A Resource Based and Context Dependent Model of Firm Competitiveness

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Introduction

In today's global business environment, competitiveness is very crucial for superior performance in marketplace. In order to survive and be profitable, firms should establish and improve competitive advantage over their competitors. However, competitive advantage is not an easy concept to define and evaluate. Several factors, directly or indirectly, affect and jointly determine the competitive strength of an individual firm. The challenge is the identification of the *specific factors,* and *how* and *to what extent* they affect firm competitiveness. This study addresses these questions through a new model of firm competitiveness which incorporates both the firm specific (internal firm resources) and the environment based determinants (industry and country-related factors) of competitive advantage and specifies how and under which conditions firm resources can lead to competitive advantage and how the industry and the country-related factors can affect the value of firm resources for competitiveness.

Due to the importance of the concept, competitiveness and its key contributors have been widely investigated in the literature. Two major research streams, the Resource Based View (RBV) with its focus on the internal firm attributes and Market Based View (MBV) on the industry characteristics, have provided analyses of firm competitiveness. Each has identified and thoroughly examined different determinants of firm competitiveness and contributed to our understanding of competitiveness from different perspectives. RBV provides an understanding of internal firm resources and how they may lead to sustained competitive advantage but it lacks the explicit consideration of the external factors. MBV, on the other hand, carries out an industry oriented analysis of competitive advantage. Taking into consideration the conclusions of the subsequent empirical studies that reveal the intertwined nature of resource and environment-based factors, the next step seems to be developing models that would reflect the interaction of firm resources and the wider business environment in generating competitive advantage. In this study we present such a model that regards internal firm resources as the main source of firm competitiveness and also addresses the effect of the environmental conditions via industry and country-related factors. Though originating from the basic premises of RBV and MBV and mostly adhering to the arguments of RBV, our model extends the analysis put forward in RBV to incorporate some of the MBV based principles.

In the next section we will make a brief overview of the related literature especially focusing on RBV and MBV.

Literature Review

The first emergence of strategy and competitiveness studies dates back to the basic SWOT analysis where researchers have placed equal emphasis on the firm-based strengths and weaknesses analysis and the environment-based threats and opportunities analysis. One of the initial studies in this genre is '*The Concept of Corporate Strategy*' by Andrews (1971) where he cites formulation and implementation as the two important aspects of corporate strategy and defines corporate strategy as identifying opportunities and threats in the company's environment and claims that before a choice can be made, the company's strengths and weaknesses should be appraised together with resources on hand. Andrews has been accompanied and followed by many other researches (Richardson, 1972; Demsetz, 1973; Teece, 1980) and these studies sowed the seeds of competitive advantage research.

In 1980, with the publication of Porter's influential book on generic competitive strategies, the focus has been turned to the environment or more specifically to the industry-based factors. Porter and the subsequent research focused on the *industry* as the basis of competitiveness and strategy analysis. With Wernelfelt's 1984 article, which is generally regarded as the originator of the more recent RBV studies, the focus once again shifted on the individual firm and its resources. Contemporaneously with Wernerfelt, Rumelt (1984) has published another seminal article in which he discusses some of the core concepts and the central ideas of RBV such as the inappropriateness of 'homogenous and identical firms' assumptions of neoclassical firm theory for the business policy studies, the degree and the importance of intra-industry variance, uncertain imitability and isolating mechanisms like casual ambiguity, specialized assets, unique resources, reputation and image, etc.

In 1991, Barney put forward the main arguments of RBV in a highly compact and formulized manner and after then, this study has been mostly regarded as the fundamental article of resource-based paradigm. It is extended and empirically tested by several successive researchers in many respects.

Another form of analysis in strategy studies has been based on *game-theoretic models*. In this approach rather than the resources or the industry characteristics, short-term or daily tactical maneuvers that are used to bewilder the competitors are at the center of the analysis (Veliyath and Fitzgerald, 2000).

In the next section, we have a closer look at the two main frameworks, RBV and MVB, which we utilize in developing our model. We mainly refer to Barney (1991) for RBV and Porter's studies for market-based models and explain how our model relates to and extends their central arguments.

Fundamental Approaches in Competitiveness Analysis

Resource-based View: RBV relies primarily on the internal attributes of an organization to describe its position in the competitive environment. It specifies firm resources/capabilities namely, *the attributes of a firm's physical, human and organizational capital that enable a firm to conceive of and implement strategies that improve its efficiency and effectiveness* (Barney, 1991 p.102), as the main *potential determinants* of firms' competitive advantage. In RBV, a firm is assumed to have competitive advantage *if it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors*

(Barney, 1991 p.102). Furthermore, this competitive advantage is assumed to be *sustainable* when these other firms cannot be able to duplicate the benefits arising from this strategy.

As opposed to the environmental models of competitive advantage, which implicitly assume the *homogeneity* and *the perfect mobility of resources* firms operating in a given industry have access to, RBV puts forth two alternative assumptions, namely, *resource heterogeneity* and *immobility.* RBV theorists claim that these assumptions, which are also empirically justifiable, are necessary to set the link between firms' internal resources and their performance. Barney (1991) states that even if the degree of heterogeneity of firms' strategic resources in the same industry is an empirical question, some amount of heterogeneity should certainly exist within different firms in order to be able to explain the observed performance differences between firms. Otherwise, all firms possessing identical resources would conceive of and implement the same strategies and could only improve their effectiveness and efficiency to the same extent, ending up with no sustained competitive advantage or performance superiority.

Once launched the validity and the necessity of resource heterogeneity and immobility assumptions, RBV lists four necessary attributes of the firm resources that can generate sustained competitive advantages as;

1) *Being valuable* (enabling a firm to conceive of and implement strategies that will improve its effectiveness and efficiency)

2) *Being rare* (By this assertion RBV does not dismiss the importance of valuable but common resources. However, it claims that such resources can help to ensure a firm's survival but cannot lead to competitive superiority for the firm.)

3) *Being imperfectly imitable* (due to ***a)*** unique historical conditions, ***b)*** causal ambiguity between the competitive advantage and the resource giving rise to it, ***c)*** social complexity of the resource generating competitive advantage)

4) *Absence of strategically equivalent substitutes*

Undeniably being a very comprehensive and influential perspective, RBV has also received criticisms from strategy researchers. One of the most important of these states that RBV does not meet *the requirements of a theory* as offered by Rudner (1966) primarily because its statements lack the falsifiability requirement when evaluated in terms of *empirical content criterion* (Priem and Butler, 2001). Priem and Butler correctly ascertain that fundamental statements of RBV which express the causal link between valuable and rare resources and competitive advantage are analytic statements which are essentially true by *definition* and are *not testable*. Indeed, the primary problem they point out is the *circularity* existing in the definitions of firm resources, valuable resources, and competitive advantage. Priem and Butler further claim that even if Barney's definition of competitive advantage, *implementing a value creating strategy not simultaneously being implemented by any current or potential competitors*, is replaced by more common definitions of competitive advantage such as Schoemaker's, *systematically creating above average returns*, the problem will still persist mostly because of the definition of *resource value* in the article (Priem and Butler, 2001, p.29). To overcome this problem, we adopt a different definition of internal firm resources

leaving out the *value* concept at this stage, and include the *context variables* that will affect and in fact determine the value of resources into the analysis instead. Furthermore, our model employs a performance oriented definition of competitive advantage instead of Barney's value creating and rare strategies oriented definition and consequently is able to avoid the aforementioned definitional circularity.

Another main criticism for RBV is on its implicit *stability* and *homogeneity assumptions* about demand markets. Priem and Butler (1991 p.30) claim that *just as the prior environment-focused models simplifies strategic analysis with the implicit assumptions of homogenous and perfectly mobile firm resources, the RBV itself also simplifies strategic analysis with an implicit assumption of homogenous and immobile product markets*. They assert that *a synthesis of the resource-based and environment-based perspectives* might be an important next step toward a complete strategy theory just as we attempt to accomplish in this paper by introducing context variables to address the effects of the wider business environment on competitive advantage besides the internal firm resources which are regarded as the fundamental component of firm competitiveness.

Market-based View (Environmental Models): These models rooted in the traditional competitive analysis have mainly been advocated by industrial organizational economists. Focusing primarily on the external market or industry characteristics and the particular positioning of a firm in its industry to explain its competitive advantage, the advocators of this view (Caves and Porter, 1977, 1978; Porter, 1980; Gilbert, 1989; Tallman, 1991) claim that a sophisticated understanding of the rules of competition determining an industry's attractiveness is needed for shaping competitive strategy. Hence, Porter proposes *the five forces model* (Porter, 1980) to assess the ability of firms to earn in an industry. He regards industry as the fundamental arena where competition occurs, and argues that competitive strategy should simply be a search for a favorable competitive position in an industry, and should try to establish a profitable and sustainable position against the forces that determine industry competition. Although researchers in this stream emphasize industry conditions as the main determinants of firm competitiveness, the link to the internal firm attributes in creating competitive advantage is implicit in environmental models. However, unlike the *firm resources origin* of RBV, they assert that firms should initially examine the specific industry conditions and then accordingly choose their competitive strategies (either *cost leadership* or *differentiation*) and consequently obtain competitive advantage through implementing these strategies by the help of their internal resources.

RBV and environmental models defines the sustainability of firm competitiveness in two different ways. While resource-based theorists focus on the characteristics of a particular firm resource to ensure the sustainability of competitive advantage, environmental researchers resort to external factors like entry barriers or isolating mechanisms that will prevent competitors from imitations. Through extending its premises and enhancing it with new arguments, our model will principally adhere to RBV to set the conditions required for sustaining competitive superiority.

The more recent studies of Porter focus on the concept of *value-chain* which is principally a representation of all the activities a firm performs in order to design, produce, market, deliver and support its product. Porter (1985) claims that competitive advantage comes from many discrete activities of a firm and proposes *the value chain analysis* to examine all the strategically relevant and discrete activities in a systematic way at business unit level. Furthermore, he asserts that the value chain of each firm is a reflection of its history, strategy

and approach to implement its strategy and should be closely examined in order to determine the competitive advantage of the firm. The value chain approach provides a framework in identifying internal firm activities, which may have the potential to generate competitive advantage for the firm.

Need for a New Model

As summarized above, strategy literature has mainly followed two frameworks for explaining the competitive strength and subsequent performance differences of firms. Market-based view being the older and the RBV being the more recent one, both approaches have been empirically tested in many different settings (Kotha & Vadlaman, 1995; Powers & Hahn, 2003; Spanos, Zaralis, Lioukas, 2004; Chang, 2005; Jacome, Lisboa, Yasin, 2002; Shah, Zeis, Ahmadian, Regassa, 2000; Kim, Nam, Stimpert, 2004; Molina, Pino, Rodriguez, 2004; Makhija, 2003; Coates & McDermott, 2002; McGahan & Porter, 1997). All these empirical studies have shown that both frameworks are useful in explaining certain aspects of competitiveness. However; most of them, particularly the more recent ones, (Brush & Arzt, 1999; Priem & Butler, 2001; Makhija, 2003) also acknowledge that to completely understand and evaluate firm competitiveness a new model which can bring together the main arguments of these two views besides accounting for their implicit assumptions and shortcomings is needed. Considering this gap, in this study, we develop *a resource based and context dependent model* of firm competitiveness which can be empirically tested. We base our model on the two main frameworks: RBV and MBV and extend their premises to address both resource and environment aspects of firm competitiveness. Our model provides a better understanding of the specific determinants of firm competitiveness, how and under which conditions firm resources can lead to competitive advantage and how the context variables can affect the competitive advantage generation potential of firm resources.

In the following sections, we first introduce the key concepts which help us in clarifying our model and then we propose our model.

Definition of Key Concepts

As RBV establishes, internal firm resources carry primary importance in defining the competitiveness of a firm. Firms can achieve competitive advantage by effective use of their extant resources. Hence, adhering to the main argument of RBV, internal firm resources are regarded as prerequisite for firm competitiveness in our model. However; deviating from the traditional definition, *firm resources* are defined as all tangible (all kinds of physical assets including machinery & equipment, plants & buildings, physical technology, raw materials etc.), intangible assets (knowledge & information, organizational attributes & capabilities, firm name & reputation, patents and copyrights etc.) and human resources. In other words, we do not require the condition of *enabling the firm to conceive of and implement strategies that improve its efficiency and effectiveness* at this stage and, thus, emancipate *the concept of value* from *the definition of resource*. This way, not only we are able to avoid the aforementioned tautology arguments and independently examine the effects of environmental conditions on the value of firm resources, but also we can take into consideration those resources, which may become strategically valuable in the future in an appropriate context, although not perceived as such at present. So, in a way we aim to establish *a dynamic model of competitive advantage*.

Context variables determining under which circumstances which specific resources can contribute to competitiveness are examined at two major levels, namely as *industry-related factors* and *country-related factors.* In other words, we use the term 'context' to include not only the industry of the firm but its wider business environment as well. Having introduced the firm resources and the context variables, resources are said to have *competitive advantage generation potential* when the context variables emphasize or favor them in the marketplace. Furthermore, this potential of firm resources are transferred to actual competitive advantage and reflected on objective performance measures if the favored resources are also *rare* among the competitors of the firm as suggested by Barney (1991). Here, *rarity* implies being uncommon and seldom possessed by other competitors. Of course, specifying the exact boundaries of rarity is impossible, since it partially depends on *the competitive structure of the market* and *the range of possible utilizations of the resource*. For instance, if the industry in question is very large, a resource owned by two or more firms can be still regarded as rare, or alternatively, if the resource can be used or bundled in a number of different ways by its different owners, then again, it can provide competitive advantage to all of its owners. On the other hand, *the degree of rarity* determines the amount of competitive advantage a resource can provide to the firm. If the firm is the *unique owner* of the resource or if it can utilize the resource in a very *exclusive way,* then the amount of competitive advantage the firm can attain will be of highest degree compared to the other cases.

As for *the sustainability of competitive advantage*, Barney's argument that sustainability requires *inimitability* and *non-substitutability* of the contextually favorable and rare resources is preserved; however one more condition, *the continuation of the favoring effects of context variables,* is added. Actually, this condition is also recognized by Barney (1991) under his brief discussion of Schumpeterian Shocks in the industry, but not included in the formal model. Consequently, our model suggests that firms can *sustain* their competitive advantage, if their competitive advantage generating resources cannot be easily imitated or strategically substituted by their competitors and if, in addition, the context conditions continue to favor and value these resources.

Finally, this study adopts a performance-oriented definition of *firm competitiveness*. A firm is said to be competitive if it has *superior market performance* (market share can be used as a proxy here), *high profitability* (relative profitability of the firm compared to the other firms operating in the same industry or industry average may be used as a proxy) and *high market value* (especially applicable to firms quoted in exchange markets).

Context Variables

Having defined the key concepts of the model, we can now introduce the context variables that determine the competitive advantage generation potential of firm resources. We categorize the context variables at two major levels. The first level is the *industry-related factors* or *characteristics*. As stated in the previous sections, these are generally regarded as the major determinants of competitive advantage by the advocators of market-based perspective. The second one is *the country related factors* which, to our knowledge, have not been previously investigated under the topic of firm competitiveness.

1) Industry-Related Factors

Arising from the specific characteristics of each industry, these factors set *the industrial context* and determine what kinds of resources are more important and favorable in a certain industry. In other words, they value and emphasize some firm resources over others as potential competitive advantage generators in this particular industry. Therefore, firms possessing these resources and making use of them in their strategies can end up with actual performance increase if, in addition, these resources are also *rare* among the competitors of the firm. Real-life reflections of this argument can be easily observed. For instance, generally bewildering failure of strong and successful firms in a new industry can be interpreted and explained through this industrial context dependency argument. It is no doubt that a firm successfully and profitably operating in a certain industry possesses some specific valuable resources and these resources provide competitive advantage to the firm in its current industry. However; this does not imply that the same resources can continue to provide the same amount of competitive advantage to the firm in its new industry. It is fairly possible that firm's previously competitive resources may not be able to preserve their competitive advantage generation potential under the new industrial context. Thus, in spite of being very successful in its current industry, the firm may fail in its new industry with its existing resources.

We can classify industry-related factors under the following headings;

- *Entry/Exit Barriers for the Industry*: These are the factors that determine the ease of entry to or exit from an industry. A wide range of factors can be cited under this heading. To give some examples from Porter (1980) economies of scale, capital requirements and government policy or regulations specific to this industry can all be considered as entry barriers for a certain industry.

- *Competitive Structure of the Industry:* These factors specify the competitive conditions in a particular industry. A number of criteria like number of firms operating in the industry, relative sizes of the competitors, market share distribution, diversity and characteristics of competitors (Porter, 1980), differentiated vs. undifferentiated target markets can be cited as the determinants of an industry's competitive structure.

- *Supplier Relations of the Industry:* The strength and life-span of supplier relations, availability of alternative suppliers and supplier concentration (Porter, 1980) are a few examples of the factors that shape the nature of supplier relations in a certain industry and consequently affect the potential of firm resources in generating competitive advantage.

- *Buyer Relations of the Industry:* Ranging from general demographic properties of buyers to buyer concentration and bargaining power, a number of buyer-related factors can alter the value of specific firm resources in an industry.

- *Development Potential of the Industry:* Depending on external factors, different industries may be at different points on their growth curves. Some of them may be maturing industries with decreasing rates of growth while the others can be emerging ones with accelerating growth rates. Thus, each industry exhibits different development potential which can considerably alter the industrial context and accordingly the value of firm resources. To illustrate; in an emerging industry, firm

resources facilitating manufacturing expansions will become valuable because such expansions can increase the market share of firms and add to their competitiveness in growing industries.

- *Clustering and Networking:* Hill and Brennan (2000) defines a cluster as a geographic concentration of competitive firms or establishments in the same industry that either have close buy-sell relationships with other industries in the region, use common technologies or share a specialized labor pool. Similarly, Rosenfeld (1995, 2000) sees a cluster as a geographically bounded agglomeration of related firms that together are able to achieve synergy. On the other hand, a network is defined as a group of firms with restricted membership and specific, often contractual, business objectives, in which the members choose each other and agree explicitly to co-operate in some way (Brown & McNaughton, 2002). Hence, networks differs from clusters in terms of their restricted membership structures, specified set of common objectives, formal contractual agreements among the members and not necessarily being located in the same regions. However; both of these special structures provide their members alternative ways to access, acquire, improve and more efficiently utilize their resources and as a result, simultaneously increase their competitive advantage though it sounds counterintuitive. Thus, belonging to a cluster or a network can considerably affect the value of specific firm resources and firm competitiveness.

- *Product Characteristics:* The particular characteristics of the industry product also carry great importance while determining which resources can be more useful for obtaining competitive advantage in a certain industry.

Although the first four of these seven factors in some way correspond to the determinants in Porter's five forces industry structure model, our model does not strictly abide with Porter's sub-classification scheme. Unlike Porter, the aim of this study is not directly determining the industry profitability but pointing out the industry-related factors that can influence the competitive advantage potential of firm resources, because we believe that without necessary firm resources, characteristics of industries do not reveal a lot about the competitiveness of individual firms.

The industrial context shaped by the specific occurrences of these factors highlights some specific resources over others in a certain industry and, in a way bestow competitive advantage to the owners of these resources if additionally rarity condition is satisfied. For instance, in an industry where speed, flexibility, customer-orientation and quality are required due to buyer and product characteristics, resources like improved distribution channels, flexible manufacturing systems, quality control systems and advanced marketing capabilities will carry great importance and provide competitive edge for their possessors. On the other hand, in another one deprived of effective entry/exit barriers, firm resources that can allow the firm to distinguish and protect itself from its competitors' threat like patent rights, marketing capabilities and brand name or reputation will have the potential to generate competitive advantage. Furthermore, in a developing and highly dynamic industry, resources that can ensure healthy and rapid growth of the firm like an appropriate organizational structure, advanced strategic planning capabilities, strong financial position, innovative and progressive employees, especially managers will become crucial for remaining competitive.

2) Country-Related Factors

In addition to the industrial context, the *country context* in which the firm operates is also very influential on the competitive strength of a firm and thus, should be carefully examined in a comprehensive competitiveness analysis. Here, by '*country',* we imply not the nation of the firm but the particular country in which the firm continues its activities, so that the analysis does not only apply to the domestic activities of firms but also comprises the activities carried out in foreign markets.

In a certain country, both government policies/regulations and social/environmental conditions can render some resources more valuable than others and significantly alter their competitive advantage generation potential. Similar to the industrial context case, our country context dependency argument has real-life reflections. To illustrate, failure of large multinationals in some country markets in spite of their considerable investments, strong financial backgrounds, useful experiences and substantial resources can be explained in terms of the mismatch between their resources and the country context. Likewise, prevalent success of firms in countries where market and macroeconomic conditions resemble those of their own nations can also be interpreted and understood in this framework.
We examine country-related factors constituting the country context under the following headings;

- *Government Policies and Regulations* (e.g. incentive policies, antitrust laws, legal protection of copyrights and patents (in general intellectual property law), economic treaties with other countries, taxation policy, and international union memberships)

- *Infrastructure of the Country* (e.g. telecommunication channels, transportation system and technological availabilities)

- *Macroeconomic Conditions of the Country* (e.g. inflation rate, unemployment rate, economic stability and the credibility of the nation in international financial markets)

- *Environmental Advantage of the Country* (e.g. geographic location, available natural resources and climate conditions)

- *General Demographic and Cultural Characteristics of the Market* (e.g. income level of average households, quality consciousness and priority of average consumers, age and education distributions of the population, openness to and demand for innovative and technological products)

To illustrate, how each of these country-related factors can favor certain firm resources over others, we can consider the following examples. For instance, in a country where effective legal protection for copyrights and patents exists, firms can highly benefit from their technological novelties or innovations and consequently outperform their competitors. Hence, R&D capabilities become very valuable resources for the firm. Conversely; in a country where such regulations or laws are very weak or insufficient, R&D activities and resources will not mean a lot for firm competitiveness. As another example, in a poor economy with deteriorating macroeconomic indicators and low national credibility in international financial markets, firms' special connections or capabilities that can allow them to access low-priced financing channels will surely have competitive advantage generation potential. Yet, as a further example, in a country with a particular type of abundant mine reserves that can be

utilized in energy production, a distinctive technology that can process and convert this source to consumable energy for manufacturing will be a valuable resource and will potentially provide competitive advantage to its owner(s).

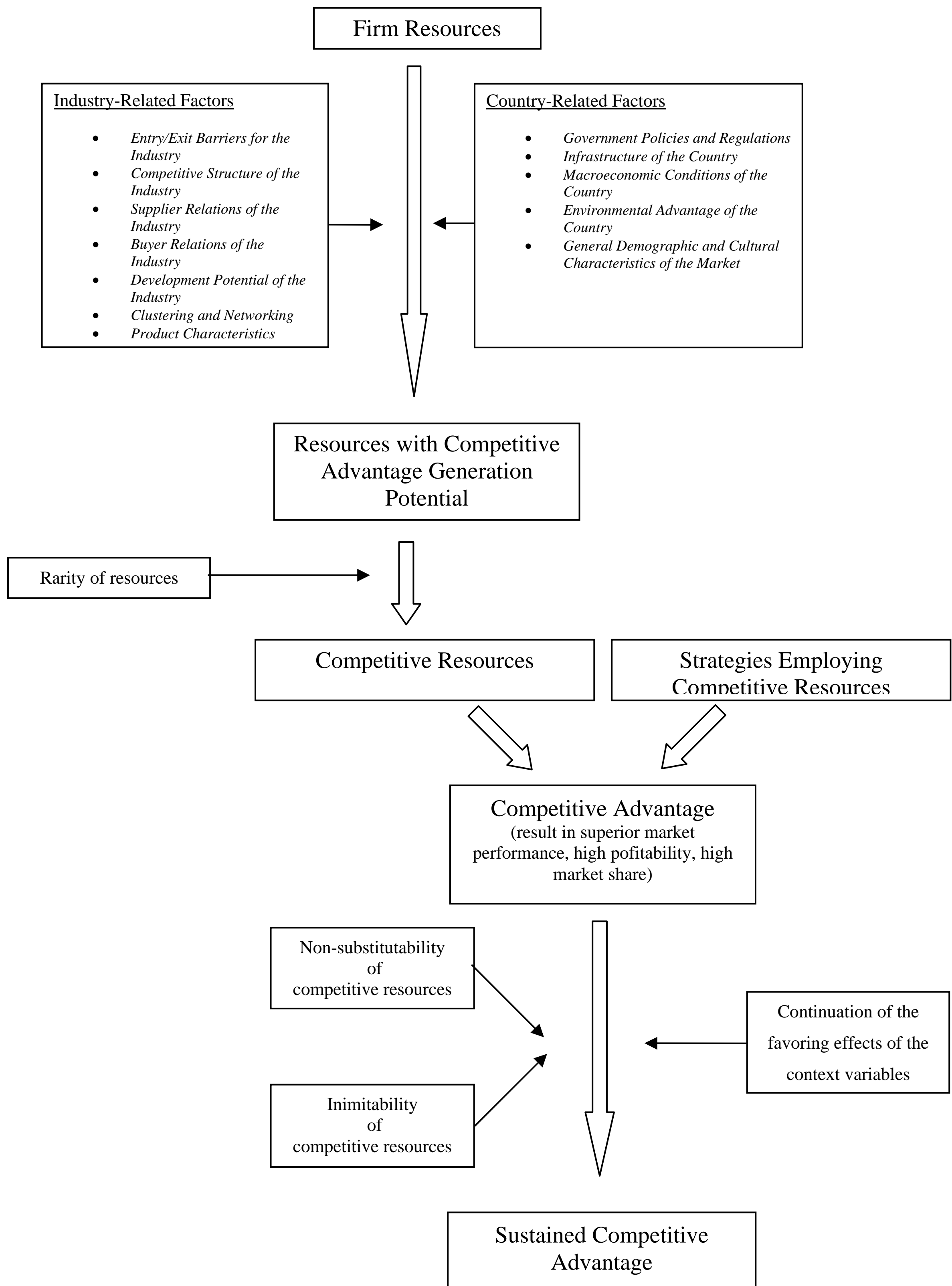
Model

After defining the key concepts and introducing the context variables, we can now formally present the model, though its main arguments are already revealed in the above discussions. *Firm resources*, which are considered as prerequisite for competitiveness, gain *competitive advantage generation potential* depending on the context conditions prevailing in the business environment of the firm. That is to say, current *industry* and *country-related factors* favor certain kinds of firm resources over others and designate them as more valuable and important in attaining competitive advantage. These potentially competitive advantage generating resources lead to actual competitive advantage and contribute to the competitiveness of the firm if they are also *rare* among the competitors of the firm. Therefore, our model asserts that firms possessing contextually favorable and rare resources and implementing strategies using these resources can become *competitive* in the marketplace or, in terms of our competitiveness definition, can achieve *superior market performance*, *higher profitability* and *higher market value* relative to their competitors (Figure-I). Furthermore, firms can preserve and sustain their competitive position, if their competitive resources cannot be *imitated* or *substituted* with strategically equivalent resources by their competitors (Barney, 1991) and, in addition, if the context variables continue to favor these resources. Consequently, considering firm resources as the fundamental piece of the analysis and leaving them aside, five essential requirements for sustainable firm competitiveness can be summarized as follows;

- Appropriate industrial and country context highlighting the resources held by the firm
- Rarity of these firm resources
- Inimitability of these firm resources
- Non-substitutability of these firm resources
- Continuation of the favoring effects of the context variables

As a direct consequence of the last requirement, our model implies that current competitive resources may lose their competitive advantage generation potential and leave their place to new ones, if the context variables that favor and render them valuable change due to external events. Consequently, competitive strength of firms primarily arising from their contextually valuable resources may increase or decrease as the industry and the country conditions alter over time. Hence, our model can also be regarded as *a dynamic model of firm competitiveness* since it can comprehensively explain possible alterations in firm competitiveness.

Figure-I-Illustration of the model



Conclusion and Possible Extensions

In this study, we present a resource-based and context-dependent model of firm competitiveness. Although originating from the fundamental arguments of the two main approaches (MBV and RBV) and mostly committing to RBV to explain the basis of firm competitiveness, our model extends the basic premises of the two approaches and addresses their implicit assumptions and respond to their criticisms. Addressing both the *environment* and *resource* based aspects of competitive advantage in the same model, it provides a more comprehensive and explanatory competitiveness analysis.

Moreover, selecting appropriate proxies for the aforementioned concepts and customizing the context variables according to the specific conditions of relevant industries or countries, it can be applied or empirically tested in several real life settings. Indeed, we believe that it will be more effective and tractable to conduct empirical studies on a business unit (departmental) level and examine only a certain group of firm resources each time (e.g. resources associated with production and operations). This way, context variables that should be investigated for their effects on firm resources can be much more restricted and the complexity of the analysis can be reduced. Hence, besides its theoretical contribution, our model can also provide useful insights for practitioners who need to assess their potential competitive advantage in different industries or markets and shape their future strategies accordingly.

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