The theoretical underpinnings and empirical research

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The main purpose of this chapter is to determine the theoretical underpinnings and empirical research that seeks to explain why some firms are more successful than others. In particular, a discussion will be presented first on the economic tradition. Second, and more specifically, the resource-based view of the firm is explored from which the conceptual model is based.

The first segment determines the economic practice of performance heterogeneity, with a particular focus on traditional industrial organization (IO) economics and Michael Porter’s five forces framework. The second part drags concentration to the major criticisms pointed at the economic tradition. Following the second segment, an exploration of the new economy will be offer in order to extrapolate new views and assert determinants of organization success in the existing economic era and its importance to resource-based theory. The third segment deals with the determinants of firm success, explaining the firm’s factors. The fourth segment explains the channel criticisms leveled at the RBV. In the end, the last segment discovers the relevant practical evidence within the RBV stream.

DETERMINANTS OF THE FIRM SUCCESS: INDUSTRY STRUCTURE FACTORS

Levinthal (1995) found out that the principal mission of strategic management is the analysis of performance variety within the firms. Two prime theories explained and have heavily influenced the answer to the question of performance differences within firms. One theory’s focuses is on differences in the performance of industries-and in addition, firms-are characteristic to the economic attractiveness of the structural features of the industries within which they are associated. This line belongs to the school of

economic explanations of performance heterogeneity, primarily subjected to performance differences between industries.

Illustrating upon economic heredity but changing the centre of attention away from industry structure, another stream has conceived that differences in firm success are characteristic to internal or firm-level factors. This stream contemplates on resources as the unit of analysis in determining performance heterogeneity within firms. Consequently, two leading explanations of the sources of competitive advantage have surfaced in the literature, mainly in the last 30 years. The first main group follows the structure-conduct-performance (SCP) paradigm of traditional industrial organization (IO). The second group is known as the resource-based view of the firm (RBV), based on a firm’s factor tradition.

TRADITIONAL INDUSTRIAL ORGANIZATION ECONOMIC THEORY

Economic theory has a stretched and rich practice and includes a range of ‘ schools’ to which individual theorists have contributed over the last 75 years. Though a number of schools seek to understand the determination of performance variance within firms with a level of focus on firm-level factors, strategic management has been mainly influenced and grounded by industrial organization economics (Porter, 1981). Industrial organization economics mainly concentrates on industry structure as the main determinant of performance within industries, while paying no attention to the importance to intra-industry heterogeneity. The external environment is quarreled to be a central subject matter within traditional IO (Mauri and Michaels, 1998).

Mason (1939) was within the first to suggest that there is a deterministic connection between industry structure and firm's performance. Later on, Bain (1959), one of Mason's students at Harvard University, presented his seminal work which focused on the structure-conduct-performance (SCP) model. The SCP model confirms the importance of industry structure as one of the key determinant of the performance variance between firms competing within different industries.

In the Bain-type industrial organization (IO), conduct can largely be ignored as performance is determined solely by structure (Porter, 1981) because industry structure determines firm conduct. In fact, most of the intellectual work has observed the structure-performance association, efficiently ignoring behavior (Scherer, 1980). Phillips (1974) proposes that a firm's performance depends on industry structure alone, therefore, behavior is determinable. Summarizing the SCP, Porter (1981) states:

" The essence of the [Bain] paradigm is that a firm's performance in the marketplace depends critically on the characteristics of the industry environment in which it competes…Industry structure [Bain proposed] determined the behavior or conduct of firms, whose joint conduct then determined the collective performance of the firms in the marketplace".(p. 610, 611)

Within the structure-performance model, the roles of firm size and industry concentration are predominantly emphasized. Bain (1954, 1956), for example, highlights that industry concentration and barriers to entry act together to increase the performance of large firms. Also, Martin (1993)

claims that, economies of scale, product differentiation, and absolute capital requirements act as barriers to entry. In this regard, larger firms lean to be the benefactors of such structural occurrence.

The formation of high levels of industry concentration, on the other hand, tends to encourage collusive and even monopolistic conduct, which allows firms to experience market power while purposively confining competition (Conner, 1991; Jacobson, 1992; Martin, 1993; Grant, 2002).

Firms who hold back output can then charge higher prices, thus gaining a profit through a synthetically high market price. In addition, the restriction of rivalry, forces customers to accept inferior quality products because the benefits of innovation are controlled in the market (Jacobson, 1992).

The capability to build strong barriers to entrance and the chase of monopoly control tends to support larger firms, given the postulation of relatively stable, stagnant market environments within the Bain-type IO theory (Porter, 1981; Jacobson, 1992; Makadok, 1999). Applying IO rational to the development of a competitive strategy, the key then, is to select a field whose structure is beneficial to imperfect competitive dynamics whereby monopoly fees can be taken out.

From a resource point of view, whereas neoclassical perfect rivalry theory proposes that firm resources are fundamentally homogeneous and thus entirely mobile and transferable among firms, Bain-type IO theory calms down this assumption in those levels of firm resource heterogeneity may exist; i-e in the form of lawfully protected assets such as patents, those are unique to individual firms (Bain, 1959). However, while levels of firm

resource heterogeneity may be standardized in Bain-type IO theory, these variations do not matter as the economic strength or weakness of industry structure eventually determines the possible profit of firms within a given industry (Phillips, 1974; Porter, 1981).

Though much of the theoretical groundwork of the traditional IO model was prepared in the 1930s through the 1950s, Michael Porter's work in the 1980s indicated a foremost ' revival' of the Bain-type IO model in that he applied IO principles to the field of strategic management, mainly in the areas of corporate strategy and competitive benefit (Porter, 1980, 1985). Mostly referred to as the ' five forces' framework. Porter's early research has conquered the teaching and practice of strategy for more than 30 years and is deep-rooted in the traditions of Bain-type IO economics.

PORTER'S FIVE FORCES FRAMEWORK

As with IO economics, Porter emphasized much of his attention on industry structure. Inspecting the level of competition within an industry based on five forces, he suggests that it is the mutual strength of the five forces that conclude the profit potential of any industry and thus firms' relative chance for higher performance (Porter, 1980).

It is the first structural force is hazard of new entrants that focuses on the strength of an industry's barriers to entry. The first force focuses on the favorability of industry barriers that may restrict the arrival of new entrants, therefore protecting the industry's potential profit. Barriers to entry can comprise of economies of scale, product differentiation, and customer loyalty to recognized brands (Hill and Deeds, 1996; Mintzberg et al., 1998). The

higher the barriers/ obstacles to entry, the more probable it is that firms within the industry will look for tacitly collude to uphold those barriers, as a result making it difficult for outsiders to gain entry, which ultimately preserves industrial performance (Hill and Deeds, 1996; Grant, 2002).

The second structural force is the threat of alternate/substitute products and services that focuses on the quantity and level of competition between industries. In industries where a few products or services substitutes are available, industrial profitability is protected. In industries where there are many products or services substitutes are easily available, industrial profitability will for sure suffer. Competition then, depends on the degree to which products or services in one industry can be replaced by products or services from another industry (Mintzberg et al., 1998; Digman, 1999).

The third structural force is the bargaining authority of suppliers/dealers that focuses on the relative power and control that suppliers/dealers may or may not impose within an industry. If we assume that suppliers would wish to take advantage of their own profits, achieving the highest price for their products or services is desirable. If there are a few suppliers and strategic, the bargaining power of firms in that particular industry is then voiceless, so pricing advantage can be attained by suppliers/dealers which in turn negatively impacts the overall industrial performance and vice versa (Bennett, 1996).

The fourth structural force is the bargaining authority of buyers that focuses on the customers of that firm and their purchasing power. Buyers always try to bargain for lower prices with higher quality. In order to do so the firms

give concessions to the buyers with bargaining powers necessarily increases rivalry within the industry, which ultimately eats away the industrial profit margins (Digman, 1999). This is a serious problem in industries where the threat of substitute is high.

The fifth structural force is rivalry amongst the existing competitors that focuses on the competition of firms within an industry to extreme. The other four forces converge on rivalry, which is likened to competition as a ‘ war’ (Mintzberg et al., 1998). Fundamentally, the fifth force looks for, to explain the conduct of firms engaged in this battle for bigger market share and higher performance.

It is important to keep in mind that the five forces are a function of industry and because of this industrial structure industrial profitability is determined (Digman, 1999). Similar to Bain’s structure-conduct-performance (SCP) model, the five forces of industrial structure affects the overall industry performance, and therefore the performance of firms within the industry.

Porter’s (1980; 1985) work, however, does set special emphasis on firm’s conduct, mostly with respect to strategy development and strategic choice within the framework of industrial structure. Known as ‘ generic’ strategies, Porter (1980) argues that firms must choose between three standard strategies:

Cost leadership

Differentiation

Cost or differentiation focus

Porter (1985) looks at the external environment as partially exogenous and partially subject to the influences of firm actions. Porter (1985, p. 7) states, “ a firm is usually not a prisoner of its industry structure. Firms, through their strategies, can influence the five forces. If a firm can shape structure, it can fundamentally change an industry’s attractiveness for better or for worse.”

In addition, Porter’s framework visibly identifies the position of firm conduct in persuading its own destiny. i. e., Firms have to choose a strategy with which they can create an exclusive, invulnerable position against industry rivals. Last but not least, Porter (1985; 1996) does identify the importance of internal activities but this identification does not place the same importance on resources as does the resource-based view of the firm (Wernerfelt, 1984; Barney, 1991).

CONDEMNATION OF INDUSTRY STRUCTURE

In a broadly cited study, Schmalensee (1985) examined the accounting profits of American manufacturing firms that are enclosed in the Federal Trade Commission Line of Business Report (FTC LBR) for the year 1975. He comes to know that industry effects explain 19. 46 % of the difference in firm profitability of firms while firm effects account for only 0. 62 % of the difference.

Hansen and Wernerfelt (1989), by means of a sample of 600 Fortune 1000 firms, study the relative significance of economic factors such as industrial profitability, market share, and size of the firm effects and organizational factors (firm-level factors) such as goal importance and human resources importance. Using data from the Survey of Organizations (SOO), developed

by the Institute for Social Research at the Michigan University, they find that firm-level effects account for just about twice as much of the profitability variation as industry effects, 38 % to 18. 5 %.

Rumelt (1991), confronting Schmalensee (1985) findings and using FTC LBR data for the year's 1974 to1977, argues that the differences in firms' profitability are based unique endowments of resources found in independent firms or single business units rather than on the structural characteristics of an industry. Rumelt discovers that industry effects account for only 4% of the variance in profitability while firm-level effects account for 46 % of the variance.

McGahan and Porter (1997), also study the earlier work of Schmalensee (1985), Rumelt (1991), sample including manufacturing & services industries in America and a longer time period, including the years 1981-1994. The outcomes show that the industry effects account for 19 % of the business section profitability variance while firm-level effects account for 36 % of the variance in profitability across all the industries.

Hawawini et al. in (2003), reinvestigated the work and study of Schmalensee (1985), Rumelt (1991) and McGahan and Porter (1997), scrutinize 562 firms across 55 industries over a period of ten years, 1987 to 1996. They found that the firm effects account for 36 % in the explained variance in return on the assets while the industry effects account for just over 8 % of the variation in accounting profits.

Naturally, firm's success is accomplished by an appropriate fit of internal resources to the external competitive environment. Thus, research that

compares the firm’s factor and the industry structure will probably continue to be a fruitless effort because both the resources and the industry structure are important for shaping strategy and performance (Henderson and Mitchell, 1997). Lastly, though studies that compare industry factors with firm level factors may then provide empirical value, such studies do not successfully isolate which of the resources contribute most to the success of the firm.

Bettis and Hitt (1995) state that the traditional industrial boundaries were blurring as many industries congregated or overlapped, as a result making the determination of what makes up an’ industry’ ever more difficult and less identifiable.

Canals (2000, p. 118) notes, “ as the industrial society becomes a services society, where knowledge and information are the mainstays of business growth, the importance of intangible resources will come increasingly to the forefront.”

Intangible resources such as the employee know-how, the intellectual property, or the organizational culture are considered not easy to imitate between firms and are as a result major, if not ultimate, sources of competitive advantage (Barney, 1991). Now a days, intangible resources, rather than tangible ones, are surely argued to be the reason a firm’s performance differentials exist (Teece, 1998a).

ECONOMIC TRANSITION: COMPETITIVE DYNAMICS IN A NEW ECONOMY

Mainly, neoclassical economic theory focuses its emphasis on production optimization-the

optimization of tangible and physical resources such as land, equipment, building,

machinery, and raw material. In neoclassical economic theory little, if any, attention is

paid to intangible resources. In addition, IO theory argues that the competitive advantage

is mostly created by external structural factors rather than internal resources.

No official date for such an economic transition has been established. Some experts describe the arrival of a new economy having occurred as far back as in the 1970's and 1980's (Toffler, 1971), while the others ' officially' date the birth of the new economy during the late year 1995, a point in time in which the Internet was commercialized and legitimized formally (Mandel, 2000).

To be sure, during the second half of the 1990s, a business, economic, and technological observable fact took place on a large scale in many countries. The fact was mainly based on the development of the Internet-in particular its commercial features-and Internet technology, considerably rising multi-factor output trends, the rise of this ' dot com' business, and the speedy

growth of stock market indices-particularly in the US. Terms such as the ‘ digital age,’ ‘ wired economy,’ ‘ knowledge age,’ ‘ Internet economy,’ and ‘ intangible economy’ were bantered about to describe the sharing fact in of a new economic era.

The Asia-Pacific Economic Cooperation (APEC Secretariat, 2001) stated:

“ There is no doubt that the revolution in information and communication technology is dramatically boosting the development of the global economy. It carries with it unprecedented opportunities in a new style of economy with new forms of markets, higher levels of productivity and new demands for knowledge, entrepreneurship and innovation”. (p. 1) [emphasis in original]

THE IMPACT OF NEW TECHNOLOGIES

Even though technology has long been an important foundation of innovation, economic growth, prosperity and competitive differentiation (Gordon, 2000), the late twentieth century saw technology acts as a mean to create strategic discontinuities that has changed the nature of competition on an unprecedented scale (Hitt et al., 1998). Such technologies are not only changing the nature of production, but also the nature of work itself.

Some of the researchers suggest that the current economic landscape is certainly best defined as a ‘ knowledge economy’. Lei et al. (1995) argue that knowledge, or know-how, turns out to be the basis of gaining and maintaining a competitive edge. Experts have suggested that the ability to constantly build, destroy, and rebuild new resource combinations that are valuable to customers and defensible against certain rivals is critical. This ability has been defined as a dynamic capability (Teece and Pisano, 1994).

WITNESS THE RISE OF INTANGIBLE RESOURCES

The dynamics of the current competitive environment, mostly driven by the technology and progressively more integrated global economic transactions, appear to be creating a landscape where the inevitability and stability of markets, and the identification and assessment of competitors, is increasingly difficult (Hitt et al., 1998). Moreover, experts suggest that increased flow of the financial capital around the world, the lowering of transactions costs, and rapid technological change and diffusion are the crumbling barriers to entry in many industries while blurring many traditional industrial boundaries (Bettis and Hitt, 1995; Daley, 2001).

D’Aveni (1995b, 1997), i. e. says that the effects of technological change, comparable factor endowments (i. e., a mass of global trade taking place among advanced nations with similar factor endowments), and the richness and availability of capital, transportation, raw materials, machinery, and services- in spite of the country a firm chooses to struggle in-have created an environment where rather than competing on the parallel factor endowments of financial and physical resources, firms have to have new sources of competitive edge. Holding on to such a view, Upton (2001, p. 59) states, “ the importance of intangible assets is the distinguishing feature of the new economy.”

Like flexibility, innovation is not a very new concept or corporate vital. Yet, the rate at which innovation must take place is argued to be different than in prior economic periods (Ghemawat, 1986).

Harvey et al. (2001) says that given the set availability of financial capital and the rather equal factor donations of the industrialized nations of this world today, the easiness with which they are made and or bought makes physical assets relatively more common and less valuable than in competitive eras of the past. Whereas, Daley (2001) states that intangible resources such as human know-how, brand names, reputation has become more valuable as interaction costs and global boundaries fall, which comes into sight to be the case in the current competitive environment (Hitt et al., 1998).

The advantages of intangible assets are that unlike physical assets, they are argued to be trickier to ‘ build’ and as a result less easily copied by competitors (Reed and DeFillippi, 1990; Barney, 1991; Amit and Schoemaker, 1993; Michalisin et al., 1997). In an era where experts (see, for example, D’Aveni, 1997; Teece, 1998a) argue that access to financial capital is not set aside for only the large companies and the ability to buy or build physical assets is a relatively easy proposition, the dispute extrapolated in this segment would seem to propose that intangible resources should be more valuable, and add more significantly to firm success, than either financial or physical-tangible-assets.

The first basis of evidence proposes that the worth of intangible resources is found by examining a firm’s market capitalization. By evaluating public firms’ market value i. e. total number of common shares outstanding times current stock price, to their book value i. e. accounting value of financial and physical assets minus liabilities, Daley (2001) found that the average market-to-book percentage for public firms in the United States and

Australia, for example, had gradually risen since 1950s. While the chronological average is about 1. 6, many firms had achieved market-to-book percentage well above 5 in 1990s (Lev, 2001). High market-to-book percentages, according to some experts (Blair and Wallman, 2001; Lev, 2001), propose that intangible resources are far more valuable than financial or physical assets and as a result constitute the most valuable store of capital in many firms.

The 2nd source of evidence comes from the investment activities of member OECD countries. Croes (1999, 2000) found that usually, investments in intangibles such as research and development, software, education and training, advertising, and marketing have increased while investments in gross fixed tangible resources have decreased over the period 1985 to 1997. Croes (1999, 2000) concluded that an obvious rise in intangible investments points to the existence of an evolving ‘ knowledge-based’ economy, in which intangible resources require to be influenced from, to gain a competitive advantage and to maintain growth.

DETERMINANTS OF FIRM SUCCESS: RESOURCES-BASED FACTORS

Background and History

The progress of resource-based theories, and in particular the resource-based view of the firm (RBV), though first conceived in the strategic management literature by Wernerfelt (1984). Chamberlin (1933) and Robinson (1933), talk about some of the key resources of the firm i. e., know-how, reputation, brand image, intellectual property, in their works, which have been evidently revisited by RBV theorists.

The Resource-Based View of the Firm

The RBV was ‘ formally’ presented in the strategic management literature by Wernerfelt (1984). Wernerfelt’s (1984) focus, however, is to move further than the treatment of the firm as largely a ‘ black box’ (as in the Bain-type IO model) to one that explained performance and growth on the basis of the distinctive resources of the firm. Even though Wernerfelt’s (1984) contribution to the development of the RBV is generally acknowledged, Minzberg et al. (1998) suggests that the RBV became a developed theory in 1991.

From a definitional point of view, resources are normally categorized as tangible or

intangible (Itami and Roehl, 1987). Tangible resources include financial assets such as cash and physical assets such as buildings and land etc. Intangible resources include intellectual property assets such as patents and trademarks etc., organizational assets such as culture and organizational structure etc; reputational assets such as brand name reputation and company reputation etc; and capabilities and competencies which consist of know-how and routines.

Barney (1991) proposes that to be sources of competitive advantage, resources must be:

Valuable

Rare

Inimitable

Non-substitutable.

Valuable resources allow a firm to create or implement strategies that improve its effectiveness and efficiency (Barney, 1991). Resources are rare if they are obtained by a small number of current or potential competitors or, ideally, by one firm. Rareness then, is a matter of degree.

Hence, the sustainability of a resource-based advantage is predicated on the circumstance of exclusivity (Lippman and Rumelt, 1982; Barney, 1986b). Resource exclusivity refers to the degree to which a resource can be imitated by rivals. The trouble-free way to try to gain a competitive advantage is to get hold of a resource with attributes and levels of attributes similar to some desired resource which produces a competitive edge (Barzel, 1997).

For a resource to be a foundation of continual competitive edge, it must have no equivalents. Though, similar to the rare condition, non-substitutability is a matter of degree. Clearly, perfect substitutes would weaken the rent-generating capacity of another resource but perfect substitutes hardly ever exist.

The firm’s main purpose is to attain a sustainable competitive edge that affords above-normal performance (Conner, 1991; Mahoney and Pandian, 1992).

There are systemic differences across the firms in the extent to which they control resources that are necessary to implement strategies required i. e., resource heterogeneity exists (Barney, 1991);

These differences can be sustained over time (Barney, 1991; Peteraf, 1993);

These differences can create environments where resources cannot be transferred from firm to firm without cost (Peteraf, 1993);

Differences in the firms' resource endowments can explain performance variation (Barney, 1991).

In the order to search for the sources that explain performance variation, one should always look to intangible rather than tangible resources (Ray et al., 2004).

Given the above tenets of the RBV, the view automatically concentrates on firm-level factors in order to explain why differences in firm success exist.

The Capabilities School

Dosi et al. (1988) argues that during 1980s, many economists and non-economists were not happy with the treatment of innovation and technological change in mainstream economics. Nelson and Winter (1982) argue that neoclassical economic theory had mainly been unsuccessful in explaining the occurrence of technological change.

In the 1990s, the dynamics of global rivalry, particularly among high technology industries, is argued to have been a ' hypercompetitive' environment; one in which the development of the new strategies becomes

essential for competitive survival (D’Aveni, 1994, 1995a). Teece and Pisano (1994) argue that simply owning the right technological assets guarded by property rights is not enough to support a competitive edge. They say that firms with a significant competitive advantage are ones that “ can demonstrate timely responsiveness and rapid and flexible product innovation, along with the management potential to efficiently coordinate and divert internal and external competencies” (p. 538).

As a result, the capability to judge and adjust to ever-changing competitive environments through the incorporation and continuous re-configuration of organizational skills, assets, and the functional competencies is the core of a dynamic ability (Teece et al., 1997; Eisenhardt and Martin, 2000; Fiol, 2001). Also, many experts (D’Aveni, 1994, 1995a, Teece et al., 1997; Makadok, 1998; Eisenhardt and Martin, 2000) state that competitive advantage can’t be sustained over the long-term; as a result, small, temporary advantages must be frequently and dynamically ‘ rebuilt.’ It is the dynamic ability, then, that is argued to be the key source of performance, if not survival, in the modern, hypercompetitive economy.

Other scholars in 1990s looked beyond a purely technological idea or dynamic view of potential. Day (1994) i. e. explains the capabilities/ potential in a more broad sense. He proposes that capabilities are the multifaceted bundles of knowledge within a firm that are worked out through organizational processes that allow firms to organize and make dynamic use of their assets. Rather than referring to only technological or dynamic capabilities, Day (1994) suggests that capabilities are as various as new product development, service delivery, and order fulfillment.

Dazzling on firm capabilities, Collis (1994) and Day (1994) suggests that not all capabilities are foundation of competitive advantage. Some capabilities will be carried out sufficiently and others vice versa. On the other hand, a few must be performed with supremacy in order to do better than competitors (Day, 1994). In real meaning, a firm must have idiosyncratic capabilities to achieve superior levels of success in competitive markets (Day, 1994; Galbreath, 2004b).

In short, Nelson and Winter's (1982) usual hierarchy model is reconfigured to conceive a general view of capabilities. In the vision of the capabilities school, basic inputs can be described as factor stocks such as property or capital. Factor stocks are considered stagnant factors of production. That is, they must be transformed into outputs to recognize their full value-creating or economic potential. Operational routines are usual and knowable patterns of activity that are made up of a series of synchronized actions by individuals and groups (Nelson and Winter, 1982). Operational routines are the facilitating, knowledge-based processes used by particular firm activities to influence a preferred end-state (Lehmann, 1997; Srivastava et al., 1999).

Firm activities are the functional, active, and metaphysical activities that, via equipped routines, transform inputs into value-creating outputs (Day, 1994). Capabilities, comprising of routines and activities, are the personification of individual, group, and firm-wide know-how. In conclusion, given their history and background, capabilities may be distinctive to the firm and may display high levels of value, uniqueness, inimitability, and non-substitutability. Dierickx and Cool (1989) argue that capabilities are constructed rather than bought and, as a result, profits that accrue to positions of competitive

benefit supported by capabilities are much less likely to be dissolute in the competition to obtain those capabilities in factor markets (Barney, 1986a).

Figure: 2. 1 Conceptualization of capabilities

The Core competency concept