

STRATEGY IN AN ERA OF ECONOMIC UNCERTAINTY: INTEGRATING EXTERNAL AND INTERNAL ANTECEDENTS OF FIRM PERFORMANCE

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ABSTRACT

According to the “structure-based view” of performance, the way a firm fits into the industry structure is seen as the primary source of competitive advantage. On the other hand, the “strategy-based view” contends that process-based aspects of firms should be accorded far more importance in the study of the determinants of performance than macro, structural indicators. While research in both these fields has added immeasurably to our understanding of inter-firm heterogeneity, there has been little attempt at integrating the wisdom from their collective findings. In this paper, we attempt to place the two fields in an integrative framework, arguing that linking the research on the strategic variables with structural research can explicate a number of unexplained facets of firm performance.

INTRODUCTION

In the context of strategy theory, the current economic challenges faced by firms across the globe may be seen as a sign that external economic forces are more powerful determinants of firm performance than internal indicators (Albors-Garrigos, Molina & Molina, 2014; Wilson & Eilertsen, 2010). Be it the credit crisis, the reduction in global consumption, or the pervasive problems associated with the global supply chain, current economic wisdom seems to call for firms to pay greater attention to positioning themselves against environmental turbulence rather than premising strategic decision on inwardly focused approaches. This is ironic because in the arena of strategic theory, the notion of internal drivers of performance, as exemplified by the dynamic capabilities perspective (Barretto, 2010; Helfat et al, 2007), is hegemonic in the current era. In other words, theorists suggest that firm success is determined primarily by how firms configure their internal resources and core competence. Which view explains firm performance better? In this paper, we suggest that this is in reality a flawed question; i.e. the purported antagonism between external and internal antecedents of firm performance is an unhelpful fiction. We attempt to go beyond the artificial binary between these two approaches, i.e. between external and internal indicators of firm performance to offer a possible integrated model.

The impact of market structure on firm performance has been the subject of considerable discussion and debate in strategic management (Porter & Siggelkow, 2008; Galunic & Eisenhardt, 1994). Drawing from the structure-conduct-performance paradigm in I/O economics, this discussion has progressed from an analysis of the impact of industry concentration on profitability to the impact of market share on profitability. Similarly, research on contingency theory has tightened the unit of organizational analysis from the corporate level to the SBU level (Rumelt, 1991). According to these perspectives, which may be collectively termed the “structure-based view” of performance, the way a firm fits into the industry structure is seen as the primary source of competitive advantage.

On the other hand, considerable parallel research has been being conducted on the strategic determinants of firm performance (Newbert, 2007). Grounding its research in an analysis of strengths that are inherent within the firm, this stream of research, which may be termed the “strategy-based view” of performance, has isolated valuable drivers of inter-firm heterogeneity through the understanding of core competence (Prahalad & Hamel, 1990), strategic factor markets (Barney, 1986), and dynamic capabilities (Helfat et. al. 2007). The contention of the strategy-based view is that process-based aspects of firms should be accorded far more importance in the study of the determinants of performance than macro, structural indicators.

While research in both these fields has added immeasurably to our understanding of inter-firm heterogeneity, there has been little attempt at integrating the wisdom from their collective findings (cf. Conner, 1994, for a prominent exception). In this paper, we attempt to place the two fields in an integrative framework, arguing that linking the research on the strategic variables with structural research can explicate a number of unexplained facets of firm performance. The paper seeks to build links between these two apparently diverse views of firm performance, arguing that strategic variables may be seen as drivers of structural variables rather than moderators thereof. In other words, structural variables may be seen not merely as drivers of firm strategy, but occasionally, its outcomes. In an econometric sense, it suggests that modeling strategic variables into structural elements of firm performance would explain far more variance in performance than a discrete examination of either stream.

The rest of this paper is organized into three main parts. The first part provides a historical and analytical overview of the debate on structure and performance, from its inception in the field of industrial economics down to its adoption by the field of business strategy. It summarizes the main findings of this view and critiques its shortcomings as an analytical tool. In the second part, the strategic view of firm performance is introduced and analyzed as an alternative explanation of firm performance. Its diverse sub-streams and shortcomings are also explored. The final section is concerned with postulating an integrative framework between these two streams, and developing propositions whereby links can be made between their respective empirical agendas. This integrative framework is meant not only to further the contention that strategic behavior by firms and industry structure exist in a reciprocal relationship, but also to suggest areas of commonality in the two perspectives that may lead to a unified research agenda.

STRUCTURE-BASED VIEW OF FIRM PERFORMANCE

Research in strategic management has always acknowledged its relationship with the field of economics in general and industrial organization in particular (Kim & Mahoney, 2005; Rumelt, Schendel, & Teece, 1991). While the areas of collaboration and joint theory building between the two fields are indeed diverse, nowhere is the relationship stronger than in the examination of the impact of market power as represented by a variety of structural variables on firm performance. It may be contended that while the foundations of research on the relationship between structure and performance were laid in the field of traditional industrial organization theory, much of the subsequent refinement in the debate came from the field of strategy. For instance, while the postulated relationship between industry structure and firm profitability was inspired largely by Bain's (1956) study of the relationship between profitability and industry concentration and subsequent empirical studies confirming this relationship especially on the temporal scale (Weiss, 1971), it was research that went beyond the confines of neo-classical economics into management strategy which introduced market share as a more explanatory determinant of firm performance (Ravenscraft, 1983; Chu, Chen & Wang, 2008).

The theory that profitability and market share were causally linked provided the basis for further disaggregation of the unit of analysis in structural research from the industry to the firm. The theoretical persuasion for this disaggregation was primarily laid by the emergence of strategic groups as a construct (Caves & Porter, 1977). However, the primary empirical impetus for this disaggregation, and indeed, the repudiation of all industry level aggregation, may be attributed in large part to the analyses that were conducted using data made available from the Profit Impact of Market Share (PIMS) database and the Federal Trade Commission's Line-of-Business data. While PIMS provided disaggregated data for a small but dominant sample of firms (all of which figured in the Fortune 500 list), the FTC data was far more comprehensive, though it is available for far too short a period to lend itself to any meaningful longitudinal analysis.

Using PIMS, researchers were not only able to demonstrate a strong correlation between market share and performance, but also to speculate on the specific quantitative relationship between market share and profitability (they wished to come up with specific, quantitative relationships between % increases in market share and % increases in profitability). While this quantitative relationship has been hotly debated in the marketing literature (Jacobson & Aaker, 1985), the relationship between market share and profitability was subsequently confirmed by other studies (Chu, Chen & Wang, 2008), which found that the incorporation of market share in the structure-performance equation rendered concentration completely ineffective as an explanatory variable.

In terms of units of analysis, the structural view of firm performance has concentrated on four levels, viz. the industry/strategic group level, the corporate level, the SBU level, and at the level of intra-corporate fit (Vorhies, Morgan & Autry, 2009).

First, borrowing from the I/O perspective, the industry/strategic group analytical level tries to explain how firms use their resources to draw industrial boundaries - thereby making it difficult for new entrants to capitalize on rents enjoyed by incumbents (Bain, 1956). Further

refinement of the barriers to entry concept reveals that industries may not be the best criteria to draw boundaries - instead, firms tend to cluster in strategic groups, which may pose mobility barriers to new entrants rather than entry barriers (deSarbo, Grewal and Wang, 2009).

Second, drawing primarily from Chandler's (1962) study of the strategy-structure relationship, corporate level theorists primarily explore issues of diversification and its impact on structure and performance. Chandler's theories were extended by Rumelt (1974), who found that the strategies of related-constrained and related-linked diversification were more profitable than unrelated diversification. Studies of diversification have constantly attempted to explore the link between relatedness of diversification profile and performance (Nath, Nachiappan & Ramanathan, 2010). While related diversification has an intuitive appeal, empirical results have been equivocal; while some researchers found support for Rumelt's hypothesis, others found that unrelated diversifiers outperformed related firms in some industries.

Third, some theorists have argued that variances in firm performance are best explained through business level strategies. They contend that drivers of performance are meaningless if the unit of analysis is the diversified firm, since many strategies tend to get aggregated; the ideal unit of analysis should be the strategic business unit (SBU) (Rumelt, 1991). Drawing from this finding, there may be normative strategies that SBUs may employ to succeed in a variety of environments, such as cost-based strategies, differentiation strategies or narrowly focused strategies (Porter, 1980). Such strategies may be used uniquely or in combination (Hill, 1989). Based on the types of environment encountered by SBUs, they may be classified according to their strategic focus as prospectors, analyzers, defenders or reactors. SBUs may also vary their strategies at the product level, based on the product life cycle, or the information available about the product environment (Brown & Blackmon, 2005).

Finally, going beyond the corporate and the business level, theorists of intra-corporate fit (Gupta & Govindarajan, 1986, 2000) have argued that fit between intra-corporate units is important, and that corporate strategy is no more than a portfolio of separate SBU strategies rather than simple diversification. Firms may have a mixture of SBUs that are prospectors, cost-leaders, innovators, etc. The concern of these researchers was to derive different management characteristics that were needed to drive different SBU strategies effectively. Their endeavors were later joined by others who attempted to explore the different control arrangements that were needed between corporate headquarters and SBUs, and the different inter-SBU relationships that were needed for the same (Hill, Hitt, & Hoskisson, 1992; Ocasio & Joseph, 2008).

STRATEGY-BASED VIEW OF FIRM PERFORMANCE

Theories of the strategic determinants of firm performance concentrate more on the efforts of firms in creating competitive advantage by developing internal routines and exploiting synergies rather than through structural maneuvering (Newbert, 2007). While many schools of thought may be linked to the strategy-based view, three research streams appear representative of this perspective; the resource based view of the firm, nowadays being buttressed by the dynamic capabilities perspective, corporate leadership, and strategic decision-making. In all these research streams, strategic choices made by managers and firm constituents are emphasized as

being far more important to firm performance than structural constraints. For example, the resource based view conceptualizes human resources as valuable sources of competitive advantage (Barney, 1986; Newbert, 2007), while the dynamic capabilities perspective seeks to understand how organizations ‘learn to learn’ (Theodore, 2014; Barretto, 2010) and renew their core competences.

The aim of these inter-related perspectives is to understand how companies are able to achieve rent benefits through the management of their strengths and weaknesses rather than environmental positioning. Most researchers agree that this is achieved through the development and improvement of specific strategies that are hard to imitate by competitors. Hence, they agree that competitive advantage itself is idiosyncratic, and its sustainability is dependent precisely upon its resistance to replication.

The resource based view and increasingly, the dynamic capabilities (DC) perspective, lies at the heart of this paradox. According to these perspectives, the advantage of the resource-rich firm lies in the fact that its resources and the routines, capabilities, competencies that arise therefrom, are tacit, ambiguous, difficult to imitate (Reed & DeFilippi, 1990). According to these perspectives, firms develop and maintain a sustainable competitive advantage through unique and idiosyncratic characteristics. DC theorists have somewhat ambitiously suggested that the key to superior firm performance in the future lies in a firm’s ability to corral complex and innate knowledge assets into routines (Lo, 2013; Helfat et al, 2007).

The resource-based view of the firm seeks to explain patterns of performance differences in firms by conceptualizing them as collections of heterogeneous resources. Resources may be physical (plant and equipment), human (managerial and technical staff) or organizational (routines and coordinating mechanisms). The dynamic capabilities view argues that heterogeneous resource endowments are sources of competitive advantage if they are value creating, rare, imperfectly imitable, or non-substitutable.

This approach places itself in opposition to the outward focus advocated by the industry-structure hypothesis. In an attack on the structural preoccupations of the research in strategy, Barney (1986, p. 1240) criticizes research that "is based on the observation that firms which compete in imperfect product markets enjoy above normal returns". While the correlations between firm performance and market imperfections has been statistically observed, Barney contends that it is a poor explanatory variable for understanding firm heterogeneity, and that firms need to look inward to "exploit resources they already control in choosing strategies"(p. 1239). In effect, Barney exemplifies the antipathy of the resource-based view of the firm toward structural analysis.

The resource-based view grounds its research in an analysis of strengths that are inherent within the firm, this stream of research has isolated valuable sources of inter-firm heterogeneity such as core competencies (Prahalad & Hamel, 1990), strategic factor markets (Barney, 1986), uncertain imitability (Lippman & Rumelt, 1982), organizational climate (Hansen & Wernerfelt, 1989) and intangible assets (Hall, 1993). Many theorists (e.g. Menguc & Barker, 2005) have found that the resource-based and dynamic capabilities perspectives are quite complementary and mutually reinforcing.

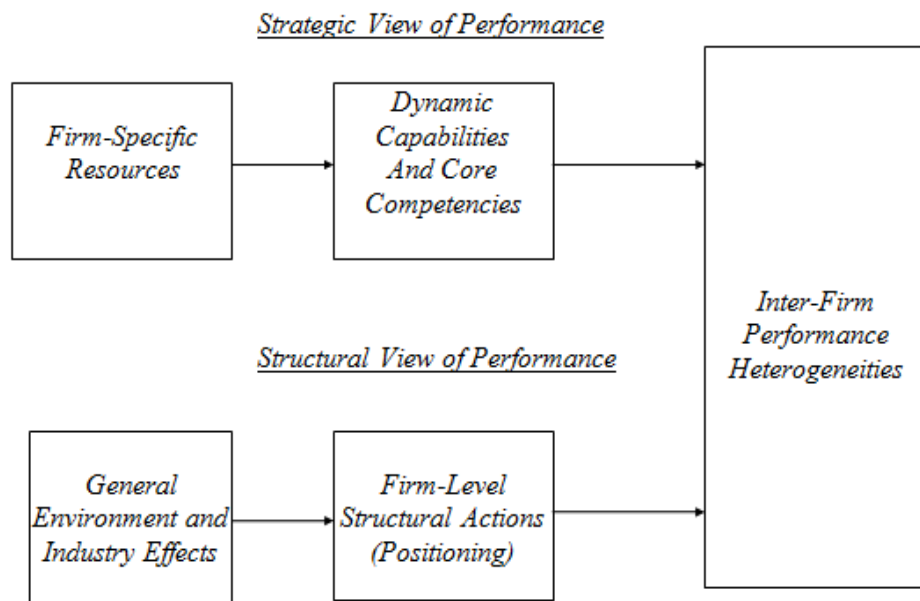
Building on this theme is the contention that firms create sustained competitive advantage by creating conditions of causal ambiguity (Reed & DeFillippi, 1990). Informed in part by the literature in contestability of markets and its repudiation of the concept of entry barriers, such approaches suggest that in the absence of external drivers of heterogeneity, firms need to create different conditions under which they can sustain their positions of ascendance in various markets. They do so by the creation of non-duplicable resources (Anand et.al. 2009), setting up specific routines of work that are in effect non-transferable (Nelson & Winter, 1982), through specificities of organizational culture that are unique to the organizational environment (Barney, 1986) and by developing and nurturing their core competencies (Prahalad & Hamel, 1990). In effect, firms look inward and create areas of expertise that are relevant, value creating and imperfectly imitable (Anand et.al. 2009).

STRUCTURAL AND STRATEGIC VIEWS: TOWARD A SHARED LEARNING

Much of the existing research on the examination of the structural determinants of firm performance has tended to minimize or set aside the strategic aspects of firm performance (McGahan & Porter, 2007). While some of the research using the PIMS database has attempted to study qualitative determinants of market share such as quality of organizational resources, nature of leadership, or the process of decision making, they have been used largely to supplement the findings of structural analysis rather than as variables in their own right. However, one of the few comprehensive attempts to include strategic attributes in a 'traditional' market share-profitability equation (Jacobson & Aaker, 1985) reported a dramatic reduction in the coefficient associated with market share when other attributes such as product quality were included as independent variables. Clearly, there exist great linkages between the strategic and structural elements of performance, suggesting that the two are by no means contradictory (Kavale, 2012).

The "unintegrated" approaches taken by the strategic and structural views have been

Figure 1. "Unintegrated" Views on Inter-Firm Performance Heterogeneities



represented schematically in Figure 1. While the strategy based view of the firm concentrates on the relationship between resources and competencies, the structural view is preoccupied with finding industry-based drivers of heterogeneity. The relationship between the empirical foci of both streams has been demonstrated in many ways; for example, research in the field of marketing has empirically tested the relationship between firm performance and a variety of attributes that reflect strategic decisions, such as breadth of product lines (Rao & Rutenberg, 1979), product quality (Garvin, 1988), price (Monroe & Krishnan, 1984), advertising expenditure (Tellis, 1988), sales staff expenditure (Gatignon & Hanssens, 1987), R & D expenditure (Hill & Snell, 1989) and intangible factors (Boulding & Staelin, 1990). As can be seen, these variables affect the strategic and structural view equally. However, in the realm of strategic management, empirical research has tended to focus more on the structural perspective. This may be due in part to the current difficulties in operationalizing the strategic view, and also to the availability of extremely rich data sources to aid research in the structural perspective. Databases such as the FTC LB data and PIMS in addition to individually culled data sources and other sources such as Compustat and Bloomberg have aided a great deal of the research, to the extent that research conducted purely on structural lines in a cross-sectional framework now seems to provide little further insight into the conundrum of inter firm heterogeneity.

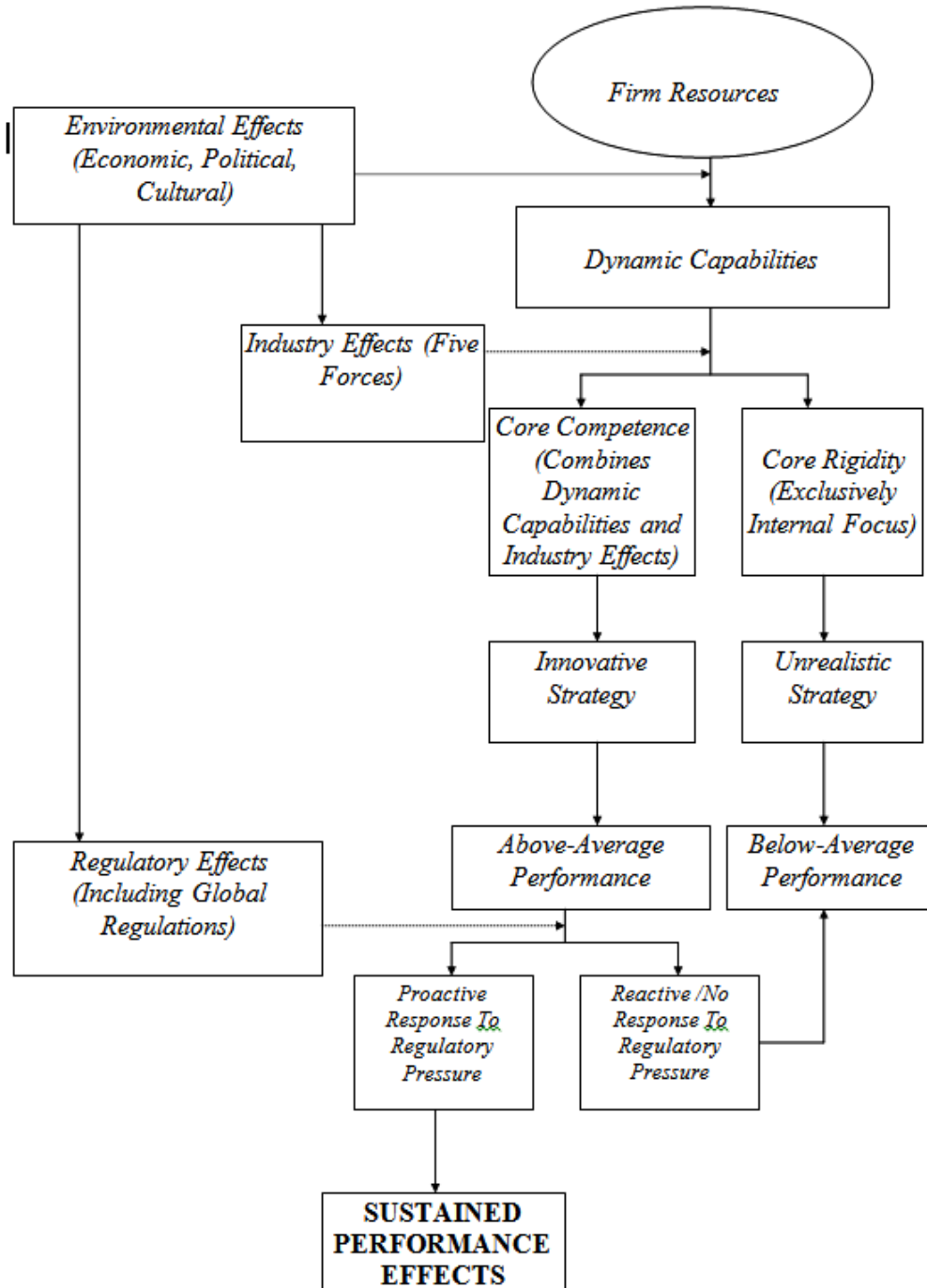
However, neither the strategy based view of the firm nor a purely structural analysis can address the inadequacy that we have begun to associate with discrete models. There is considerable evidence to suggest that the act of attempting to combine the wisdom of these two streams may not be as foolhardy as the intense debates between the proponents of these two paradigms would have us believe. For instance, despite the intense debate between the industry-structure view and the resource based view of the firm, large areas of commonality are visible upon closer scrutiny. Arguing specifically for the amalgamation of the industry-structure perspective and the resource-based perspective, Conner (1994) identifies four areas of commonality:

1. *Acknowledged importance of industry structure;*
2. *The understanding that industry conditions do not determine firm strategy;*
3. *Belief in the power of firm-level actions to affect industry structure;*
4. *Acknowledgment of exogenous influences on industry structure.*

Similarly, the artificial nature of the dichotomies we create by pigeonholing all research on firm performance into these categories can be further observed when a different classification scheme yields different groupings of approaches. For example, if we were to dichotomize the theories of the firm into theories of equilibrium and theories of disequilibrium (Best, 1990, p. 106), the strategic view and the structural view would both be seen as belonging to the equilibrium theories. Equilibrium theories would comprise the Penrosian view which takes into account much of the strategic view of firm performance, the Coasian view which studies the transactional view of the firm and the Marshallian view of static equilibrium which informs the structural perspective. These theories could then be seen as challenging economic theories that rely on disequilibrium (such as the Schumpeterian view). Clearly, the integrative framework attempted herein does have a theoretical mandate as well as a precedent.

The proposed integrative framework, which is represented in Figure 2, postulates a

Figure 2. Integrative Framework Connecting Strategic and Structural Approaches



dynamic relationship between structural determinants of firm performance such as general environmental, industry and regulatory effects, and internal strategic determinants such as

dynamic capabilities and core competence. It also suggests that in the absence of an external focus, a core competence may morph into a core rigidity, which would affect firm performance negatively. In terms of its integrative aspects, this framework makes five major distinctions from the existing wisdom.

1. Industry/Firm Reciprocity

Contrary to the contentions that may be derived solely from the structure-based view, it sees industry structure more as an outcome variable in the interactions between firms and markets rather than purely a driver of firm performance. Based on the above contention, the following proposition for research may be offered:

Proposition 1: Industry structure and firm performance exist in a condition of dynamic equilibrium; sometimes industry structure may be seen as a resultant of firm performance rather than a determinant thereof.

In an econometric sense, this proposition argues for using market structure variables as dependent variables in the performance equation, where firm performances within an industry may be used as independent variables. In a theoretical sense, it suggests that it is not industry level variables (such as barriers to entry) that constrict firm performance, but rather the actions of individual firms within the existing industry or strategic group that exert greater pulls. From a practitioner's perspective, this proposition challenges the contention that blind commitment to increasing market share at the expense of differentiation can lead to the panacea of improved performance; market share is viewed more as an indicator of performance rather than a bland causal antecedent thereof.

2. The Environment as a Source of Dynamic Capability

Instead of viewing core competencies as being causally derived from firm-specific resources, the new model argues that strategic factors that contribute to a firm's competitive advantage are direct results of the application of core competencies to freely available resources. For instance, Google's business model is based on its ability to facilitate search of already available digital data, while Apple has monetized digital music downloads by fashioning its iTunes software so that consumers can access available and copyrighted music from vendors (Auletta, 2009). Following from the logic of the above premise, it may be argued that freely available resources from external factor markets can play an equally important role as the constituents of competitive advantage as long as firm-specific core competencies are deployed to make innovative and value-creating products therefrom. This contention may be formally articulated as follows:

Proposition 2: Freely available resources may be as much a source of competitive advantage as firm-specific resources, provided they exhibit a unique fit within the firm's dynamic capabilities.

The above proposition is also seconded by the research on hyper-competition, where it is observed that speed of response may lead to advantage even when regular strategic decisions are being employed; in other words, there are conditions where, given the same access to resources, some firms may outperform others because some aspect of their core competency assists in the speed of response.

For modelers, this proposition offers a method of relating (operationalizable) specificities in the resource structure of the firm to (intangible) competencies. From a theoretical standpoint, it challenges the current taxonomy of competencies into input-based, managerial, output-based and transformational competencies (Lado & Wilson, 1994). Rather, in a Schumpeterian sense, it may be argued that all competencies are, by definition, transformational. For practitioners, this offers a way in which such competencies can be linked to expected performance during the planning process.

3. The Role of Luck and Timing

The incorporation of stochastic elements into the model offers a far more realistic analysis of the peculiarities of inter-firm heterogeneity. As described earlier, stochastic elements may have integral parts to play in the creation of heterogeneities. The planned entry of a large player into the market may substantially alter the contours of the market overnight. Similarly, exit decisions by competitors are not events that one can plan for. There is always the element of luck, fortune and force majeure elements that may radically alter a firm's fortunes. The stochastic element therefore not only has the potential to exert a tremendous and unexpected force on firm performance, it may radically alter the industry structure.

Based on a need to take the stochastic element into account, a third proposition may be offered as follows:

Proposition 3: Competitive advantage may be related to events that are beyond the ambit of structural or strategic analysis; to that extent, models of performance need to account for stochastic elements.

In econometric terms, this proposition argues for including elements of this uncertainty into any model that they proposed. One of the best examples of such modeling was provided by Lippman and Rumelt (1982), who operationalized uncertain inimitability by “[m]aking a parameter of the firm's cost function depend upon a realization from a probability distribution” (p. 420). Such incorporations into simulations are extremely important, as they recognize the inherent reality of our inability to account for factors in the model that may play a major role in the creation of firm-level advantages. In terms of the interpretation of results, it frees models from the "tyranny of the r-square", and allows them concentrate more on specific explanatory tasks.

For theory, the study of stochastic elements offers insight in that macro analysis, trend based studies, longitudinal data and survivor analysis become more important as explanatory as well as predictive indicators rather than mere cross-sectional data. For practitioners, it suggests a

greater level of macro-analysis to predict, pre-empt or take advantage of environmental exigencies.

4. Special Challenges for Global Firms

International management theorists have been engaged in studying the structural and competitive elements of a global strategy from a long time (Birkinshaw, Morrison, & Hulland, 1995). Such studies have attempted to describe markets and industries as under-globalized, optimally globalized or over-globalized depending on the level of international competitive activity (Peng and Pleggenkuhle-Miles, 2009). The level of globalization of a particular market may be seen as a very important moderating factor in the role that structural factors may play in enhancing firm performance. For example, in underglobalized markets, while there may be great advantages in structural factors such as barriers to entry, mature global markets will not only demand differentiated products, but will also provide large enough markets to firms, whereby the advantages associated with structural factors may be minimized. In other words, it may be proposed that:

Proposition 4: Structural factors will play a far more vital role in underglobalized markets than in mature global markets; the more globalized a market, the less critical will be the impact of structural factors.

This proposition locates its theoretical roots on the Post-Fordist literature (DiPrete, Goux & Maurin, 2002), where it is contended that growing heterogeneities in market demand in late-capitalist industrial segments as well as increasing sophistication of manufacturing technologies will lead to lesser emphasis being placed upon structural factors such as economies of scale. In other words, the more globalized the economy, the greater will be the demand for flexibility in distribution (Gao & Yoshida, 2013) and manufacturing systems (Piore, 1994), and leading to niche markets, specialized products and reduced entry barriers.

5. Market-Hierarchy Blurring

Not only are markets getting globalized, but relationships between markets and hierarchies are being fundamentally altered by the advent of newer technology. It may be argued that in the Post-Fordist marketplace, the firms that will be able to sustain their competitive advantage will be those that are able to network with other firms in other geographic and product markets to develop synergies. Be they buyer-supplier synergies (Martin, Mitchell, & Swaminathan, 1995), or synergies of shared resources (Piore & Sabel, 1984), these networks of cooperation between firms will be powerful sources of competitive advantage, flexibility and lowered costs in the Post-Fordist workplace. It must be kept in mind however, that such innovative blending of strategic and structural arrangements may not be immediately observable in technologically stable environments, where stable manufacturing and marketing options render it lot of competitive activity more profitable, but will be exhibited only in industries which demand technological sophistication, capital intensive up-front investment in infrastructure, research and product development, and the rationality of cooperation as a risk-

reducing, cost-reducing and resource-sharing device. This contention can be stated in the form of a proposition as follows:

Proposition 5: Networking and cooperative strategies will be a powerful source of competitive advantage in technologically advanced industries; to that extent, technological advancement will diminish the importance of traditional structural attributes and contingencies.

This proposition however implies that relationships between collaborating firms can no longer remain superficial, but become more organic. Such relationships, as have been observed in many industrial districts (Piore & Sabel, 1984), imply that firms not only share facilities and finances, but also specific resources, know-how and trade secrets. For example, the joint research effort by two pharmaceutical companies to develop a new drug can only be possible when the companies share the inertia of accumulated basic research of decades. Such collaborations are becoming more and more prominent in the technology intensive segment, especially in the information sector, where diverse information providers are trading core competencies (the relationship being Google and media companies being a prominent case) and newer organizational arrangements seek to adapt to newer forms of customer interface (such as the semantic web). Based on these ground realities, it may be proposed that:

Proposition 5 (a): In emergent, technology intensive sectors, core competencies may also be tradable.

Taken at face value, this proposition appears to be a repudiation of the core competence perspective. However, this should be viewed more as a special case scenario than as a contradiction. As Piore (1994) has argued, the entire notion of firm propriety and boundaries has been challenged in the emergent technology sectors.

For researchers, the above propositions represent the need to take industry-specific factors into account while modeling the performance relationships. In particular, hi-tech industries, and those requiring capital-intensive product development need to be treated differently from those industries with conventional product ranges.

DISCUSSION

In moments of economic crisis, it is essential that firms use their internal strengths as well as their ability to leverage economic trends harmoniously; this is the only way for them to succeed in an atmosphere as turbulent as the one we are currently experiencing (Wilson & Eilerstein, 2010). In this paper, we have suggested a more holistic and integrated perspective that needs to be employed in order to fully understand the issue of firm heterogeneity. The integrative framework presented herein represents but one way in which we may go about this.

The discussion about the integration of strategy and structure contains tremendous interdisciplinary possibilities. Theorists of political science, public administration, sociology and education have been grappling with a similar need to balance the deterministic elements of structure and the role played by individual will in this process. The fundamental inadequacy associated with the structural view is that a lot of detail and nuance regarding a firm's process-

based dynamic is sacrificed at the altar of operationalization. This loss may be likened to searching for a lost object only where the light is adequate, and disregarding the dark areas. On the other hand, the strategic perspective may be faulted on the grounds that it is far too relativistic to be operationalizable. It is tautological to state that firms perform better because they have intangible advantages; the challenge is to render these advantages tangible, a challenge that the strategic view scarcely accepts.

The proposed continuum starts from structural (and measurable) aspects of firm performance, and suggests ways in which they can be disaggregated into the strategic aspects. It also discusses specific issues relating to the operationalization of these aspects, which will be important for the aspiring empirical researcher. Also, practitioners also need to be aware that exclusive reliance on structural parameters such as market share may not be the best option under the circumstances, it is far more important to view structural parameters as outcomes of strategic actions rather than as performance indicators in their own right.

Much of the intensity of the debates in the field would be better served if put to work in discovering elements of commonality and continuity. To the extent that the explication of heterogeneities forms one of the cornerstones of research in the "content" segment of the field of strategic management, it constitutes a relevant and important area of concentration. This integrative framework represents the beginning of an attempt to address one of the biggest challenges that has faced modelers of strategic performance, the inability to operationalize intangibles such as dynamic capabilities. In addition, it suggests the incorporation of stochastic and probabilistic elements into quantitative analysis, which represents an important agenda for research and inquiry.

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