Australian Fine China is an isolated</li> </ul>	<p><u>weak influence</u></p> <ul style="list-style-type: none"> <li>• Hof Pottery competes by offering individual, hand-decorated ware which limits the scope to pursue scale economies</li> <li>• local industry highly fragmented with several firms effectively competing in the hand-decorated tableware market; however, little competition perceived in the market</li> </ul>

	<ul style="list-style-type: none"> <li>isolation from major markets; perception of comparatively high transportation costs</li> </ul>	not created pressures to sell abroad in order to grow	example; there are no close-working relationships with other internationally successful suppliers	<ul style="list-style-type: none"> <li>high degree of substitutability with imported hand-decorated ware; however the Hof's are not aware of the degree of competition from foreign products</li> </ul>
Australian Lens Laboratories	<p><u>moderate influence</u></p> <ul style="list-style-type: none"> <li>specialized knowledge resources (proprietary technology relating to the macrolite lens) created through investment</li> <li>partner's collective expertise acquired as the result of their training and experiences within the domestic industry reflecting favorable factor-creating mechanisms</li> <li>physical inputs and machinery are all sourced offshore</li> <li>semi-labor intensive manufacturing process involving skilled optical technicians at high cost relative to export markets</li> </ul>	<p><u>no influence</u></p> <ul style="list-style-type: none"> <li>macrolite lens innovation largely the result of consumer trends occurring in other countries; macrolite lens developed from day one with the needs of short-sighted Asian market in mind</li> <li>Australian buyers not perceived as being in any sense different from foreign buyers</li> <li>Australian optometrists have a limited awareness of the macrolite lens and the consumers' need for it</li> <li>both partners perceive significant opportunities for growth domestically</li> </ul>	<p><u>no influence</u></p> <ul style="list-style-type: none"> <li>all suppliers are foreign firms; materials and machinery are all sourced offshore</li> <li>no connections with other related firms affecting ALL's production of export activities; no internationally successful related industries within Australia</li> </ul>	<p><u>moderate influence</u></p> <ul style="list-style-type: none"> <li>the macrolite lens innovation emerged as the direct result of the pressures created by intense domestic rivalry fuelled by a high degree of product substitutability in glass and CR39 lenses</li> <li>domestic rivalry did not create pressures for the firm to sell the macrolite lens abroad</li> </ul>
Gelflex Laboratories	<p><u>no influence</u></p> <ul style="list-style-type: none"> <li>physical inputs (eg; lens buttons) and machinery are all sourced offshore</li> <li>labor intensive manufacturing process involving skilled optical craftsmen at high cost relative to export markets; absence of skilled labor in the local market</li> <li>proprietary knowledge relating to the manufacture of high-water content lenses acquired outside of Australia, ie; CEO's specialized skills are the product of another nation's factor-creating mechanisms</li> </ul>	<p><u>no influence</u></p> <ul style="list-style-type: none"> <li>increasing sophistication of Australian buyers and competition amongst contact lens retailers has come about in the period since exports began</li> <li>Australian buyers perceived to be relatively undiscerning and are generally reluctant to wear contact lenses; the nature of the Medicare system means Australian optometrists are more inclined to prescribe spectacles than contact lenses</li> <li>significant opportunities for domestic sales growth perceived</li> </ul>	<p><u>no influence</u></p> <ul style="list-style-type: none"> <li>all suppliers are foreign firms; materials and machinery are all sourced offshore</li> <li>no connections with other related firms affecting Gelflex's early export activities; no internationally successful related industries within Australia</li> </ul>	<p><u>no influence</u></p> <ul style="list-style-type: none"> <li>exports began while firm still small and production volumes low</li> <li>current perceptions of intense rivalry are the result of industry trends that have emerged in the period since the firm began exporting</li> <li>high-water content lens innovation not the result of pressures created by local rivalry; similarly local rivals did not create pressures to sell abroad in order to grow</li> </ul>
Top Optical	<p><u>moderate influence</u></p> <ul style="list-style-type: none"> <li>selective factor disadvantages have led to the firm's investment into semi-automated production processes; these improvements have significantly increased the productive efficiency of the firm and increased the potential capacity of the firm by 300%</li> <li>physical inputs (lens blanks and frames) and machinery are all sourced offshore; there is a lack of domestically available raw materials</li> </ul>	<p><u>weak influence</u></p> <ul style="list-style-type: none"> <li>Easy Lite innovation emerged to meet the needs of Top Optical's local client base</li> <li>a saturated home market has created pressures to innovate and to sell abroad in order to grow</li> <li>Australian consumers are perceived to be unsophisticated and lacking in brand loyalty; spectacle lens purchases are motivated primarily by health - and not fashion - considerations</li> </ul>	<p><u>weak influence</u></p> <ul style="list-style-type: none"> <li>all raw materials are imported either directly or through local distributors; Australian suppliers only fill bulk-breaking and distributor functions</li> <li>learnt of the Easy Lite innovation through its relationship with a domestic supplier when the domestic supplier sent the Easy Lite lens to Top Optical for testing</li> <li>no internationally successful related industries within Australia</li> </ul>	<p><u>strong influence</u></p> <ul style="list-style-type: none"> <li>vigorous domestic rivalry and many substitute products has created intense pressures on firms to cut costs, add services, differentiate output as well as creating pressures to sell abroad</li> <li>Top Optical competes by offering superior service and a differentiated product</li> </ul>

