

# Determinant of Firm Performance

## Two Different Approaches

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*The question of what determines firm performance still defies a definite answer. The problem is extremely complex, because there are a vast number of influences on performance. There are two major paradigms in determining firm performance. One is based on industrial organisation economic field that was developed earlier by Mason-Bain. This concept suggests that market structure variables (environment) influence strategy and in turn, affect the firm performance. The other line of paradigm builds on strategic management field, which was developed earlier by Nourse-Doury. They viewed that firms' performances were not determined simply at the mercy of industry factors but dominantly by firms' specific factors.*

### Introduction

Although many research has provided insight into information what factors influence a firm performance, the findings have yet to fully examine the key determinant influence it. Some of the findings noted that market environment as a dominant factor (e.g., Christensen and Montgomery 1981; Lusch and Laczniak 1989), others noted that performance is affected dominantly by firm specific factors (e.g., Amit and Schoemaker 1993; Barney 1991; Wernerfelt 1984). Actually, these findings represents the debate between researchers in industrial organisation economics and the field of strategic management that has been going on for more than 50 years (Roquebert et al. 1996).

The key question of the principal source of performance seems to have had very little influence on the further development of theoretical orientations in both the industrial organisation economics and strategic management fields, each acting each view were dominant (Roquebert et al. 1996). Additionally, Henderson and Mitchell (1997, p. 6) noted that simply comparing firm-level and market-level influences would continue to prove fruitless for two reasons. Firstly, both firm specific factors and market environment are clearly important in shaping strategy and performance. Secondly, the inconclusive nature of much of the existing research reflects the fact

that firm specific factors, market environment, strategy and performance are fundamentally endogenous. That is, the market environment and firm specific factors shape business strategy, while interactions between strategy and performance, in turn, shape.

### Two Major Paradigms

As noted previously, there are two major paradigms in determining firm performance. One is based on industrial organisation economic field that was developed earlier by Mason-Bain. Mason-Bain proposed structure-conduct-performance (SCP) paradigm, emphasising the importance of external market factors (structure) in determining a firm success. This concept suggests that market structure variables (environment) influence strategy and in turn, affect the firm performance. In other words, this paradigm builds on the strong assumption that market factors as the primary cause of shaping strategy and performance. In the 1970's and 1980's, some scholars in the industrial economic field started looking for answer within the industry and modified the SCP to advance the concept of relative competitive positions to account for intra-industry heterogeneity and performance variation (Caves and Porter 1977; Christensen and Montgomery 1981; Lentz 1981; Lusch and Laczniak 1989; Porter 1976).

The other line of paradigm builds on the strategic management field, which was developed earlier by Nourse and Drury (1938). They viewed that firms' performances were not determined simply at the mercy of industry factors but dominantly by firm specific factors. Furthermore, in the classic strategy model, a firm performance gained from a combination of external and internal factors, known as opportunities and strengths applied against threats and weaknesses (Roquebert et al. 1996). Recently, strategic management scholars have developed resource-based theories, which define firm specific factors as valuable, unique and inimitable resources. These typical resources create sustainable competitive advantage, which in turn, resulted in superior performance (Barney 1991; Conner 1991; Grant 1991; Wernerfelt 1984).

### Structure-Conduct-Performance (SCP) Paradigm

Some of the most extensive studies of relationships between the environment and performance were found in the literature of industrial organisation. The research in this field is usually guided by the "structure-conduct-performance" (SCP) paradigm earlier proposed by Bain-Mason. Within their framework the environment refers to the market, or industry, in which a firm competes. In this paradigm, the *structure* of a market influences the *conduct* of firms within it and their conduct, in turn, affects *performance*. Because a firm conduct is assumed to be determined by industry structure, empirical studies have most often examined the association between structure and performance (cf. Conner 1991, p. 124).

The structure represents to the external environment within which firms exist. As a member of this environment, the firm is affected and limited by the various properties found within this environment. Examples of "properties" within the structural environment could be the number of suppliers; the number and size of competing firms; technological trends and performance; changes of customer preferences and/or a host of any number of other external factors that currently influence or potentially could affect on firm (Caves 1967, p. 37-38).

This paradigm viewed that the structure of the industry determines the behaviour of the firm in the major degree. Thus all firms in an industry were treated as identical organism. Further, their methods of marketing, production, and finance are identically determined by the constrained of industry structure (Porter 1976, p.70). In this case, the firm profitability depends on the ability of a firm to control the market through the exercise of monopoly power or by colluding with other firms. The successful firm's profit is the difference between an "artifi-

cially" high market price and its costs (cf. Conner 1991, p. 125).

Further development of this paradigm has been paid to the effects for firm's size or industry concentration (absolute or relative) on profitability (Conner 1991; Lusch and Laschniak 1989; Orvis 1996). The reason is that because large firms control substantial proportions of industrial output. These firms believe to have the greatest opportunity and incentive through engaging monopolistic or collusive practices. Their statements are influencing the motivation for firms' expansion to increase monopolization or, alternatively, prevent another firm from gaining monopoly control. For example, horizontal integration is seen as a method for extending monopoly power to dominate a market. Similarly, advertising and product differentiation are viewed as ways to erect entry barriers and increase monopoly power (Conner 1991).

Having said that, the quest for monopoly rents (the returns to market power) is the basis for superior performance through seeking favourable industry environments, locating attractive segments and strategic groups within industry, and moderating competitive pressures by influencing market structure and competitor's behaviour. However, the empirical results have been, less than conclusive, revealing at best a weakly positive association (Conner 1991).

Although the empirical results are not satisfactory, present research continues to confirm the important role market structure conditions play in the performance of an individual firm. Seeking to explain performance differences across firms, recent studies have repeatedly shown that average industrial profitability is the most significant predictor of a firm performance. Accordingly, Schmalensee (1985) concluded that, firm effects do not exist but industry effects are important. These account 20 per cent of variance in a firm's profit (and nearly 100 per cent of total variance explained). Thus, market structure analysis should play a vital role in strategy formation to gain superior performance (Montgomery and Porter 1991).

In contrast to those above, Rumelt (1991), extended Schmalensee's approach. He reported that business-units effects explain 44-46 per cent of variance (about 73 per cent of the explained variation), and industry effects account for a total of 9-16 per cent of variation. Baden-Fuller (1995) revealed two weaknesses in this paradigm. The first one, they typically relegated the role of strategy in execution to a lower consideration. The second one, they suggested that outcomes were the results of industry force not the method by which the strategy was devised. Moreover, half of Andrew's model has been forgotten, it needed to be brought back into the core strategy, which were in-

ternal resources to develop distinctive competence (Roquebert et al. 1996). The next subsection will explain the important of combination of strategy and environment in determined performance.

### Strategic Management Paradigm

Several empirical studies use the concepts of environment and strategy to explain firm performance. Schoeffler (1977), who studied a diverse sample of industrial firms, found that strategy variables (market share, investment intensity and product quality) and environment variables (market growth, seller concentration and market evolution stage) – both independently and in conjunction with other factors – have a direct influence upon performance. His findings showed that the joint effects of market conditions and firm strategy explain up to 80 per cent of the variance in return on investment. Moreover, Lentz (1980), who studied in the federal home loan bank, revealed that the combination of environment-strategy-organization structured associated with high-performance firms differs from the combination associated with low-performance organizations.

In the same vein, Capon et al. (1990) studied a meta-analysis of 320 published relates environmental, strategic and organisational factors to financial performance to investigate the relationship between these factors. They found that a combination of elements of environment and firm strategy affected a firm performance. The results above bring to the conclusion that the environmental conditions surrounding firms and the strategies pursued by firms within industry will affect the firm performance, or a firm performance as a function of environmental variables and strategy variables. This conclusion are conceptually similar to those proposed by other scholars (Ackoff's 1970; Hansen and Wernerfelt 1989).

Recently, research in strategy management started looking to firm's specific factors (resources and capabilities)\*, which related to sustainable advantage. Amit and Schoemaker (1993) claimed that firm resources and capabilities are grounds for establishing the firm sustainable advantage, and thereby generate profit. Accordingly,

firms were fundamentally idiosyncratic. Overtime, they accumulated unique combinations of firm resources and capabilities constitute the real source of sustainable competitive advantage that enables firms to generate above-normal rates of return. In addition, these resources may not be perfectly mobile across firms, and thus heterogeneity can be long lasting (Wernerfelt 1984; Barney 1991; Grant 1991; Mahoney and Pandian; Amit and Schoemaker 1993).

Proponents of the resource-based theories would argue that the influence of such idiosyncratic firm effects can be considered and, furthermore, can be persistent over time (McGrath et al. 1995). Rumelt (1991) concluded those stable long-term differences in business units, some six times more important to the explanation variance of firm performance than are stable industry effects.

Conducting a similar study using U.S. public corporation within specific 4-digit SIC categories, McGahan and Porter (1997), indicated that industry and firm-specific effects account for 19 per cent and 32 per cent respectively, of the aggregate variance in profitability. They also found that the importance of the effects differed substantially across sectors of the economy. Market factors effects account for a smaller portion of profit variance in manufacturing but large portion in services, wholesale/retail trade, and transportation. Accordingly, the differences between the sector lied in a distinction between individual and organisational capabilities. Firms that develop extensive organisational capabilities (manufacturing) find it more difficult to adapt to major changes in an industry's environment than firms that rely on the capabilities of individuals (service-related businesses). Thus, market factors will have strong influences on the profitability of many service-related businesses than manufacturing (Henderson and Mitchell 1997).

From the previous discussion, this it may be summed up that both key factors that environment and firm's specific factors shape success and performance in an industry. Thus, industry norms will tend to produce a distribution of levels of performance for industry players. In the same way, the firm's resources and capabilities will determine a given firm position within that industry distribution (McGraith 1995; Henderson and Mitchell 1997).

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\* Firm resources will be defined as stocks of available factors that are owned or controlled by the firm. Resources are converted into final products or services by using a wide range of other firm assets and bonding mechanism such as technology, management information systems, incentive systems, and more. Capabilities, in contrast, refer to a firm's capacity to deploy resources, usually in combination processes, to effect a desire end. They are information-based, tangible or intangible processes that are firm specific and are developed over time through complex interactions among the firm's resources (Amit and Schoemaker 1993: 35).

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