

Building an integrated framework of strategic management theories to explain performance of firm in one industry.

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Abstract

This paper is rather theoretical approach and to answer research questions: is it possible to build a comprehensive framework integrated all these three theories (IO, OE and RBV) in strategic management to explain performance of firm in one industry?; and how are all these three theories integrated conceptually? After reviewing literature related to all main three theories of strategic management, it can be seen that each theory looks performance from its own different perspective. This paper tried to argue a mechanism by complementary views among these three perspectives. As a result, a comprehensive integrated framework was proposed. Moreover, this study tried to provide several solutions to operationalize the conceptual framework in reality, or test it empirically. These solutions are related to variables indicating constructs in the framework,

measurement of variables and analytical methodology. In general, this paper is expected to make several contributions to mostly academics. It provides a good suggestion for future studies in this field.

Keywords: framework, performance, resource-based view, industrial organization, organizational economics

I. Introduction

Strategic management is one of pivotal fields of management in organization studies. Its development has been dramatic over the last four decades. There have so far been three main directions of strategic management field: *Industrial organization* (IO), *Organizational economics* (OE) and *Resource-based view* (RBV). IO focuses largely externally on industry structure and competitive position in industry. OE and RBV are the more recent perspectives in strategic management field. The former focuses on the firm boundary relationship on the way of swing back to the latter, in which internal firm characteristics are emphasizing.

Explanation of performance of firm is one of significant topic in field of strategic management. In order to explain performance of firm in their empirical researches, scholars have usually based on above theoretical backgrounds of strategic management such as RBV, IO and OE. However, those researches have often applied only one of these three main theories or two in far rarer cases. In other words, there have been a very few comprehensive research applying over two theories in one study to explain performance of firm, even may be not any research integrating all these three theories as my best

understandings. Therefore, there are research questions: is it possible to build a comprehensive framework integrated all these three theories in strategic management to explain performance of firm in one industry?; and how are all these three theories integrated?

This research paper aims at proposing a comprehensive integrated framework from all these three main and independent theories to explain performance of firm in one industry in general. It is not a simple combination among three theories; it is expected to propose a framework integrated at a proper mechanism. In the following sections, theories of strategic management are presented detailed to build a conceptual framework.

II. Theoretical Background

Firstly, it is necessary to briefly look a position of RBV, IO and OE in historical development of strategic management field. The development of strategic management field has been dramatic over the last four decades, in which the various historical emphases in its development process are illustrated in Figure 1 through using the metaphor of swings of a pendulum (Hoskisson, Hitt, Wan, & Yiu, 1999). Specifically, according to Hoskisson et al. (1999), originally, strategy or strategic management has been considered as an applied area as business policy. However, current field of corporate strategy is strongly theory based, with substantial empirical research. Actually, the field of strategic management began in the 1960s with works of some famous scholars such as: Chandler (1962)'s *Strategy and Structure*, and Ansoff (1965)'s *Corporate Strategy*, which focus on internal firm characteristics. Although these works are considered as a foundation for strategic management, they were mostly oriented to be in-depth case analysis, the main methodological tool of study at the time. The approach was mainly

normative or prescriptive in purpose, generalization was not a goal nor was it deemed feasible. Unfortunately, the case approach with lack of generalization did not provide the base necessary for continued advancement of the field. As such, the work in this area was not well accepted by other academic fields. The need for a stronger theoretical base and for empirical tests of the theory to allow generalization made a swing of the pendulum.

Because of its appropriate fit and influence, and advanced and much more scientific development in terms of methodology, the swing moved toward use of economic theory, particularly industrial organizational (IO) economics in the 1970s, to examine strategic management phenomena. This swing changed strategy research from inductive, case studies largely on a single firm or industry, to deductive, large-scale statistical analyses seeking to validate scientific hypotheses. It can be said that the adoption of IO economics, especially the work of Michael Porter in the 1980s, is one of the most important contributions to development of strategic management, which shifted the research focus from the firm to industry structure and competitive position in the industry (Hoskisson, et al., 1999).

While IO economics emphasizes industry-level phenomena, strategic management is originally concerned with firm-level strategies. Application of the IO economics brought new and important contribution to the strategic management field. However, building on the early work of Ansoff and others, there remained some missing pieces of the puzzle. Research has shown that some firms perform better than others in the same industry and/or within the same strategic group. This suggests firm-level phenomena are important. Furthermore, the competitive context for many industries began to change, particularly with the development of global markets (as opposed to domestic markets) (M. A. Hitt,

Keats, & DeMarie, 1998). Foreign firms entered domestic markets and, in some cases, accompanied with new ideas and strategies, began to capture significant market shares. Thus, strategic management scholars returned their focus on the firm with organizational economics (OE). At a relative exact position, the focus of OE is a boundary relationship between the firm and its environment. It provided transaction costs economics (TCE) and agency theory in the mid-1970s, and important tools for strategic management researchers during this stage of the field's development (Hoskisson, et al., 1999). Both TCE and agency theory have their roots in Coase's (1937) influential essay "The Nature of the Firm". TCE has contributed much research on firm boundaries, markets versus hierarchies. For example, this work has led to many studies on the adoption of the multidivisional structure (for a review, see Hoskisson, Hitt, & Hill, 1993), and vertical integration and strategic alliances (B Kogut, 1988). Additionally, a substantial amount of studies on corporate governance has been spawned by agency theory (K. M. Eisenhardt, 1989). Both of these perspectives have been used to examine a variety of topics, such as mergers/acquisitions, divestitures, and downscoping (e.g., M.A. Hitt, Hoskisson, & Ireland, 1990; Hoskisson & Hitt, 1994), greenmail (e.g., Kosnik, 1990), leveraged buyouts (e.g., Wiersema & Liebeskind, 1995), interfirm cooperation (Combs & Ketchen, 1999), outsourcing (Girma & Gorg, 2004; Marsall, McIvor, & Lamming, 2007), and subcontracting (Kimura, 2002; Lazerson, 1990; Wynarczyk & Watson, 2005; Yun, 1999). OE is presented much more detailed in the subsequent section due to its significant application for this study.

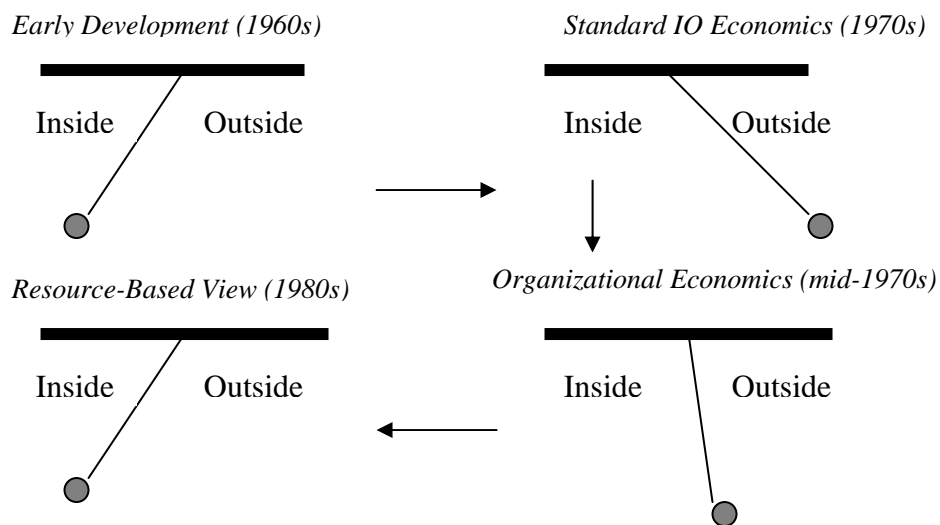
Whereas transaction costs theory and agency theory from OE contributed substantially to our understanding of strategic management, there were still missing pieces

of the puzzle. Some argued that there were idiosyncratic characteristics of firms that contributed to their competitive advantage (e.g., J.B. Barney, 1991; Wernerfelt, 1984). For example, some firms more effectively manage transaction costs, while others are able to respond to competitors' actions more effectively than others. The heterogeneity among firms in the same industry (or strategic group), then, is of importance. The primary differentiation of firms is in their resources, tangible and intangible. The importance of resources, however, was not a new concept when considering the earliest works of strategic management field. Thus, the field was coming full circle, back to its roots with a renewed focus on firms' idiosyncratic resources. The renewed focus on resources was regarded as resource-based view (RBV) of the firm, which is the more recent theoretical contribution for the strategic management field. Theoretically, the central premise of RBV addresses the fundamental question of why firms are different and how firms achieve and sustain competitive advantage.

Despite the recent rise of RBV, it is not completely new concept (Hoskisson, et al., 1999). Actually, its footprints can be found in early management works. Andrews and his colleagues (Learned, Christensen, Andrews, & Guth, 1965/1969) and Ansoff (1965), were predominantly concerned with identifying firms' "best practices" that contribute to firm success. This emphasis on internal competitive resources can be traced to the early classics such as Chester Barnard's (1938) *The Functions of the Executives*, Philip Selznick's (1957) *Leadership in Administration: A Sociological Perspective*, or Edith Penrose's (1959) *The Theory of the Growth of the Firm*. Theoretically, the recent rise of the RBV (e.g., J.B. Barney, 1991; Wernerfelt, 1984), along with the two closely related content areas: the strategic leadership and the knowledge-based view have returned

attention to the internal aspects of the firm. Developing concurrently or emerging from RBV, the research sub-streams (strategic leadership and knowledge-based view) also focus on specific types of resources inside a firm. The strategic leadership is a potentially unique resource of the firm. Its research focuses on individuals (e.g., CEO or division general managers), groups (e.g., top management teams) or other governance bodies (e.g., board of directors). The knowledge-based view of the firm is an extension of the RBV by conceptualizing firms as heterogeneous, knowledge-bearing entities (Hoskisson, et al., 1999). Knowledge was classified into two categories: explicit or codified (Polanyi, 1966) or five dimensions: codifiability, teachability, complexity, system dependence, and product observability (Zander & Kogut, 1995). However, this study focuses on the central premise of RBV at its comprehensive approach, which is explained much more detailed in the subsequent sections, rather than the specific and underlying approaches of the strategic leadership and the knowledge-based view of the firm.

Figure 1 Swings of a pendulum: Historical emphases in strategic management



Source: reproduced by author from Hoskisson, Hitt, Wan & Yiu (1999)

In short, it can be said that in the historical development of strategic management, there have so far been three main directions: IO, OE and RBV. IO focuses largely externally on industry structure and competitive position in industry. OE and RBV are the more recent perspectives in strategic management field. The former focuses on the firm boundary relationship on the way of swing back to the latter, in which internal firm characteristics are emphasizing.

All these three main and independent directions can make really influential contributions to explain for a certain phenomenon in strategic management field. Due to the specific focus of each direction, it is necessary for a comprehensive research related to the strategic management field to apply all these three main directions. The comprehensive research here can be considered as a research about a specific phenomenon (i.e. performance) through multi-perspectives (RBV and OE and/or IO) in the research field. For instance, Combs & Ketchen (1999) used 94 publicly held restaurant chains in US to explain their performance based on RBV and OE perspectives. Marsall, McIvor & Lamming (2007) also based on RBV and TCE (one of central theories of OE) to explain the outsourcing process and outcomes in telecommunications industry. Spanos and Lioukas (2001) had tried to explain how IO and RBV play their role in business performance. They attempted to explain the complementarities between two perspectives and argued that both of views were needed to explain the performance. Rivard, Raymond, & Verreault(2006) also followed Spanos and Lioukas (2001) in building model upon the complementarities between IO and RBV to understand the contribution of information technology to firm performance. Galbreath & Galvin (2008) through studying 285 Australian firms explored the relative importance of distinct

resources (RBV) and industry structure (IO) in explaining firm performance. By applying multi-perspectives, the comprehensive research is looked from unique insight of each one. In other words, although each of the independent perspectives has its own unique insight, they complement each other to create the comprehensive research. This paper also follows the comprehensive approach that applies multi-perspectives in the strategic management field. Specifically, it tries to apply all these three independent directions IO, OE and RBV.

In summary, there are proper reasons for applying perspectives of industrial organization (IO), the firm boundary relationship (OE) and the internal firm characteristics (RBV) into explaining performance of firm in general. In other words, we are looking at performance on basis of three different aspects IO, OE and RBV. In the following sub-sections, IO, RBV and OE are presented detailed to build a conceptual framework.

Industrial organization perspective (IO)

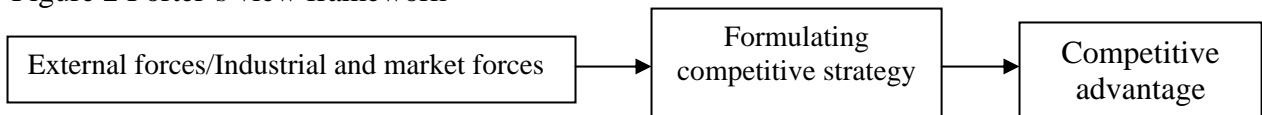
As indicated in previous section in the historical development of strategic management, in the 1970s, the historical emphases (swing of pendulum) moved toward use of industrial organizational (IO) economics to examine strategic management phenomena. During this swing, the influence of economics, particularly industrial organizational (IO) economics, on strategy research was substantial, and in terms of methodology, strategy research also became much more “scientific.” This swing changed strategy research from inductive, case-studies largely on a single firm or industry, to deductive, large-scale statistical analyses seeking to validate scientific hypotheses, based on models abstracted from the structure-conduct-performance (S-C-P) paradigm

(also known as the Bain/Mason (Bain, 1956, 1968; Mason, 1939) paradigm (Hoskisson, et al., 1999)).

It can be said that Porter (1980; 1985) made the most influential contribution to the field employing IO economics. Using a structural analysis approach, Porter (1980) outlines an analytical framework that can be used in understanding the structure of an industry. Whereas the concept of industry structure remains relatively unclear in the field of IO economics, Porter's (1980) Five Forces Model, by more clearly specifying the various aspects of an industry structure, provides a useful analytic tool to assess an industry's attractiveness and facilitates competitor analysis. The ability for a firm to gain competitive advantage, according to Porter (1980; 1985), rests mainly on how well it positions and differentiates itself in an industry. The collective effects of the five forces determine the ability of firms in an industry to make profits. To Porter (1980; 1985), the five forces embody the rules of competition that determine industry attractiveness, and help determine a competitive strategy to "cope with and, ideally, to change those rules in the firm's favor" (1985: 4). Therefore, as a refinement of the traditional S-C-P paradigm, and also a significant contribution to the field of strategic management, Porter's framework specifies the competitive structure of an industry in a more tangible manner, as well as recognizes (albeit limitedly) the role of firms in formulating appropriate competitive strategy to achieve superior performance. Porter (1980; 1985) suggested generic strategies (low cost leadership, differentiation, and focus) that can be used to match particular industry foci and, thereby, build competitive advantage (cited in Hoskisson et al., 1999).

Central to Porter's view of strategy is the notion of activities. For Porter then, strategy is a consistent array or configuration of activities (M.E. Porter, 1991: 102), aiming at creating a specific form of competitive advantage for which there exist two fundamental types: differentiation or low cost. These in turn, together with the scope of operations define the notion of generic strategies. Within this framework, strategy choice is the product of (and response to) a sophisticated understanding of industry structure (Spanos & Lioukas, 2001). Porter's view can be illustrated by the following Figure 2. This view is also shared by Grant (2002) as indicated in Figure 4 in next section.

Figure 2 Porter's view framework



Source: outlined by author

Resource-based View

Over the last two decades, the resource-based view of the firm (RBV) has emerged as one of the most dominant theoretical perspectives in the strategic management field (Crook, Ketchen, Combs, & Todd, 2008; Newbert, 2007; Priem & Butler, 2001).

Looking back the development process of RBV in strategic management field, it can be seen that Edith Penrose was one of the first scholars to recognize the importance of resources to a firm's competitive position. In 1959, she argued that the way in which a firm's resources are employed affects its growth, both internally and then externally through merger, acquisition, and diversification. Specifically, she began by arguing that a firm consists of 'a collection of productive resources' and continued by suggesting that these resources may only contribute to a firm's competitive position to the extent that

they are exploited in such a manner that their potentially valuable services are made available to the firm(also see Newbert, 2007).

Rubin (1973) is argued to be one of the few scholars to conceptualize firms as resource bundles prior to the formal origins of the RBV(Wernerfelt, 1984). Similar to Penrose, Rubin recognized that resources were not of much use by themselves. Instead of merely possessing resources, Rubin (1973: 937) argued that ‘firms must process raw resources to make them useful.’

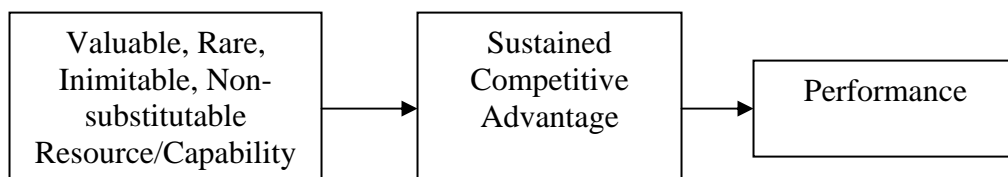
Based on Penrose and Rubin, Wernerfelt, in the first attempt at formalizing the RBV, argued that ‘for the firm, resources and products are two sides of the same coin’(Wernerfelt, 1984: 171). In other words, while a firm’s performance is driven directly by its products, it is indirectly (and ultimately) driven by the resources that go into their production.Given this line of reasoning, Wernerfelt(1984) proposed that firms may earn above normal returns by identifying and acquiring resources that are critical to the development of demanded products. However, because of the rather abstract nature of Wernerfelt’s (1984) seminal work, acceptance of this theoretical perspective did not immediately gain support from academic audiences.

Until several years later, appreciation for the RBV began to be widespread with the publication of two papers.The first was Prahalad and Hamel’s 1990 paper, ‘The core competence of the corporation’. In this paper, they argued that the critical task of management was to create radical new products, which was enabled by the exploitative nature of the firm’s core competences. Much like Penrose (1959) and Rubin (1973), these authors focused not only on static resources but also the firm’s inimitable skills, technologies, knowledge, etc., with which they are deployed. However, perhaps because

Prahalad and Hamel's 1990 paper was positioned as a paper for practitioners (Wernerfelt, 1995) and contained no testable hypotheses, its focus on resource exploitation was largely ignored at the time by empirical scholars.

The second influential paper was Barney's 1991 article, 'Firm resources and sustained competitive advantage'. This paper is widely regarded as the first formalization of RBV. Based on works by Penrose (1959), Rumelt (1984), Wernerfelt (1984), and others, Barney (1991) based on two fundamental assumptions: that resources (and capabilities) are heterogeneously distributed among firms and that they are imperfectly mobile. These assumptions conjointly allow for differences in firm resource endowments to both exist and persist over time, thereby allowing for a resource-based competitive advantage. Barney (1991) argued that firms that possessed resources that were valuable, rare, inimitable and non-substitutable would attain a competitive advantage and sustain these advantages over time, which in turn improve performance. Barney's (1991) conceptual model is interpreted parsimoniously in Figure 3.

Figure 3 Barney's (1991) conceptual model



Source: Reproduced by author from Barney (1991)

One of the primary critiques of Barney's (1991) expression of the RBV over time has been its rather static nature (Newbert, 2007). In response to this missing link between resource possession and resource exploitation, Mahoney & Pandain reminded scholars that 'a firm may achieve rents not because it has better resources, but rather the firm's

distinctive competence involves making better use of its resources' (Mahoney & Pandain, 1992: 365). They continued by suggesting that firms that make the best use of their resources are those that allocate them in such a way that their productivity and/or financial yield are maximized. Similar arguments were put forth by Peteraf and by Henderson & Cockburn, who argued that to confer a competitive advantage to a given firm its valuable resources must be properly leveraged (Peteraf, 1993) or managed (Henderson & Cockburn, 1994). Subsequently, there have been a lot of theoretical work that began to emerge regarding the types of processes to which resources must be subjected in order to exploit their latent value, such as core capabilities (Leonard-Barton, 1992), competences (Fiol, 1991; Reed & DeFillippi, 1990), combinative capabilities (B. Kogut & Zander, 1992), transformation-based competencies (Lado, Boyd, & Wright, 1992), organizational capabilities (Russo & Fouts, 1997), and capabilities (Amit & Schoemaker, 1993).

This attention to process led to the emergence of two theoretical approaches within the RBV. The first was Barney's VRIO (Valuable, Rare, Inimitable and Organizational) framework. Barney (1997) argued that in addition to simply possessing valuable, rare, inimitable (which by then included non-substitutable) resources, a firm also needed to be organized in such a manner that it could exploit the full potential of those resources if it was to attain a competitive advantage. He added that the implementation skills that could ensure proper resource exploitation included such organizational components as structure, control systems, and compensation policies (J.B Barney, 1997; J.B Barney & Mackey, 2005). In short, the organization of a firm was considered to be a firm-level orientation,

strategy, or context that encouraged a general and unified approach to the utilization of its resources(Newbert, 2007).

The second and radically new theoretical approach more specifically defined the types of processes by which firms could exploit resources. Teece, Pisano& Shuen (1997: 510) proposed the dynamic capabilities framework ‘to explain how combinations of competences and resources can be developed, deployed, and protected’. To do so, they defined a dynamic capability as ‘the firm’s ability to integrate, build and reconfigure internal and external competences to address rapidly changing environments’(D.J Teece, et al., 1997: 516).

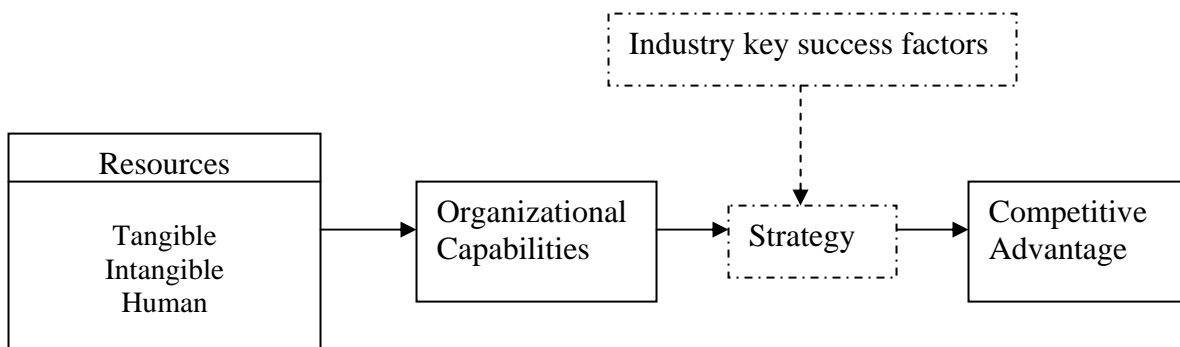
Building on the work of both sets of scholars, Eisenhardt & Martin later verified that dynamic capabilities ‘are the organizational and strategic routines by which firms achieve new resource configurations as markets emerge, collide, split, evolve, and die(K.M. Eisenhardt & Martin, 2000: 1107). These authors contended that the isolated resources are not real value to the firm. Instead, they reaffirmed that their latent value could only be made available to the firm via its idiosyncratic dynamic capabilities.

Similar arguments and even more clarified, Grant (2002: 139) attempted to conceptualize a comprehensive framework of relationships among resources, organizational capabilities and competitive advantage (see Figure 4). Grant (2002) suggested that the basic and primary inputs into organizational processes are the individual resources of the firm such as financial capital, physical equipment, intellectual property, reputation, human resources, and so on. Nonetheless, in most cases, the resources are not so productive on their own. In order for the firm to create competitive advantage, individual resources must work together to initially establish organizational

capabilities. Hence, it can be interpreted that there is no direct link between the individual resources and competitive advantage or performance. These resources should go into processes to create the organizational capabilities needed to influence directly on the competitive advantage.

To explain more detail about Figure 4, it can be said that Grant originally focused on competitive strategy that is formulated from RBV and IO perspective. That is why the strategy was put centrally on the conceptual model, and industry key success factors (IO perspective) affecting to the strategy were also considered. However, whereas the previous section considered IO perspective (dot frame), this section only takes the remaining part of Grant’s framework (bold frame), which emphasizes a process based on RBV from resources through organizational capabilities to competitive advantage. In this process, the competitive advantage is expressed as an actual implementation of strategy. In this sense, Grant’s model can be regarded as a comprehensive framework about process approach of RBV.

Figure 4 The link among resources, organizational capabilities and competitive advantage



Source: Reproduced by author from Grant (2002: 139)

As such, until now, the RBV has come a long way over the past decade and a half. In that long way, since originally formalized by Barney in 1991, there have so far been many researches which focus on different approaches. Newbert (2007) categorized the theoretical approaches utilized by previous empirical studies of RBV into four types: resource heterogeneity, organizing approach, conceptual-level, and dynamic capabilities. The resource heterogeneity approach argues that a specific resource, capability, or core competence that is valuable, rare, inimitable and non-substitutable, when controlled by a firm, will affect its competitive advantage or performance. The organizing approach explains firm-level conditions in which an effective exploitation of resources and capabilities is implemented. Instead of identifying the actual resources that confer an advantage to a firm, scholars utilizing the conceptual-level approach try to investigate if attributes of a resource identified by Barney (1991) such as value, rareness, and inimitability, can effectively explain performance. Finally, the dynamic capabilities approach emphasizes specific resource-level processes influencing on competitive advantage or performance, in which a specific resource interacts with a specific dynamic capability as an independent variable.

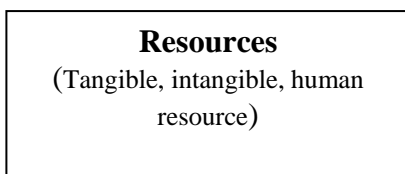
According to Newbert (2007), among these four approaches, the resource heterogeneity one is the most widely used. The organizing approach, conceptual-level, and dynamic capabilities approaches are the second, third and fourth most employed, respectively. One of the reasons for that is related to the measurement of variable, in which a specific resource is quantified somehow more easily than capabilities (Newbert, 2007). However, based on a detailed analysis of all approaches, Newbert (2007) finds out that the most widely used approach -resource heterogeneity- is not the one which

received the strongest support from empirical tests. It is also concluded that the firm's organizing context and its valuable, rare, inimitable capabilities (dynamic and otherwise) and core competencies may be more important in determining its competitive position rather than its static resources identified mostly by the resource heterogeneity approach. Newbert (2007) also suggests that because research on the organizing, conceptual-level and dynamic capabilities approaches are still few, any of these approaches used in future research will without doubt improve our understanding of relationships among resources, capabilities, competitive advantage and performance in RBV studies.

From Newbert (2007)'s categories and the development process of RBV since its formalization in 1991 by Barney, it can be understood that the resource heterogeneity and the conceptual-level approach are mostly based on Barney's (1991) model as illustrated in Figure 3. The organizing approach follows the type of process approach by Barney's VRIO(1997). The dynamic capabilities approach expresses the new theoretical approach of process by Teece, Pisano & Shuen (1997) and Eisenhardt & Martin(2000).

By looking Grant (2002)'s comprehensive framework (Figure 4) and Newbert (2007)'s categories, it can be said that Grant (2002)'s framework inherits the insights of the process approach categorized as the dynamic capabilities one by Newbert (2007). However, Grant (2002) developed his framework into a more comprehensive process from resources to organizational capabilities by resource integration process and then from organizational capabilities to competitive advantage by business operation process (see Figure 5).

Figure 5 Detailed conceptual description of relationships among resources, organizational capabilities, competitive advantage and performance.



Source: Modified by author based on Grant (2002: 139)

In the comprehensive process by Grant (2002) above, the term “organizational capabilities” may have different implication from types of capabilities used in many previous researches. Generally speaking, by reviewing previous empirical studies, it can be said that there are three types of capabilities: the first is understood as specific or individual, the second is processes, and the third is the organizational capabilities. In the first type, capabilities are characterized as skills or expertise of employees, or intangible resources such as reputation or culture (Carmeli & Tishler, 2004; Hadjimanolis, 2000), which seem to be quite specific or individual. In this sense, capabilities are only considered as the basic inputs equivalent to the specific resources or parts of overall resources in Grant (2002: chap. 5)’s definition (J. Galbreath, 2005; Grant, 2002; Hall, 1987).

On the other hand, in the most recently emerging trend of RBV, scholars have emphasized more on firm’s capabilities as processes. Although authors of many

researchers used some different terms such as ‘combinative capabilities’ (Kogut & Zander 1992), ‘capabilities’ (Amit & Schoemaker 1993), ‘architectural competence’ (Henderson & Cockburn 1994), and ‘dynamic capabilities’ (Eisenhardt & Martin 2000), their definitions of these terms all indicate the firm’s processes that use specific resources and integrate them together, reconfigure and release new resources of competitive advantage.

These new resources can be regarded as output of the processes that turn out to be input of new processes (business operation process) toward competitive advantage. We do not hesitate to name the output of the resource integration processes as a third type of capabilities. This third type can be called organizational capabilities that Grant (2002) implies in the comprehensive framework showing the relationships among resource, organizational capabilities and competitive advantage (also see Figure 5). Moreover, in that sense, it can be said that the term ‘resource-based capabilities’ used in the empirical studies by Chandler & Hanks (1994), and Wang & Ang (2004) should be listed in the third type. As a matter of fact, it is not easy to distinguish clearly between these theoretical constructs of the resource integration processes - from using specific resources to releasing organizational capabilities (new resources) - in empirical works, because the distinction often appears to be based both on the ground of logic and intuition. With this in mind, this paper does not focus on the relationships among these theoretical constructs but it considers the direct link between these new resources (so called organizational capabilities) and competitive positions.

Based on the development stream of RBV that focuses increasingly on the process approach and Newbert (2007)’s conclusion about its explaining strength from previous

studies, and his suggestion on researching this approach as well, this study emphasizes on the new process direction (dynamic capabilities) by applying the comprehensive framework of Grant (2002).

Organizational Economics

As mentioned briefly above, OE is one of major perspectives in the strategic management field, which swing the strategic management pendulum further away from the industry level emphasis and toward a firm level of analysis (Hoskisson, et al., 1999). OE focuses on identifying actions or organizational ways of economic activity that minimize the costs of governance which, in turn, maximize performance (Combs & Ketchen, 1999). According to the viewpoint of OE, the various intra- and inter-firm arrangements or linkages (i.e., vertical integration, joint ventures, share acquisition, alliances, subcontracting, outsourcing, franchising, licensing) observed in contemporary economies represent alternative ways of organizing the exchange of goods and services in the context of self-interested behavior, diverging goals, and imperfect information (Combs & Ketchen, 1999; Hesterly, Liebeskind, & Zenger, 1990). Such arrangements or linkages offer a variety of incentive systems and authority relationships that are not available to participants in simple market transactions (Williamson, 1975). Any given arrangement can thus be viewed as an attempt to minimize the cost of economic exchange by aligning authority relationships and incentives to the unique conditions surrounding the exchange (Combs & Ketchen, 1999).

There are two theories that are the most central to the OE: transaction costs economics (Williamson, 1975, 1985) and agency theory (Fama, 1980; Jensen & Meckling, 1976). Both theories, especially transaction costs economics are based on

Coase's (1937) critical insight on transaction costs that makes organizations exist because the cost of managing economic exchanges between firms (transaction costs) is sometimes greater than that of managing exchanges within firms. Transaction cost economics focuses on the characteristics of an exchange that encourage managers to increase firm boundaries (i.e., full ownership by vertical integration), share with others (i.e., interfirm cooperation, subcontracting, joint venture, franchising, licensing), or exchange in markets (Combs & Ketchen, 1999). Among the exchange conditions initially identified by Williamson (1975), asset specificity defined by the geographical, physical and human features is perhaps the most robust empirically (Williamson, 1994). Specific assets, in contrast to general purpose assets, are costly to redeploy to alternative uses (Williamson, 1991). Asset specificity generally encourages enlargement of a firm's boundaries because, if the firm invests in specific assets in the context of a cooperative arrangement, it has little recourse if a partner attempts to alter the terms of their agreement *post hoc* (Anderson & Coughlan, 1987; Monteverde & Teece, 1982). If such opportunism arises, the firm faces an unpleasant choice between continuing to work with its recalcitrant partner and forgoing the expected value of its specific assets (Combs & Ketchen, 1999).

However, under certain conditions, asset specificity encourages share or cooperation between firms (Williamson, 1983). When both firms in a cooperative agreement must invest in specific assets, the assets form a reciprocal dependency that reduces each partner's incentive to engage in opportunism, thus reducing the costs of the cooperation (Dyer, 1996; Klein & Murphy, 1988; D. J Teece, 1987). Hence, whereas unilateral investments in specific assets should lead to full ownership, mutual investments under a certain agreement can encourage the cooperation (Combs & Ketchen, 1999).

A second OE perspective, agency theory, actually it has two streams so called normative principal-agent theory and positive agency theory (Combs & Ketchen, 1999). The former is found primarily in the economics literature and uses mathematical models to present how optimal employment contracts can be designed under various sets of assumptions. Whereas the former is generally not considered compatible with strategic management (R.P. Rumelt, Schendel, & Teece, 1994), the latter is choice of strategic management researchers (Hoskisson, et al., 1999). The positivist theory focuses on exchanges where one party, the principal, delegates responsibility to another, the agent (K. M. Eisenhardt, 1989; Jensen & Meckling, 1976). Normally, self-interested agents are expected to pursue their own goals, not those of principals. As a result, the firm (as principal) must spend resources monitoring and controlling the behavior of its agents (e.g., employees, managers, cooperative partners). The costs of such monitoring varies with the ease with which information about agents' job performance is available and can be effectively evaluated (Eisenhardt, 1989). In situations where the costs of direct monitoring are high, principals often substitute incentives that stimulate agents' goal toward principals' rather than attempting to oversee agents' activities directly (Eisenhardt, 1989). Moreover, in some certain types of cooperation, forcing agents to take an equity position in the operations under their control is a common way to realign agents' goals (Phan & Hill, 1995). Under credible commitments, cooperative relationship offers this type of incentive because cooperative partners' rewards are largely dependent upon their own performance outcomes (e.g., Combs & Ketchen, 1999; Shane, 1998).

Moreover, the agency theory has also been based to analyze a risk sharing mechanism in the cooperative arrangement among firms. Several empirical researches in Japanese

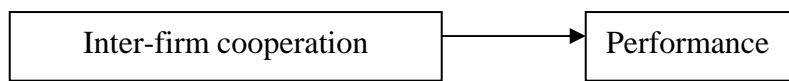
automotive industry (Asanuma & Kikutani, 1992; Kawasaki & McMillan, 1987; Okamuro, 2001; Tabeta & Rahman, 1999), in Korean automotive industry (Yun, 1999), and in Italian air-conditioning industry (Camuffo, Furlan, & Rettore, 2007) revealed that the buyers (large customers, assemblers) partially absorb the business risk of the suppliers. The relative stability of profit rate of the suppliers is significantly affected by the intensity of business relations with the main customer. Subcontracting relations can no longer be explained by the “big guys exploiting small guys” hypothesis, subcontracting is essentially the risk sharing mechanism based on an economic rationale of maximizing mutual benefits (Yun, 1999).

Both transaction costs economics and agency theory suggest that the inter-firm cooperation that minimize transactions/agency costs and share risk can be expected to provide adopting enterprises with a competitive edge. In order to understand more about benefits of inter-firm cooperation, subcontracting – a form of inter-firm cooperation – is taken as a good example. Subcontracting refers to the purchase of a part or component of a product or process from a different firm (Kimura, 2002). Specifically, subcontracting means long term transactions with specific companies, in which the firm offering another independent enterprise the subcontract requests to undertake the production or carry out the processing of a material, component, part or subassembly for it according to specifications or plans provided by the firm offering the subcontract (Holmes, 1986, p.84, cited in Taymaz & Kiliçaslan, 2005, p.634). It can be said that subcontracting is a long term arrangement. A one-time transaction is not regarded as subcontracting. In addition, a subcontractor may have several clients and vice versa.

Reviewing more specifically previous empirical researches, the subcontracting arrangement can bring several benefits to contractors/subcontractors. Firstly, the information and transaction costs are reduced through a long term and frequent exchange. Secondly, risks and uncertainty also decline and thus the rate of profit is expected to increase as a consequence of stable orders and better payment conditions. Thirdly, capital pressure is less because an enterprise would need a big amount of capital if it produced all the product components (CIEM, 2004). Fourthly, the creditworthiness is improved (e.g. debt guarantee by contractors) (Hondai, 1992, p.176-178 cited in Hayashi, 2002; Kumar & Subrahmanya, 2007). Lastly, through subcontracting ties, the provision of technical assistance and second-hand equipments to subcontractors enable them to improve on quality, cost reduction and delivery of products (Hayashi, 2005 cited in Kumar & Subrahmanya, 2007). In short, both contractors and subcontractors can enhance their competitiveness and performance through a subcontracting relationship.

As presented, this study will look at performance of firm from three different perspectives RBV, IO and OE. From the view of OE, the exchange conditions (e.g., asset specificity) are generally not associated directly with performance (Williamson, 1994). They only affect performance after organizational arrangements have been selected from both contractors and subcontractors' perspective (Combs & Ketchen, 1999). In other words, the direct relationship between inter-firm cooperation and performance may be hypothesized in this study (Figure 6).

Figure 6 Relationship between inter-firm cooperation and performance



Source: Outlined by author

III. Proposed Conceptual Framework

This section will argue a mechanism by complementary views among three perspectives to propose a comprehensive integrated framework. As presented in previous sections, it can be seen that how performance of firms in one industry is explained by each perspective independently. However, this paper follows the comprehensive approach to explain performance of firm. It means that all three perspectives RBV, IO and OE should be integrated in an appropriate mechanism to complementarily explain the performance.

Firstly, for the complementary view between the two perspectives IO and RBV, it has been recently recognized that IO and RBV complement each other in explaining a firm's performance (Amit & Schoemaker, 1993; Conner, 1991; Mahoney & Pandain, 1992; Peteraf, 1993; Spanos & Lioukas, 2001). In fact, according to Wernerfelt (1984), Porter's framework and the resource-based view constitute the two sides of the same coin. Spanos & Lioukas (2001) intuitively argued that value creation stems from the fit of internal capabilities to the strategy pursued, and of strategy to competitive environment (cited in Barney, 1992). Moreover, it could be argued that the resource-based approach provides the "Strength-Weaknesses" part of the overall SWOT framework, while industry analysis supplies the "Opportunities-Threats" part (Foss, 1996). In this respect then, the two approaches are complementary simply because they cover different domains of application (Barney, 1991) within the context of SWOT analysis. While the resource-based approach emphasizes that focusing on firm effects is important in developing and combining resources to achieve competitive advantage, industry effects are also critical.

Environmental changes "may change the significance of resources to the firm" (Penrose, 1959:79).

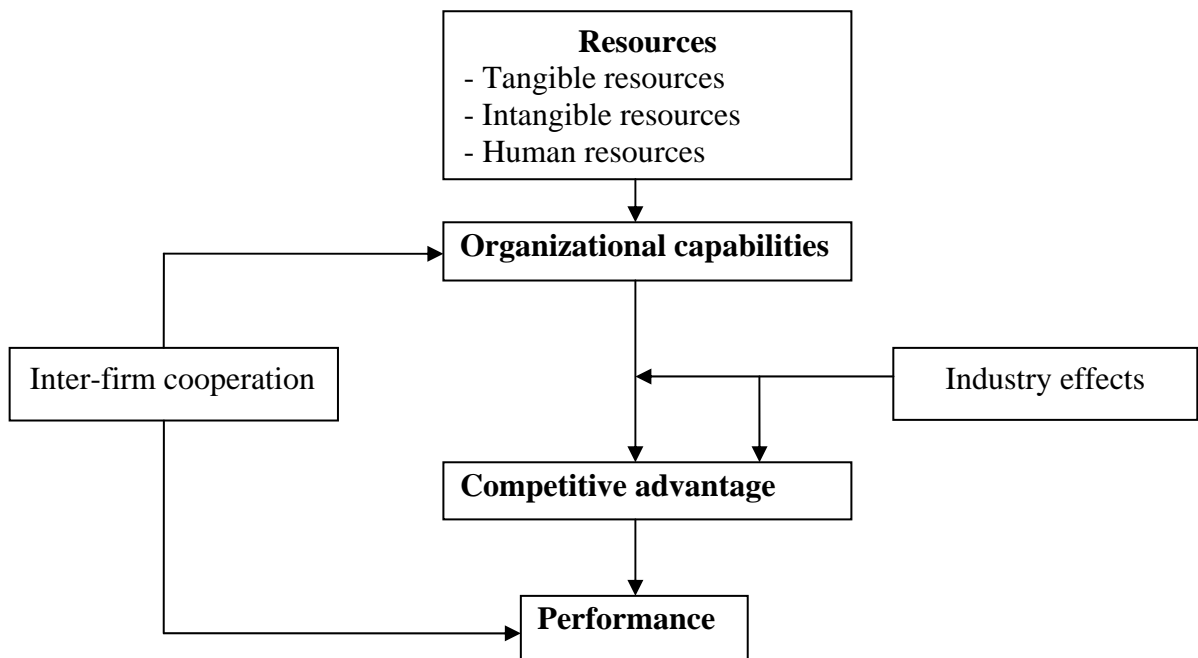
In addition, the complementary view of RBV and IO can be seen in Grant's (2002) framework (Figure 4), which formulation of competitive strategy is affected by industry effects (IO perspective) and organizational capabilities (RBV). This, in turn has impact on competitive advantage and then performance. This paper takes the complementary view on basis of Grant's (2002) framework due to its comprehensiveness. However, due to unavailability of measurement of the formulation of competitive strategy, it is assumed to occur implicitly into business operation process from organizational capabilities to competitive advantage. It means that there is no direct impact from organizational capabilities and industry effects on the formulation of competitive strategy, but industry effects moderate relationship between organizational capabilities and competitive advantage.

Secondly, for integrating between RBV and OE, Combs and Ketchen (1999) in their research reviewed three views of relating the OE and RBV in literature. First, the OE and RBV can be considered as independent explanations in which one perspective is used to explain the performance with a little consideration of the other. Second, they are complementary, in which each is offering unique insights that generally points manager in similar directions. Last view can be conflictive. This study considers the complementary view between OE and RBV to explain the performance, but not independent and conflictive explanations. On the other hand, RBV and OE are integrated to complementarily explain performance of firms at both direct and indirect relationship with the performance in this study. At direct relationship with performance, the reason is

that inter-firm cooperation arrangement is the strategic choice of firms. In relative comparison with RBV, it is similar to an actual implementation of strategy that is equal to competitive advantage. At indirect one, it can be said that inter-firm cooperation arrangement will have different improvement impact to organizational capabilities of firm. The reason is that OE as argued above is related to organizational way to minimize the cost of economic exchange. So, it can significantly affect organizational capabilities of firm by arranging or allocating resources inside the firm.

Based on a sequence of arguments above, a comprehensive integrated framework can be illustrated in Figure 7. It can be seen in this conceptual framework that performance of firms is complementarily explained from three perspectives of strategic management field; Resource based view (RBV), Industrial Organization (IO) and Organizational Economics (OE).

Figure 7 Comprehensive Integrated Framework



Source: outlined by author

IV. Operationalizing Conceptual Framework.

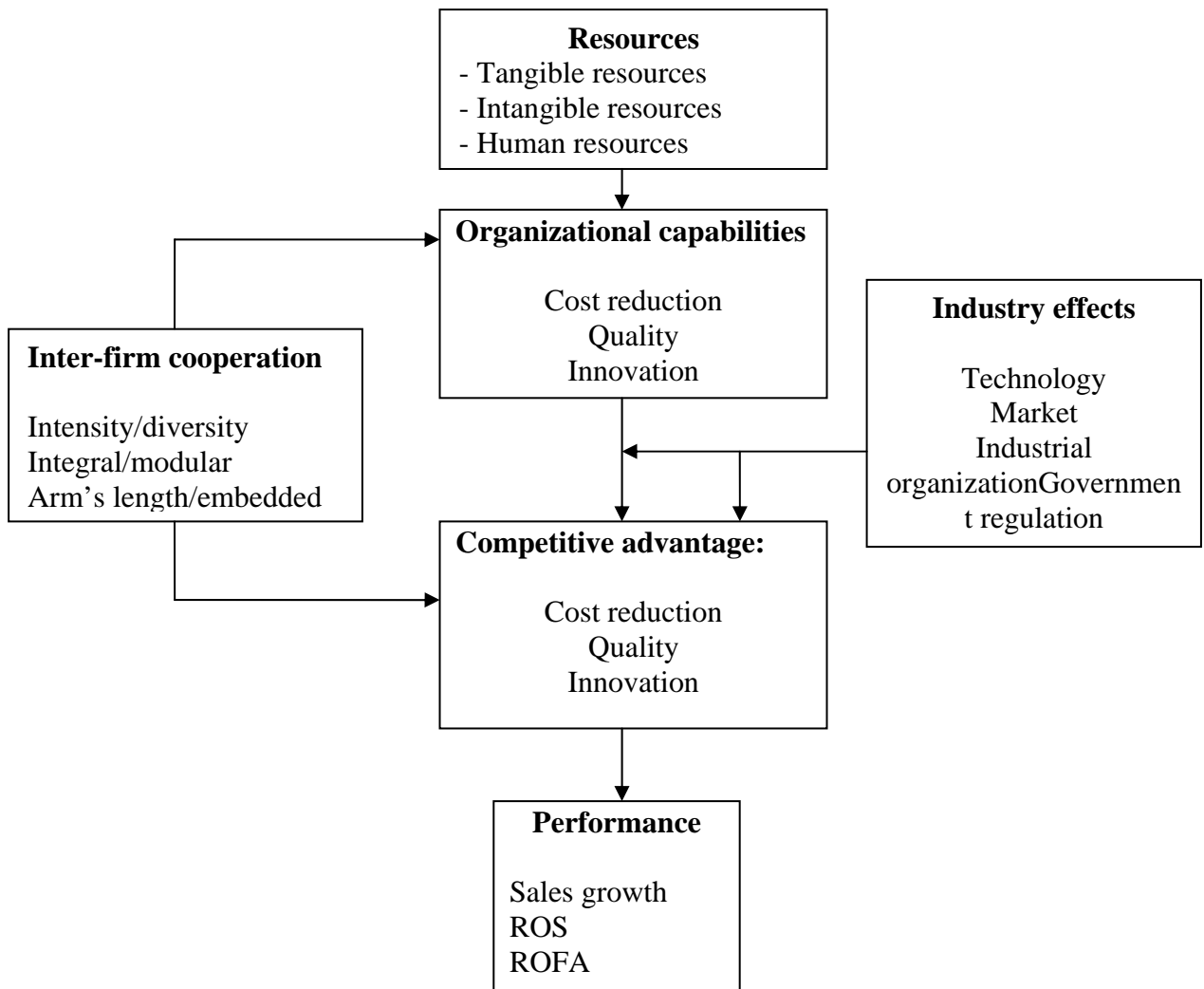
Although the framework is conceptual, it derives from a lot of previous empirical studies. In its turn, it is expected to deal with/apply in practical cases at more comprehensive and integrated scope. This section will try to provide solutions to operationalize the conceptual framework in reality, or test it empirically. These solutions are related to variables indicating constructs in the framework, measurement of variables and analytical methodology. It should be perceived that these following solutions are illustrating examples rather than concrete guidance that can apply for all cases. The purpose of these solutions is to support for possible studies in the future.

For variables indicating constructs of the framework, firstly constructs of resources can consists of tangible, intangible and human resources that are common for all cases. Each of these resources can be expressed in more detailed. For example, tangible resources are financial, physical; intangible ones are intellectual property, company reputation, organizational culture and structure; and human resources are skills, expertise and creativity of employees (also see Grant, 2002). Secondly, organizational capabilities can be factored as three separate scales supportive of competitive advantages: cost leadership, quality, and innovation (G. N. Chandler & Hanks, 1994; Wang & Ang, 2004). Thirdly, Barney (1991) defines that a competitive advantage is generally conceptualized as the implementation of a strategy that facilitates the reduction of costs, the exploitation of market opportunities, and/or neutralization of competitive threats (see also Newbert, 2008). Competitive advantages can be indicated as the implementation of strategies of cost-leadership, quality, and innovation. Constructs of these three strategies

are developed based on references from Chandler & Hanks (1994), Grant (2002: chap. 8&9), and Wang & Ang (2004). Fourthly, Zahra (1993)'s construct of environmental dynamism can be applied to measure industry effects. Respondents will be asked to rate changes in the past years for four aspects: technology, market, industrial organization, and government regulation for industry. Each aspect is measured by a five-point Likert scale (1 = minor change to 5 = major change). Fifthly, inter-firm cooperation can be specified by many forms such as vertical integration, joint ventures, share acquisition, alliances, subcontracting... or by nature of linkage such as intensity/diversity, integral/modular, and arm's length/ embedded relation. Finally, performance is measured by financial or/and nonfinancial one. The financial performance, for example, may be three indicators such as Sales Growth, ROS and ROFA. Sales Growth will be used for analyzing RBV whereas ROS and ROFA are for analyzing OE. Sales Growth that describes longer term business expansion is relevant to RBV which focus on competition among firms. ROS and ROFA (profitability indicators) are more appropriate to OE which emphasize on cost and risk sharing mechanism. For example, as described in Ishida et al.'s book (1997), one of automobile companies representing for the largest market share in Japan- has utilized indicators of unit per minute (can be understood the similar type of indicators as Sales Growth) to measure its performance. However, the other automobile assembler has used indicators of cost per unit (can be expressed in ROS and ROFA) to evaluate its performance because they could not expect more sales even if they produce more due to their relatively weak position in the market. Figure 8 illustrates solutions of possible variables for operationalizing the conceptual framework.

For measurement of above possible variables, they may be measured as quantitative or qualitative, depending on availability of data source. However, as the proposed framework, qualitative measurement seems to be more applicable. If they are qualitative, they will be rated by scale (e.g, 5 point Likert scale).

Figure 8 Illustrating analytical framework



Source: outlined by author

In terms of analytical methodology, firstly, this framework is proper to be tested empirically with a large enough sample of firms in one industry. The sample is also representative for the industry. In that sense, secondly, one survey by questionnaire for the sample will be necessary to collect data to analyze the framework. Sampling, design and measurement of questionnaire will depend on case by case. Lastly, the framework shows dependent relationships between constructs in an integrated mode, so it is the best if the framework utilizes structural equation modeling (SEM) to analyze. With this kind of methodology, all relationships of the framework will be revealed by only one graphic integrated as the conceptual framework. However, if this methodology is impossible due to nature of data or limited size of sample, method of separate regressions will be more feasible. In addition, in order to analyze these models, statistical software packages such as SPSS, AMOS and STATA can be used to be suitable for each situation.

V. Conclusion

This paper is to answer research questions: is it possible to build a comprehensive framework integrated all these three theories (IO, OE and RBV) in strategic management to explain performance of firm in one industry?; and how are all these three theories integrated conceptually? After reviewing literature related to all main three theories of strategic management, it can be seen that each theory looks performance from its own different perspective. This paper tried to argue a mechanism by complementary views among these three perspectives. As a result, a comprehensive integrated framework was proposed. Moreover, this study tried to provide solutions to operationalize the conceptual

framework in reality, or test it empirically. These solutions are related to variables indicating constructs in the framework, measurement of variables and analytical methodology.

In general, this paper is expected to make several contributions to mostly academics. Firstly, it is the first study trying to integrate all three main theories of strategic management into a comprehensive conceptual framework to explain performance of firm in one industry. Secondly, during the process of literature review, this paper summarized all main points of each theory of strategic management, and thus providing useful reference for academics. Thirdly, this study provided some solutions to support for possible studies in the future.

However, like almost all researches, this paper also faces some limitations. The first one is scope of applicability of the framework. This framework is assumed to apply for analyzing firms in one industry, but not firms in mixed industries. One industry (e.g supporting industry or textile and garment industry) will give a common background and decrease complicated factors among industries, which will help distinguish performance among firms. The second one is that the framework is not instant applicability. Any researcher who wants to apply the framework needs to review literature thoroughly to adapt to each situation. Although this paper suggests some solutions for applying in empirical studies, they are illustrating examples rather than concrete guidance that can apply for all cases.

For the future studies, this framework is really needed to test empirically in different environment (industry, country, economies). By doing that, the framework can prove its applicability and be further improved.

This research paper aims at proposing a comprehensive integrated framework from all these three main and independent theories to explain performance of firm in one industry in general. It is not a simple combination among three theories; it is expected to propose a framework integrated at a proper mechanism.

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