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POINT — COUNTERPOINT

Edith Penrose's (1959) Contributions to the Resource-based View of Strategic Management

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ABSTRACT We argue that Rugman and Verbeke (2002) underestimate the importance of Penrose's (1959) contributions to the modern resource-based view of the firm. In particular, we take issue with Rugman and Verbeke's (2002) arguments concerning Penrose's (1959) contributions to our knowledge of: (1) the *creation* of competitive advantage, (2) *sustaining* competitive advantage, (3) isolating mechanisms, and (4) competitive advantage and economic rents. In our response, we show that Penrose (1959) has both *directly* and indirectly influenced the modern resource-based view of strategic management.

INTRODUCTION

Rugman and Verbeke (2002) present their views on Edith Penrose's contributions to the resource-based view of strategic management. We find provocative their discussion of the links among Penrosean arguments, the resource-based view, and dynamic capabilities, and we agree that the distinctive contribution of Penrose (1959) to the modern resource-based view is a 'nontrivial issue'. Indeed, it is widely acknowledged that Penrose (1959) is one of the more influential books of the second half of the twentieth century, bridging strategic management and organizational economics (Kor and Mahoney, 2000; Pitelis, 2002).

Rugman and Verbeke (2002, 2004) propose that Penrose's (1959) *The Theory of the Growth of the Firm* does not make *direct* contributions to modern resource-based thinking. We submit that these arguments underestimate the relevance of Penrose (1959) in strategic management research. In response to Rugman and Verbeke (2002), it is not our purpose to critique their entire paper. Instead, we focus on the

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contributions and relevance of Penrose's (1959) classic to the modern resource-based view of the firm.

We take issue with some of Rugman and Verbeke's (2002) arguments concerning Penrose's (1959) contributions to our knowledge of: (1) the creation of competitive advantage, (2) sustaining competitive advantage, (3) isolating mechanisms, and (4) competitive advantage and economic rents. We discuss each of these arguments in turn.

PENROSE'S (1959) CONTRIBUTIONS TO OUR KNOWLEDGE OF THE *CREATION* OF COMPETITIVE ADVANTAGE

Penrose (1959) offers durable principles governing the growth of firms and the rate at which firms can grow efficiently. However, contrary to Rugman and Verbeke's (2002) thesis, the contributions of Penrose (1959) go significantly beyond the phenomenon of the 'growth' of firms (Lockett and Thompson, 2004). Indeed, along with a theory of the process of firm growth, Penrose (1959) provides a theory of effective management of firm's resources, productive opportunities, and diversification strategy. Specifically, Penrose (1959) provides an explanatory logic to unravel causal links among resources, capabilities, and competitive advantage, which contributes to a resource-based theory of competitive advantage. Penrose (1959) provides at least three *key* arguments concerning linkages among firm's resources, productive opportunities, and profitable firm growth.

First, Penrose (1959) maintains that firms can *create* economic value not due to mere possession of resources, but due to effective and innovative management of resources (Mahoney, 1995). Penrose (1959) makes a distinction between productive resources and productive services (Loasby, 2002). Given the same bundle of resources, the 'services' that this bundle of resources renders typically will be different depending on idiosyncratic *deployments*. Intra-industry heterogeneity due to creative resource deployments spurs differences in productive opportunities and financial performance (Penrose, 1959, p. 78).

Second, Penrose (1959) provides *causal links* between resources and the generation of productive opportunities for growth and innovation. The experience of managers with each other and other resources in the firm affects their image of the unique productive opportunities available for their firms. Managers function as a catalyst in the conversion of firm's resources into firm capabilities and new product applications. In the spirit of dynamic capabilities, new combinations of resources lead to innovation and economic value creation.

> There is a close relation between the various kinds of resources with which a firm works and the development of the ideas, experience, and knowledge of its managers and entrepreneurs, and we have seen how changing experience and

> knowledge affect not only the productive services available from resources, but also 'demand' as seen by the firm. Unused productive services are, for the enterprising firm, at the same time a challenge to innovate, an incentive to expand, and *a source of competitive advantage*. They facilitate the introduction of new combinations of resources – innovation – within the firm. (Penrose, 1959, p. 85; emphasis added)

Third, Penrose (1959) explains the drivers of the *rate* and *direction* of firm growth. The availability of top managerial and technical talent serves as the bottleneck for a firm's growth *rate* in a particular period of time. The current knowledge bases and underutilized resources of the firm determine the *direction* of firm growth. Penrose (1959) not only articulates why and how these drivers shape the rate and direction of growth, but also argues that ignorance of these limiting factors results in inefficiencies and loss of competitive advantage. Penrose (1959) provides a comprehensive explanation of the link between resource-based relatedness and firm-level performance. The choices that lead to an optimal growth pattern have direct consequences for economic rents. While Rugman and Verbeke (2002, p. 771) acknowledge that Penrose (1959) provides a theory of 'optimal growth', they avoid asking the question of 'optimal for what?' Penrose's (1959) argument is that there is an optimal rate for achieving *profitable growth*.

PENROSE'S (1959) CONTRIBUTIONS TO OUR KNOWLEDGE OF *SUSTAINING* COMPETITIVE ADVANTAGE

Rugman and Verbeke (2002, pp. 771–4) argue that Penrose (1959) has little relevance to the protection of a firm's competitive advantage. Here, we show that Penrose (1959) devotes close attention to the competitive forces and potential erosion of competitive advantage. Penrose (1959) stresses the importance of continuous *maintenance* of firms' existing capabilities and knowledge bases in protecting competitive advantage. Indeed, Penrose's (1959, p. 113–14) emphasis on the *time* dimension and protection of a current advantage with continued efforts to innovate to renew economic value parallels core arguments of the dynamic capabilities view of the firm (Teece et al., 1997). Penrose (1959, pp. 136–7, emphasis added) maintains that:

> In entering any new field, a firm must consider not only the rate of return it might expect on its new investment but also whether or not its resources are likely to be sufficient for the *maintenance* of the rate of investment that will be required to keep up with competitors' innovations and expansion in its existing fields as well as in the new one. Even when a firm enters a new field armed with a revolutionary innovation and is able to ward off competition with patent

> protection or other restrictive devices, it must expect that in time it will be overtaken if it fails to continue to develop its advantage.

Penrose (1959, pp. 235–6) also discusses large capital requirements, brand loyalty, reputation, and favourable arrangements with distributors that protect the incumbent's position. Penrose (1959) acknowledged sustainable competitive advantages of incumbent firms. Penrose (1959) emphasized, however, that no firm is immune from Schumpeterian competition and entrepreneurship. Penrose's (1959) resources approach puts emphasis on strategic experimentation in diversification strategy through *adaptive and creative responses*. Strategic experimentation is a component of the competitive process, and it is often the key to maintaining the existing capabilities and protection of a current advantage.

PENROSE'S (1959) CONTRIBUTIONS TO OUR KNOWLEDGE OF ISOLATING MECHANISMS

Rugman and Verbeke (2002) suggest Penrose's contributions to identification of isolating mechanisms are limited. However, we argue that Penrose (1959) contributed to the research literature concerning isolating mechanisms in at least five areas: (1) path dependencies in resource development; (2) firm-specific knowledge possessed by managers; (3) shared team-specific experience of managers; (4) entrepreneurial vision of managers; and (5) the firm's idiosyncratic capacity to learn and to diversify. We discuss each of these five mechanisms below.

Path Dependencies in Resource Development

The bundle of resources a firm possesses at a point in time limits the potential services that a firm is able to produce. A firm may expand its bundle of physical, human, and organizational resources over time, and the productive opportunity set of the firm will accordingly change. However, at least in the short run, available resources place a bound on the opportunities a firm can seize. Penrose notes that: '. . . the resources with which a particular firm is accustomed to working will shape the productive services its management is capable of rendering . . .' (1959, p. 5). Further, Penrose argues: 'the services that resources will yield depend on the capacities of the men using them, but the development of the capacities of men is partly shaped by the resources men deal with. The two together create the special productive opportunity of a particular firm' (Penrose, 1959, pp. 78–9).

Path dependency in development of a resource bundle protects a firm with a favourable market position against imitation, at least in the short run. Indeed, if this firm continuously invests in renewing its capabilities via new resource combinations as Penrose (1959, pp. 135–6, 235–6) explains, then this firm's competitive advantage can be sustainable.

Firm-Specific Knowledge Possessed by Managers

Penrose (1959) notes that managers' experience with their firm-level resources produces firm-specific knowledge about the productive opportunities that are unique for this firm. This experience-based knowledge is proprietary because it cannot be transferred to new managers quickly, and it cannot be purchased in the market. Penrose (1959, p. 53) notes that: 'experience produces increased knowledge about things and contributes to "objective" knowledge in so far as its results can be transmitted to others. But experience itself can never be transmitted; it produces a change – frequently a subtle change – in individuals and cannot be separated from them.'

The availability of managers with firm-specific knowledge also affects the bottleneck for the rate of *efficient* expansion to achieve profitable growth. A firm's capacity of proprietary firm-specific knowledge possessed by its managers functions as an isolating mechanism and determines the speed at which a firm can take advantage of emerging opportunities in its domain of business (Penrose, 1959, p. 237).

Shared Team-Specific Experience of Managers

Penrose (1959) stresses that firm-specific shared experience in the top management team produces tacit knowledge of strengths, weaknesses, and idiosyncratic habits of team members. Without this knowledge, managers cannot function well as a team, and they would be less willing to incur irreversible investments under uncertainty. Furthermore, a management team without shared team-specific experience would face difficulties in swiftly seizing productive opportunities in the environment and effectively implementing its strategy because of process issues stemming from lack of knowledge and confidence in each other's abilities. Therefore, a firm's repository of collective knowledge at upper ranks strongly affects managers' abilities to function as a team and serves as an isolating mechanism relative to firms that lack this experience-based tacitness. Penrose (1959, p. 46) argues that:

> An administrative group [management team] is something more than a collection of individuals; it is a collection of individuals who have had experience in working together, for only in this way can 'teamwork' be developed. Existing managerial personnel provide services that cannot be provided by personnel newly hired from outside the firm, not only because they make up the administrative organization which cannot be expanded except by their own actions, but also because the experience they gain from working within the firm and with each other enables them to provide services that are uniquely valuable for the operations of the particular group with which they are associated.

Entrepreneurial Vision of Managers

In Penrose's (1959) theory of efficient management of firms' resources, a key proactive role is assigned to managers in perceiving and pursuing productive opportunities. In a dynamic environment, managers can change both the productive services resources render and the demand conditions that affect its productive opportunities (Penrose, 1959, pp. 5, 31, 80). However, these entrepreneurial faculties are not equally available to all managers and to all firms. Those firms that have the top management talent and are able to keep them capture superior productive opportunities and sustain superior returns. Penrose (1959, p. 37) argues that:

> Here [in the process of growth] the imaginative effort, the sense of timing, and the instinctive recognition of what will catch on or how to make it catch on become of overwhelming importance. These services are not likely to be equally available to all firms. For those that have them, however, a wider range of investment opportunities lies open than to firms with a less versatile type of enterprise.

While some firms may have brilliant visionaries by luck, other firms have them because they developed the appropriate corporate culture, human resource practices, and reward systems to nurture the entrepreneurial faculties in their employees. It is the latter form of entrepreneurship that Penrose (1959, p. 39) gives closer attention. Those firms with an entrepreneurial culture are likely to sustain superior returns – an idea that is revisited in Barney (1986).

The Firm's Idiosyncratic Capacity to Learn and to Diversify

Penrose argues that (1959, p. 77) as a firm's resources are specialized and efficient in particular uses, unused resources become available for further growth, where these unused resources influence the direction and scope of a firm's activities. The uniqueness of firms' historical knowledge bases leads firms to diversify in directions that utilize their excess capacity of competencies. Put differently, 'diversification and expansion based primarily on a high degree of competence and technical knowledge in specialized areas of manufacture are characteristic of many of the largest firms in the economy. This type of competence together with the market position it ensures *is the strongest and most enduring position a firm can develop*' (1959, p. 119; emphasis added).

Penrose's (1959) growth theory of the firm concerns dynamic and path-dependent organizational learning. The knowledge endowment of the firm shapes and limits the rate and pattern of learning a firm can achieve within a certain period of time (Penrose, 1959, pp. 106–7). Thus, a firm's unique capacity to learn and diversify both confines its pattern and rate of diversification and also functions as an isolating mechanism because, without similar knowledge endowment *and* entrepreneurial insight, rival firms cannot successfully imitate another firm's diversification strategy.

This overview of the five isolating mechanisms suggests that Penrose (1959) makes significant contributions to the identification and explanation of isolating mechanisms that result in sustained economic rents. An important insight that Rugman and Verbeke (2002) overlook is that isolating mechanisms can be an outcome of practices of effective and efficient management of resources. S*pecific sources of rent generation and isolating mechanisms are inextricably intertwined*.

These Penrosean ex post limitations to competition are linked to the fundamental concepts of asset specificity and bounded rationality (Mahoney and Pandian, 1992; Williamson, 1975). However, Penrose (1959) is original in providing a theory that explains the role of firm-specific tacit knowledge in the contexts of firm growth, innovation, and diversification. The limitations to the rate of learning at the individual, team, and firm-levels restrict both the rate and the direction of growth *and* the imitation capability of rival firms. Therefore, contrary to Rugman and Verbeke's (2002) arguments, we submit that Penrose (1959) *directly* contributes to our understanding of not only the sources of firm heterogeneity and economic value creation but also the isolating mechanisms that explain the presence of long-term superior economic rents. Similarly, Pitelis (2002, p. 11) argues that unlike Barney's (1991) theory of exogenous value creation, Penrose (1959) provides a theory of endogenous economic value creation, and 'both value creation and "rent in equilibrium" can have their uses, but . . . the latter's use can be better appreciated if one's starting point is value creation . . . Penrose's contribution could and should be of input to all contributors in this area.'

PENROSE'S (1959) DISCUSSION OF COMPETITIVE ADVANTAGE AND ECONOMIC RENTS

Rugman and Verbeke (2002, p. 772) argue that Penrose (1959) makes little reference to the profitability consequences of resource deployments and growth whereas modern resource-based research emphasizes profit maximization. We concur that Penrose's view on the profit goals of the firm is not a strict profit maximization approach. Nevertheless, Penrose (1959) describes efficient management of industrial firm resources for private economic profit. Penrose (1959) observes that firms are likely to retain profits in excess of dividends expected by shareholders and to use them as an internal source of funds for continued firm-level growth. Penrose (1959, p. 32) makes the assumption that managers are competent and interested in making investments to pursue *profitable growth*.

In crafting a theory of efficient and innovative management of firm's resources, Penrose (1959, p. 133) gives attention to the concepts of opportunity cost and economic profit. Penrose (1959) identifies the strategic factors that may affect the profitability of both growth and diversification. Penrose (1959, p. 47) argues that if a firm does not achieve a balance between its *rate* of growth and its capacity of managerial services, the firm's growth initiation will be inefficient and unprofitable. In Penrose's (1959) theory, a firm's capacity to become profitable and stay competitive in a new business influences the *direction* of growth:

> It is reasonable to suppose that if a firm plans to expand in markets already occupied by other firms (whether it be further expansion in its present markets or expansion into new markets), it does so because it believes that it has some *competitive advantage* which will ensure the profitability of the investment that will be tied up in the expansion. (Penrose, 1959, p. 165; emphasis added)

> . . . 'success' is not simply a question of making an accounting profit; to be deemed successful a new activity must turn out to have been a better use of resources of the firm than any alternative use; and it remains successful only so long as it continues to be the most profitable use, not only of whatever new funds are required to maintain the competitive position of the new business, but also of the managerial and other services absorbed by it. When firms are engaged in a number of different lines of business but are actively attempting to use their resources in the most profitable manner, they will be continually reappraising the profitability of their different activities as changes occur in external conditions and in the quality and quantity of the productive services internally available. (Penrose, 1959, pp. 178–9)

Penrose's (1959) resources approach is concerned with efficiency, economic profit, competitive advantage, and profitable growth. These are the cornerstones of a resource-based view of strategic management. Indeed, Kor and Mahoney (2000) document the large number of conceptual and empirical studies in strategic management that build on Penrose (1959).

We submit that the research literature supports the view that past researchers (e.g., Teece, 1982; Wernerfelt, 1984) have insightfully made connections between Penrosean ideas and the modern resource-based view. These connections have contributed to the ongoing development of resource-based view into a theory of generating and sustaining competitive advantage. For example, Montgomery and Wernerfelt (1988) – building on Penrose (1959) and Teece's (1982) argument that firms diversify in response to excess resource capacity subject to market frictions – show that such related diversification can lead to economic rents, as measured by Tobin's Q.

CONCLUSION

In the current paper, we show that Penrose (1959) has been instrumental to the on-going development of the modern resource-based view of strategic management. Disagreeing, in part, with Rugman and Verbeke's (2002) interpretation of Penrose (1959), we have shown that Penrose's (1959) classic not only indirectly contributes but also *directly* contributes to our knowledge of an endogenous *creation* of competitive advantage with path-dependent and firm-specific processes of firm growth and diversification, and the process by which firms can *sustain* competitive advantage through firm-specific isolating mechanisms.

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