Strategic Management Journal
Strat. Mgmt. J., **23**: 769–780 (2002)
Published online 28 March 2002 in Wiley InterScience (www.interscience.wiley.com). DOI: 10.1002/smj.240

EDITH PENROSE'S CONTRIBUTION TO THE RESOURCE-BASED VIEW OF STRATEGIC MANAGEMENT

ALAN M. RUGMAN[1]* and ALAIN VERBEKE[2]
[1] *Kelley School of Business, Indiana University, Bloomington, Indiana, U.S.A., and Templeton College, University of Oxford, Oxford, England*
[2] *Faculty of Management, University of Calgary, Calgary, Alberta, Canada and Templeton College, University of Oxford, Oxford, England*

Edith Penrose's (1959) book, The Theory of the Growth of the Firm*, is considered by many scholars in the strategy field to be the seminal work that provided the intellectual foundations for the modern, resource-based theory of the firm. However, the present paper suggests that Penrose's direct or intended contribution to resource-based thinking has been misinterpreted. Penrose never aimed to provide useful strategy prescriptions for managers to create a sustainable stream of rents; rather, she tried to rigorously describe the processes through which firms grow. In her theory, rents were generally assumed not to occur. If they arose this reflected an inefficient macro-level outcome of an otherwise efficient micro-level growth process. Nevertheless, her ideas have undoubtedly stimulated 'good conversation' within the strategy field in the spirit of Mahoney and Pandian (1992); their emerging use by some scholars as building blocks in models that show how sustainable competitive advantage and rents can be achieved is undeniable, although such use was never intended by Edith Penrose herself.*

INTRODUCTION

The purpose of this paper is twofold: first, to identify Edith Penrose's *direct or intended* contributions and her *emerging* contributions to the resource-based field of strategic management, as there appears to be some confusion in the relevant literature regarding these precise contributions; second, to demonstrate that her undoubtedly valuable insights into the processes through which resources are acquired, used, and expanded within firms were not intended to guide managers on how to outperform competitors in terms of superior profitability. In this latter case, her perspective on the functioning of multinational enterprises is taken as an example. The paper suggests that Penrose's insights have indeed substantially influenced a large number of scholars in the field of resource-based strategic management. However, this influence has only partly been as she intended, mainly through her focus on the firm as an evolving collection of resources. It has also partly been emerging, and certainly unintended, as some strategy scholars have used her ideas in conceptual approaches driven by the overarching, firm-level goal to purposefully create isolating mechanisms so as to increase rents, a concept she actually opposed.

The paper does not aim to provide a detailed historical account of the origins and antecedents of the resource-based view. Excellent accounts of the evolution of the resource-based view can be found elsewhere, most notably in Montgomery (1995) and Foss (1997). Nor does the paper aim to provide a detailed analysis of recent advances in resource-based thinking. Such work has already been successfully undertaken by several authors, including Eisenhardt and Martin (2000) and Winter (2000). Rather, this paper investigates a simple,

Key words: Penrose; resource-based view; multinationals; rents
*Correspondence to: Alan M. Rugman, Kelley School of Business, Indiana University, 1309 E. Tenth Street, Bloomington, IN 47401-1701, U.S.A.

Received 8 March 2001
Final revision received 1 November 2001

but controversial and nontrivial issue, namely the distinctive contribution of Edith Penrose to the resource-based view of strategic management.

SIGNIFICANCE OF THE RESOURCE-BASED VIEW OF STRATEGIC MANAGEMENT

The main contribution of the resource-based view of strategic management is perhaps its ability to bring together several strands of research in economics, industrial organization, organization science, and strategy itself. In spite of a very substantial number of high-quality studies adopting this perspective and being published in top-tier academic journals, especially the *Strategic Management Journal*, the field can still be considered as lacking maturity; see Priem and Butler (2001a, 2001b) for a particularly powerful critique of its conceptual foundations and Barney (2001) for an equally impressive rebuttal of this critique. Even the exact definitions of key concepts, such as resources, competences, core competences, capabilities, and dynamic capabilities, have not been agreed upon or remain ambiguous and controversial. Nevertheless, there is a widespread consensus that the resource-based view has been instrumental in improving the legitimacy of the strategic management field as perceived by scholars in other, more conventional disciplines, including mainstream economics and organization science.

Modern resource-based thinking builds upon both a descriptive and a normative component. From a descriptive perspective, the focus is on the distinctive resource profile of each firm and the processes, both at the firm and industry level, that lead to specific new resource combinations and induce or reinforce heterogeneity among firms. As regards prescription, the value of the resource-based field to practitioners results from its emphasis on the purposive creation, through firm-level investments in resources and capabilities, of 'isolating mechanisms'(Rumelt, 1984). These constitute the analogue of entry barriers at the industry level and mobility barriers at the industry group level (Mahoney and Pandian, 1992).

The prescriptive building block in most of the post-1980 academic work on the resource-based approach to strategic management shares, at least implicitly, the following four characteristics:

1. The firm's ultimate objective in a resource-based approach is to achieve sustained, above-normal returns, as compared to rivals.
2. A set of resources, not equally available to all firms, and their combination into competences and capabilities, are a precondition for sustained superior returns.
3. Competences and capabilities lead to sustained superior returns, to the extent that they are firm specific (i.e., imperfectly mobile), valuable to customers, nonsubstitutable and difficult to imitate. The heterogeneity itself among firms, in terms of competences and capabilities, can be induced or reinforced (i.e., made endogenous) in two ways: first, through a 'process of Shumpeterian competition, path dependencies, first-mover advantages, irreversible commitments and [use of] complementary or co-specialized [resources].' This is the focus of modern disequilibrium approaches in the resource-based field. The second way is as a result of 'isolating mechanisms and uncertain imitability,' whereby intraindustry differences in performance among firms can be sustained over time (Mahoney and Pandian, 1992: 374). It is especially this second source of heterogeneity that is critical as the basis for strategy prescription.
4. From a dynamic perspective, innovations, especially in terms of new resource combinations, can substantially contribute to sustainable superior returns.

In operational terms, the main role of the resource-based view, within the field of strategy, as recognized by most scholars in the field, is its complementarity to the strategic positioning school, which built upon the Bain–Mason–Scherer structure–conduct–performance paradigm and culminated in Michael Porter's (1980) book on competitive strategy (Scherer and Ross, 1990). Expressed in the simplest terms and building upon Andrews' (1971) seminal work on the concept of corporate strategy, the resource-based view can be seen as an excellent starting point for analysis of the relative strengths and weaknesses of firms (thereby largely treating the demand side as exogenous), whereas a strategic positioning approach is probably the cornerstone of any opportunities and threats analysis (with little or no emphasis on the individual firm's resources to respond to this environment in an optimal way), a point already made elsewhere (Wernerfelt, 1984; Barney, 1995).

It should be emphasized that, even within the resource-based field, there is substantial variation in the views of scholars on the macro-level economic implications of the firm-level pursuit of rents. Here, the perceived nature of these rents, in terms of their efficiency-based or monopolistic character, is critical (see Mahoney and Pandian, 1992, for a discussion).

EDITH PENROSE AND THE RESOURCE-BASED VIEW OF THE FIRM

Edith Penrose has been credited by several authors espousing a resource-based perspective of the firm as having been instrumental to the development of this perspective. Cockburn, Henderson, and Stern (2000) have even coined the term 'canonical reference', to describe Penrose's (1959a) impact on the field, although immediately adding that Stinchombe (1965) and Nelson and Winter (1982) may have had more influence on the work in the strategy process area. The main reason why Penrose's (1959a) work is considered by many to be a key building block of the resource-based view is the fact that it was cited in early papers by two key contributors to this field, namely Birger Wernerfelt (1984) and David Teece (1982). In this context, it is useful to identify exactly what ideas these two scholars borrowed from Penrose's (1959a) work.

Wernerfelt (1984) explicitly refers to Penrose's (1959a) work twice in his important contribution: 'the idea of looking at firms as a broader set of resources goes back to the seminal work of Penrose' and 'the optimal growth of the firm involves a balance between exploitation of existing resources and development of new ones.' These two quotes indeed reflect some of Penrose's most important ideas.

Teece (1982) refers to Penrose (1959) in a somewhat more specific way, namely as a key building block in the construction of an economic theory of the multiproduct firm. He first focuses on her observation that human capital in firms is usually not entirely 'specialized' and can therefore be (re)deployed to allow the firm's diversification into new products and services. He then accurately describes Penrose's view that firms possess excess resources, which can be used for diversification purposes.

In both cases, the authors do not exhibit any confusion about Penrose's precise role in the development of their own thinking. They are interested themselves, respectively, in the firm's relative position *vis-à-vis* rivals (ultimately, Wernerfelt writes on resource position barriers) and the increase of shareholder wealth (whereby, according to Teece, value maximization is achieved through economies of scope).

Two of Penrose's main *intended* intellectual contributions are emphasized in the papers described above: first, that the firm may be viewed as a collection of fungible resources and, second, that an optimal pattern of firm expansion may exist, which requires a balanced use of internal and external resources in a particular sequence (Penrose 1959a). Other, complementary *direct* contributions are respectively the 'Penrose effect,' i.e., the limits to the firm's growth rate as a result of managerial constraints, and the importance of behavioral elements and learning in the firm's growth processes. The Penrose effect has been widely debated in the economics literature (Marris, 1964; Uzawa, 1969; Rubin, 1973; Slater, 1980). Her insights on the growth process, especially the enactment of the environment and the discovery of productive opportunities through a dynamic learning process but guided by path dependencies, remain as relevant today as 40 years ago. Key references in this context include the path-breaking work on internal corporate venturing and the process of strategy formation by Burgelman (1983) and McGee and Thomas's (1986) creative perspective on strategic groups.

ISOLATING MECHANISMS, RENTS, AND EDITH PENROSE

It is in the analysis of the role of isolating mechanisms and the resulting rents that Penrose's analysis diverges most strongly from modern resource-based thinking. The most enlightened analysis of the rent concept in strategy has probably been provided by Peteraf (1993), who views rents in a context of sustainable competitive advantage gained over (potential) rivals. In this context, several influential writings in the strategy field have created the misleading impression that Penrose herself either prescribed the use of resources as a tool to generate isolating mechanisms and thereby rents, or at least viewed the pursuit of rents in practice as critical to her theory on the growth of the firm. In fact, Penrose did not view the intentional creation of isolating mechanisms and rent generation as a worthwhile endeavor, nor did she even assume this to be critical to understand the growth of firms. There are three reasons for this.

First, Penrose (1959a) explicitly rejected the concept of long-run equilibrium, in this case the occurrence (or even likelihood) of long-run superior profitability. She viewed this possibility as the mere reflection of an inefficient market structure. She acknowledged that larger and older firms could have an important advantage *vis-à-vis* small firms, both in terms of efficiency and monopolistic advantages (Penrose, 1956), but she assumed that competition among large firms would usually eliminate any rents.

Second, Penrose was never concerned with the firm's relative performance *vis-à-vis* the benchmark performance of rivals, except where monopoly profits would arise. Even as regards the profit motive itself, she argued:

> That I adopt a 'weak' form of the profit-maximizing hypothesis is only a recognition of the fact that even in the strong form, maximum profits cannot be uniquely determined ex-ante in the face of uncertainty; that no ex-post outcome can be unequivocally identified as the maximum that would have been obtained; and that managerial and entrepreneurial attitudes towards uncertainty differ greatly among firms. (Penrose, 1985: 12)

Irrespective of her own opinion on the pursuit of rents as a worthwhile managerial objective (see also the next section), Penrose thus did not consider it important in her theory on the growth of the firm, because she felt it was inconsistent with managerial reality.

Third, Penrose had an inherent bias against profits that would primarily benefit shareholders and would lead to high dividends, rather than to reinvestment in firm growth. The function of shareholders was simply to provide equity capital, and dividends needed only to be sufficient to induce investment. Penrose's positive views on the concept of firm growth (and the obvious related need for the firm to be profitable) arose mainly from the observation that such growth was instrumental to innovation and the increase of societal welfare. In this context, she adopted the term 'economies of expansion.' But her perspective should be seen as a theory of 'value creation,' rather than 'value appropriation,' as dramatically exposed in the following quote:

> the innovating competition of the big firms can degenerate into almost senseless competition to be first to introduce the 'new', exciting, or the 'original' of which the chief contribution to consumers' 'satisfaction' seems to lie in its ability to satisfy a restless desire for the 'latest'—whatever that may be. ... It should be clear that the mere fact that consumers' market demand appears to be 'satisfied' is insufficient to elicit 'approval' from the social scientist, particularly since the very desires of consumers are powerfully influenced by the actions of producers and by the competitive processes described. (Penrose, 1959a: 262, footnote 2)

This strong explicit attack against the creation of isolating mechanisms contrasts sharply with the mainstream prescriptive component in the resource-based view, which either advocates or at least considers of strong managerial relevance, purposeful managerial action to build isolating mechanisms that can act as barriers against replication of successful patterns of behavior.

In this context, Mahoney and Pandian (1992: Table 1) have identified 37 isolating mechanisms (13 from the resource-based view/strategy literature, 19 from the organizational economics literature, and 5 from the industrial organization literature). Irrespective of the 'effectiveness' of these isolating mechanisms, in terms of generating sustainable rents, the authors view isolating mechanisms as a 'unifying' concept, since

> the crucial aspect for competitive advantage involves the productive services of rent-generating resources and resource combinations which cannot be easily imitated or substituted. (Mahoney and Pandian, 1992: 371)

Here, Penrose (1959a) is directly credited with uncovering only one of these 37 isolating mechanisms, namely 'unique managerial talent that is inimitable.' In contrast, an author such as Barney (1986a, 1986b, 1991) is recognized to have contributed to uncovering six isolating mechanisms! Therefore, even if it were (incorrectly) assumed that Penrose actually had advocated or viewed as relevant the use of unique managerial talent primarily to gain rents, her contribution at this prescriptive level would appear to be very minor indeed.

Perhaps even more importantly, and irrespective of the question whether the various scholars uncovering isolating mechanisms merely described them as empirical phenomena or advocated their creation, it is not the Penrosian approach, but both Williamson's (1975) transaction cost framework (building upon asset specificity and bounded rationality) and Lippman and Rumelt's (1982) work (focusing on uniqueness and causal ambiguity) that Mahoney and Pandian (1992) view as general models providing the rationale (at a high level of abstraction), for the existence of any isolating mechanism.

For illustrative purposes, a selection of 10 quotes by distinguished scholars is now provided. Taken together, these suggest that a serious misconception may have been created in the strategy field as to Penrose's *direct* contribution to the resource-based view, although it obviously does not suggest that such confusion has existed in the minds of any of these authors.

1. '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 (Penrose, 1959a: 54)' (Mahoney and Pandian, 1992).
2. 'Strategy can be viewed as a "continuing search for rent" ..., where rent is defined as return in excess of a resource owner's opportunity costs ... A resource may be conveniently classified under a few headings ... but the subdivision of resources may proceed as far as is useful for the problem at hand (Penrose, 1959a: 74)' (Mahoney and Pandian, 1992).
3. '[The resource-based model] ... has deepened our understanding regarding ... how resources are applied and combined, what makes competitive advantage sustainable, the nature of rents, and the origins of heterogeneity. The work of Penrose (1959a) is considered a very influential force' (Peteraf, 1993).
4. 'A variety of different authors have begun to explore the competitive implications of a firm's internal strengths and weaknesses. Building on some seminal insights by Edith Penrose (1959a), this work has come to be known as the resource-based theory of the firm' (Barney, 1995).
5. 'Strategy researchers ... understand rents as deriving in large part from intangible assets such as organizational learning, brand equity and reputation (Penrose, 1959a)' Liebeskind, 1996).
6. 'Knowledge is arguably the most important asset that firms possess—a key source of both Ricardian and monopoly rents (Penrose, 1959a)' (Liebeskind, 1996).
7. 'The roots of the resource-based view of the firm stretches back to Penrose (1959a) who characterized firms as collections of resources that can never reach an equilibrium state ... The resource-based view holds that valuable resources are those that competitors cannot immediately imitate' (Foss, Knudsen, and Montgomery, 1995).
8. '... the main idea of the [resource-based perspective] that firms are essentially different in terms of their endowments of productive resources and that the resulting efficiency differences yield differential rents ... is anticipated, most notably, by Edith Penrose (1959a)' (Foss, 1997).
9. 'The resource-based perspective suggests that unique resources and capabilities represent the main determinants of corporate performance relative to rival firms (Penrose, 1959a)' (Rugman and Verbeke, 1998a).
10. 'Penrose's work helped define ... distinct areas of research ... that ... constitute ... the 'contemporary competence based approach'. (This) stems from her emphasis on the fact that specialized, scarce and valuable resources/services yield rents' (Foss, 1998).

None of these ten quotes from the literature actually says that Penrose made explicit statements on the use of resources as a purposive competitive weapon *vis-à-vis* rivals, or as a tool to generate isolating mechanisms and sustained rents. Yet, in each case the impression may be created, especially with people less familiar with her work, that Penrose actually *directly* contributed to our understanding of the linkages between resources, competitive positioning, and rents. As demonstrated above, Penrose did not in fact aim to make such a contribution.

A recent article by Kor and Mahoney (2000) provides an extensive unbundling of Penrose's

Key conditions for goal achievement / Key managerial goals	Rents	Optimal growth pattern
Isolating mechanisms and resource superiority vis-à-vis rivals	1 Modern resource-based approach	3 Economics driven international business theory
Balanced sequence of resource development/ use/acquisition/ absorption	2 Dynamic capabilities approach Dynamic international business theory	4 Penrosian approach

Figure 1. Prescriptive foundations of Penrosian and resource-based theory approaches to strategy

model on the growth of the firm (see especially Kor and Mahoney, 2000: Figure 1, p. 120) and it suggests how 10 major, original ideas of Penrose[1] have inspired 22 research questions in the resource-based field (Kor and Mahoney, 2000: Table 1, p. 127), eight of which are immediately related to achieving competitive advantage *vis-à-vis* rivals and gaining rents.[2] For each of these

[1] These 10 ideas are: (1) firms grow in a dynamic process of management interacting with resources; (2) firms are created by people to serve the purposes of people; (3) services of resources are drivers of firm heterogeneity; (4) material resources and human resources create the subjective productive opportunity set for each firm; (5) firm growth is a function of firm-specific experiences in teams; (6) managerial capability is the binding constraint that limits the growth rate of the firm; (7) excess capacity of productive services are drivers of firm growth; (8) unused services of resources can be a source of innovations; (9) firm diversification is often based on a firm's competencies that can lead to a sustainable competitive advantage; (10) experimentation is an important component of the competitive process. (Source: Kor and Mahoney, 2000: 127.)

[2] These eight research questions include: (1) How does the interaction of managers and other human resources influence a firm's growth and competitive advantage? (2) How does management of the firm's repository of knowledge influence firm's growth and competitiveness? (3) Under what circumstances are the purposes of rent maximization and growth maximization in conflict? (4) How do firms that have a stakeholder approach differ in competitiveness, commitment, and strategic flexibility from firms that maximize stockholder wealth? (5) Why are firms different in resources, capabilities, and performance? (6) What sources of firm heterogeneity are drivers of performance differences both within and across industries? (7) To what extent can firms that stretch their resources gain competitive advantage by developing strategic flexibility and increased innovativeness in the long run? (8) What are the costs and benefits of strategic experimentation (e.g., experiencing in new alliances, new organization design, new products, new markets, etc.)? Do firms with a first-mover strategy (e.g., firms that come up with inventions and test them in the marketplace first) perform better (in the short run and the long run)? (Source: Kor and Mahoney, 2000: 127.)

10 ideas, the authors carefully describe how they have been used and extended by other scholars. Perhaps the most important statement in their article, but simultaneously the one most conducive to creating additional confusion, is the observation that

> Penrose's (1959a) subjective resources approach is **consistent** [emphasis added] with contemporary strategic management that models uncertain imitability and heterogeneity under competition ... Isolating mechanisms (barriers to imitation) explain (ex post) a stable stream of rents and provide a rationale for intra-industry differences in performance. (Kor and Mahoney, 2000: 121)

The correct interpretation of the above quote is that Penrose (1959a) may contribute to our understanding of the sources of firm heterogeneity, *as she intended*, and therefore, *indirectly* and in an *emerging* fashion, to models explaining the presence of rents.

A FRAMEWORK TO ANALYSE EDITH PENROSE'S VIEWS AND THE RESOURCE-BASED THEORY

The above analysis can be illustrated in Figure 1. Having established that both the Penrosian perspective *and* the modern resource-based perspective on strategy share a *descriptive* emphasis on firm heterogeneity, and therefore help us to understand the underlying reasons for the existence of rents at the firm level, we can now focus on what distinguishes the two approaches from each other. Here, a distinction should be made, from a *normative* perspective, between both the key managerial goals, viewed as important in practice and worthwhile to pursue, and the conditions for goal achievement, perceived as most critical in each approach.

The horizontal axis, on the managerial goals, makes a distinction between the goal of sustained, comparatively superior performance (rents) *vis-à-vis* rivals, and the goal of an optimal growth rate and direction of growth. The vertical axis, on the key conditions for goal achievement, distinguishes between on the one-hand resource superiority and isolating mechanisms *vis-à-vis* rivals and on the other hand the balanced sequence of internal resource development/use and their external acquisition/absorption.

Whereas the normative component in the resource-based view is largely positioned in quadrant 1, Edith Penrose's (1959a) work can be placed in quadrant 4. This divergence in positioning obviously does not diminish the overall (*intended* and *emerging*) impact that Edith Penrose may have had on the resource-based field, but it specifies the *intended* contribution by recognizing Penrose's very distinct normative premises.

Penrose adopted a disequilibrium approach, whereby the goal of achieving rents was not viewed as critical, either in terms of its instrumentality to the firm's growth process or as an outcome of this process. She assumed (or hoped) that monopoly rents would either not occur or be prevented through appropriate public policy and the presence of 'countervailing power.' She also assumed that, generally, efficiency rents would be competed away (Penrose, 1959a: Conclusion).

The above analysis is consistent with a minority view in the strategy field, advanced by Barney (2000), namely that Penrose's *direct or intended* contribution to the development of the resource-based field may actually have been relatively limited, and that it was really Demsetz (1973) and the interaction among a number of scholars at UCLA and Berkeley which led to the rise of the resource-based field, especially the conceptual models that focus on the creation of isolating mechanisms and the existence of rents in an equilibrium context.

In the next section, we apply the framework developed above to the relevant literature on multinational enterprises; this further demonstrates the important differences between Penrose's view and the prescriptive basis of the resource-based approach to the analysis of large firms, in this case multinational enterprises.

PENROSE AND MULTINATIONAL ENTERPRISES

The two best-known applications of resource-based thinking to the activities of multinational enterprises are perhaps Prahalad and Hamel's (1990) work on the core competence of the corporation and Rugman's (1996) extension of internalization theory to incorporate modern multinational strategic management thinking, such as the influential 'Transnational Solution' model of Bartlett and Ghoshal (1989). In both cases, the focus is on achieving sustainable competitive advantage and superior performance *vis-à-vis* global rivals, which is entirely consistent with the resource-based view. This work can therefore clearly be positioned in quadrant 1 of Figure 1.

Prahalad and Hamel (1990) view strategic thinking in terms of core competences as 'the most powerful way to prevail in global competition' and critical to 'understand the changing basis for global leadership.' Their strongest statement in this context is probably the following: 'We believe an obsession with competence building will characterize the global winners of the 1990s.'

Similarly, Rugman (1996), when developing a resource-based interpretation of the 'national responsiveness–integration' framework, distinguishes between location-bound firm-specific advantages (FSAs) and nonlocation-bound FSAs. The former refer to company-level strengths that provide the potential for benefits of national responsiveness, whereas the latter reflect the potential to reap benefits of integration, including benefits of scale, scope economies, and benefits of exploiting national differences. Rugman's application of this framework to the European economic integration process (the 'single market programme') views the resource-based reconfiguration at the firm level as being largely determined by the reactions to liberalization of direct competitors and other forces driving extended rivalry at the industry level; here also, the pursuit of competitive advantage and rents in a context of strong competition are assumed to be the key objectives of the firms analyzed.

The above perspectives are in sharp contrast with Penrose's views on the behavior of multinational enterprises; her views have been expressed most clearly in various articles published in the *Economic Journal*, one article in the *Business History Review* and a book published in 1968 (Penrose, 1956, 1960, 1968, 1973).

In a somewhat neglected but representative article, Penrose (1959b) argued that multinational enterprises make 'excess profits' on their foreign direct investment (FDI) in poorer countries. Her example was the U.S.-owned Iraq Petroleum Co. which, in her view, 'exploited' Iraq in the 1950s by earning a higher rate of return on its FDI than was necessary to start the project. This conclusion was consistent with Penrose (1956), where she examined the Australian subsidiary of General Motors and found that Holden Motors was making 'excess profits' in Australia. In that article she also argued that a shortage of cars in Australia contributed to Holden's profits, neglecting the role of the protective Australian tariff as the real culprit and stating that the government had a valid rationale to retain this tariff for balance of payments reasons. This focus on distributional issues was also the theme of her book on the multinational oil industry (Penrose, 1968). It was part of her broader vision of economics, in contrast to the neoclassical efficiency- only viewpoint of most economists. Penrose's view was that regulation was necessary to curb the alleged monopoly power of multinational enterprises.

Related work by Penrose on multinational enterprises has been identified by Pitelis (2001). He states that, in various papers, she focused her attention on four topics: transfer pricing, patents, infant firm protection, and social dumping by multinational enterprises. All four issues were almost invariably discussed in terms of alleged, inappropriate enterprise behavior, leading to undesirable monopoly power. Penrose's (1973) work on patents is a case in point. She observed the rents made by pharmaceutical multinational enterprises with their successful products. Yet, their unsuccessful ones and ongoing research and development expenditures were not considered.

Penrose's work on multinational enterprises can be viewed as an application and extension of her better-known work on the growth of the firm, as she acknowledged herself in her foreword to the third edition of her seminal book (Penrose, 1995: foreword to the third edition). Here again, value creation by multinational enterprises is seen as these firms' main contribution to host countries, but the value appropriation issue, a distributive problem, often to be solved by public policy, is given much more attention than in Penrose's work on domestic firms. Paradoxically, although her work on MNEs would at a superficial level appear to be consistent with quadrant 1 thinking in Figure 1, it is in fact quite the opposite: quadrant 1 behavior is explicitly rejected and viewed as the source of great societal costs in host countries, much in line with the pioneering work of Hymer (1960), as discussed by Dunning and Rugman (1985). This is an important observation for three reasons. First, it demonstrates, even more strongly than in the domestic case, Penrose's aversion against isolating mechanisms and rents. Second, it uncovers the interesting fact that whereas

Penrose viewed the pursuit of rents as largely irrelevant in her theory on the limits to the growth of the firm, which was informed primarily by business reality in mature economic systems such as the United Kingdom and the United States, this became of great importance in countries lacking the appropriate institutional apparatus to deal with distributional problems at the macro level caused by large firms, especially foreign ones. Third, and this is related to the previous point, it also highlights the important differences between Penrose's work on MNEs and the economics-driven international business theory (Buckley and Casson, 1976; Rugman, 1981; Rugman and Verbeke, 1998b; Hennart, 1982, 1989), which focuses largely on the efficiency properties of multinational activity, rather than on distributional issues.

Indeed, economics-driven international business theory (Rugman, 1981) argues that firms can only be successful abroad if they possess some type of intangible knowledge advantage that makes them competitive in foreign markets. They then engage in FDI only when faced with natural or government-imposed market imperfections that make exports or licensing too difficult or too expensive. In other words, it is the process of 'internalization' (replacing an external market by an internal market, through setting up foreign subsidiaries) that acts as an isolating mechanism and protects the MNE's resource base against dissipation. International business theory thus focuses on the creation of isolating mechanisms, through managerial choices regarding the loci of production and specific entry modes and it can be placed largely in quadrant 3 of Figure 1. Here, the focus is not on rent seeking but on the optimal expansion patterns of multinational enterprises, both through particular choices of entry modes and sequences of geographical diversification. In quadrant 3, resource superiority, reflected in the concept of 'firm-specific advantage' (the 'international version' of a competence) is critical to overcome the inherent costs faced by multinational firms, when operating abroad (the so-called 'liability of foreignness'). Even in the longer run, monopolistic rents are predicted not to occur, because the MNE's internalization response to market imperfections is associated with (high) costs of running a hierarchy that may span several countries. In addition, most international industries are populated by several rival companies engaged in intense global competition, so that any potential to gain rents remains rather limited (Rugman, 1996, 2000).

In a recent development, this quadrant 3 international business theory has been extended, and now also includes work perhaps best positioned in quadrant 2 of Figure 1. For example, Hennart (1994) has suggested that the analysis of multinational activity should not be confined to merely investigating the optimal international expansion pattern of MNEs, in terms of choosing the governance structure that can act as the most effective isolating mechanism to avoid the dissipation of proprietary knowledge, but should also focus on how rents can be earned through superior internal organization. The Hennart 'dynamic' approach to modern international business theory is consistent with an emphasis on efficiency rents. Much of the restructuring of large MNEs is now indeed being undertaken by top management largely in response to market perceptions that profits are insufficient; more specifically, firms seek to achieve efficiency rents through new and creative resource combinations. While, in the long-run, empirical data reveal that, as a set, the world's largest 500 multinationals do not earn rents over time (Rugman, 2000), the micro-level goal of efficiency-based rent creation is now undoubtedly a key objective for most multinational enterprises.

In addition, the original focus of economics-driven international business theory on the firm's initial resource superiority as a precondition for international growth is now being complemented with work that recognizes the need to systematically tap foreign subsidiaries and the local clusters within which they operate for new knowledge so as to benefit the entire internal MNE network. More specifically, this work emphasizes the path-dependent processes of foreign knowledge absorption and diffusion throughout the MNE, and the delicate balance to be achieved between internal knowledge development and external knowledge acquisition (Birkinshaw and Hood, 2000; Rugman and Verbeke, 2001). As a result, much more attention is being devoted to the issue of effective management of resources, much in line with Chandler's (1962, 1977) pioneering works on the more effective deployment of underutilized resources through changes in the internal structural context of large firms. It is in quadrant 2 that 'dynamic' (i.e., disequilibrium-based) international business theory (Rugman and D'Cruz, 2000; Rugman and Verbeke, 2001) may meet the newest strand in (noninternational) resource-based thinking, namely the dynamic capabilities approach, pioneered by Teece, Pisano, and Shuen (1997). Here, the focus is on disequilibria, continuous resource recombinations and firm-level responses to requirements for realignment with the ever-changing environment, within a prescriptive context of pursuit of rents.

As mentioned above, Edith Penrose's brilliant insights on discontinuous growth, collective learning, discovery of productive opportunities, and the creation of impregnable knowledge bases in quadrant 4 of Figure 1 have usefully informed the descriptive component in resource-based models. However, the latter models also contain an important normative component, namely a focus on creating isolating mechanisms and gaining sustainable rents. The 'leveraging' of Edith Penrose's insights in such models, especially those that focus on MNEs, appears especially inviting in an era where financial markets increasingly induce managers to consistently produce superior returns, in spite of rapidly changing and highly volatile external environments, following much-admired examples of capability renewal such as General Electric's success during Jack Welch's 20-year (1981–2000) tenure as CEO (*Financial Times*, 28 November 2000). It should, however, always be remembered that this is not what Penrose had in mind when writing her theory on the limits to the growth of the firm.

CONCLUSIONS

A careful reading of Penrose (1959a) on the limits to the growth of the firm and her related writings on international management indicates that many scholars may well have misrepresented her *direct or intended* contributions to the resource-based view. Basically, her work must be interpreted much more carefully than in much of the resource-based literature. Although Penrose indeed inspired many research questions in the resource-based field and shares many similarities with the descriptive building blocks of the resource-based view, her normative premises were very different.

Penrose neither advocated, nor even viewed as critical in (domestic) managerial practice, the use of resources to create isolating mechanisms against rivals and therefore as a tool to generate rents. Her theory of the growth of the firm is a theory of value creation rather than value appropriation. Her disequilibrium approach does not focus on the pursuit of rents, but rather on the optimal growth pattern of a firm's management team.

In contrast, when writing on MNEs, Penrose actually did focus on rents, but only to condemn the alleged exploitation of relatively immature economic systems by large foreign companies. In spite of her probably exaggerated perception of the negative distributional effects of MNE activities, her work on multinational enterprises is *consistent* with both the new dynamic (i.e., disequilibrium-based) theory of international business and the dynamic capabilities approach, as both assume a balanced sequence of resource development/use/acquisition/absorption, rather than a mere resource superiority *ex ante*. However, as regards the role attributed to the pursuit of rents in practice and the economic implications of such rents, Penrose's ideas remain very different from those prevailing in most modern resource-based thinking. In the light of this analysis her work needs to be reread much more carefully by management scholars than has been the case in the past.

REFERENCES

Andrews K. 1971. *The Concept of Corporate Strategy*. Dow Jones-Irwin: Homewood, IL.

Barney JB. 1986a. Organizational culture: can it be a source of sustained competitive advantage? *Academy of Management Review* **11**(3): 656–665.

Barney JB. 1986b. Types of competition and the theory of strategy: towards an integrative framework. *Academy of Management Review* **11**(4): 791–800.

Barney JB. 1991. Firm resources and sustained competitive advantage. *Journal of Management* **17**(1): 99–120.

Barney JB. 1995. Looking inside for competitive advantage. *Academy of Management Executive* **9**(4): 49–61.

Barney JB. 2000. The Penrosian myth: the unimportance of Edith Penrose's work in early developments of the resource-based view. Paper presented at Academy of Management, Toronto.

Barney JB. 2001. Is the resource-based view a useful perspective for strategic management research? Yes. *Academy of Management Review* **26**(1): 41–56.

Bartlett CA, Ghoshal S. 1989. *Managing Across Borders: The Transnational Solution*. Harvard Business School Press: Boston, MA.

Birkinshaw J, Hood N. 2000. Characteristics of foreign subsidiaries in industry clusters. *Journal of International Business Studies* **31**(1): 141–154.

Buckley P, Casson M. 1976. *The Future of the Multinational Enterprise*. Macmillan: London.

Burgelman RA. 1983. A model of the interaction of strategic behavior, corporate context, and the concept of strategy. *Academy of Management Review* **8**: 61–70.

Chandler AD. 1962. *Strategy and Structure: Chapters in the History of the American Industrial Enterprise*. MIT Press: Cambridge, MA.

Chandler AD. 1977. *The Visible Hand*. Harvard University Press: Cambridge, MA.

Cockburn IM, Henderson RM, Stern S. 2000. Untangling the origins of competitive advantage. *Strategic Management Journal* **21**(10–11): 1123–1145.

Demsetz H. 1973. Industry structure, market rivalry, and public policy. *Journal of Law and Economics* **16**: 1–9.

Dunning JH, Rugman AM. 1985. The influence of Hymer's dissertation on the theory of foreign direct investment. *American Economic Review* **75**(2): 228–236.

Eisenhardt KM, Martin JA. 2000. Dynamic capabilities: what are they? *Strategic Management Journal* **21**(10–11): 1105–1121.

Financial Times. 2000. GE names successor for Jack Welch. 28 November 28: 27.

Foss NJ (ed.). 1997. *Resources, Firms and Strategies*. Oxford University Press: Oxford.

Foss NJ. 1998. The competence-based approach: Veblenian ideas in the contemporary theory on the firm. *Cambridge Journal of Economics* **22**: 479–496.

Foss NJ, Knudsen C, Montgomery CA. 1995. An exploration of common ground: integrating evolutionary and strategic theories of the firm. In *Resource-Based and Evolutionary Theories of the Firm*, Montgomery CA (ed.). Kluwer: Boston, MA; 1–18.

Hennart J-F. 1982. *A Theory of Multinational Enterprise*. University of Michigan Press: Ann Arbor, MI.

Hennart J-F. 1989. Can the 'new forms of investment' substitute for the 'old forms'? a transaction cost approach. *Journal of International Business Studies* **20**(Summer): 211–234.

Hennart J-F. 1994. The 'comparative institutional' theory of the firm: some implications for corporate strategy. *Journal of Management Studies* **31**: 193–207.

Hymer SH. 1960. The international operations of national firms: a study of direct foreign investment. PhD dissertation, MIT. Published 1976 by MIT Press: Cambridge, MA.

Kor YY, Mahoney JT. 2000. Penrose's resource-based approach: the process and product of research creativity. *Journal of Management Studies* **37**(1): 109–139.

Liebeskind JP. 1996. Knowledge, strategy and the theory of the firm. *Strategic Management Journal*, Winter Special Issue **17**: 93–107.

Lippman SA, Rumelt RB. 1982. Uncertain imitability: an analysis of interfirm differences in efficiency under competition. *Bell Journal of Economics* **13**(Autumn): 418–438.

Mahoney J, Pandian JR. 1992. The resource-based view within the conversation of strategic management. *Strategic Management Journal* **13**(5): 363–380.

Marris R. 1964. *The Economic Theory of 'Managerial' Capitalism*. Macmillan: London.

McGee J, Thomas H. 1986. Strategic groups: theory, research and taxonomy. *Strategic Management Journal* **7**(2): 141–160.

Montgomery CA (ed.). 1995. *Resource-Based and Evolutionary Theories of the Firm*. Kluwer: Boston, MA.

Nelson R, Winter S. 1982. *An Evolutionary Theory of Economic Change*. Belknap Press: Cambridge, MA.

Penrose ET. 1956. Foreign investment and the growth of the firm. *Economic Journal* **66**: 220–235.

Penrose ET. 1959a. *The Theory of the Growth of the Firm*. Oxford University Press: Oxford.

Penrose ET. 1959b. Profit sharing between producing countries and oil companies in the Middle East. *Economic Journal* **69**: June 238–254.

Penrose ET. 1960. The growth of the firm. A case study: the Hercules Powder Company. *Business History Review* **34**(1): 1–23.

Penrose ET. 1968. *The Large International Firm in Developing Countries: The International Petroleum Industry*. Allen & Unwin: London.

Penrose ET. 1973. International patenting and the less developed countries. *Economic Journal* **83**: 768–786.

Penrose ET. 1985. The theory of the growth of the firm: twenty five years after. *Acta Universitatis Upsaliensis: Studia Oeconomicae Negotiorum* (Upsala Lectures in Business) **20**: 1–16.

Penrose ET. 1995. *The Theory of the Growth of the Firm* (with a new foreword by the author, 3rd edn). Oxford University Press: Oxford.

Peteraf A. 1993. The cornerstones of competitive advantage: a resource-based view. *Strategic Management Journal* **14**(3): 179–191.

Pitelis C. 2001. The resource-based theory of the transnational firm: conceptual and empirical issues. *Global Business and Economics Review* **3**(2): 20–43.

Porter M. 1980. *Competitive Strategy*. Free Press: New York.

Prahalad CK, Hamel G. 1990. The core competence of the corporation. *Harvard Business Review* **90**(3): 79–91.

Priem RL, Butler JE. 2001a. Is the resource-based 'view' a useful perspective for strategic management research? *Academy of Management Review* **26**(1): 22–40.

Priem RL, Butler JE. 2001b. Tautology in the resource-based view and the implications of externally determined resource value: further comments. *Academy of Management Review* **26**(1): 57–66.

Rubin PH. 1973. The expansion of firms. *Journal of Political Economy* **81**: 936–949.

Rugman AM. 1981. *Inside the Multinationals: The Economics of Internal Markets*. Columbia University Press: New York.

Rugman AM. 1996. *The Theory of Multinational Enterprises: Volume One of the Selected Scientific Papers of Alan M. Rugman*. Edward Elgar: Cheltenham, UK.

Rugman AM. 2000. *The End of Globalization*. Random House: London.

Rugman AM, D'Cruz J. 2000. *Multinationals as Flagships Firms: Regional Business Networks*. Oxford University Press: Oxford.

Rugman AM, Verbeke A. 1998a. Corporate strategies and environmental regulations: an organizing framework. *Strategic Management Journal* **19**(4): 363–375.

Rugman AM, Verbeke A. 1998b. Multinational enterprises and public policy. *Journal of International Business Studies* **29**(2): 115–136.

Rugman AM, Verbeke A. 2001. Subsidiary specific advantages in multinational enterprises. *Strategic Management Journal* **22**(3): 237–250.

Rumelt RP. 1984. Towards a strategy theory of the firm. In *Competitive Strategic Management*, Lamb R (ed.). Prentice-Hall: Englewood Cliffs, NJ; 556–570.

Scherer F, Ross D. 1990. *Industrial Market Structure and Economic Performance*. Houghton-Mifflin: Boston, MA.

Slater M. 1980. The managerial limitation to a firm's rate of growth. *Economic Journal* **90**: 520–528.

Stinchombe AL. 1965. Social structure and organizations. In *Handbook of Organizations*, March J (ed.). Rand-McNally: Chicago, IL; 142–193.

Teece DJ. 1982. Towards an economic theory of the multiproduct firm. *Journal of Economic Behavior and Organization* **3**(1): 39–63.

Teece DJ, Pisano G, Shuen A. 1997. Dynamic capabilities and strategic management. *Strategic Management Journal* **18**(7): 509–533.

Uzawa H. 1969. Time preference and the Penrose effect in a two-class model of economic growth. *Journal of Political Economy* **77**: 628–652.

Wernerfelt B. 1984. A resource-based view of the firm. *Strategic Management Journal* **5**(2): 171–180.

Williamson OE. 1975. *Markets and Hierarchies*. Free Press: New York.

Winter SG. 2000. The satisficing principle in capability learning. *Strategic Management Journal* **21**(10–11): 981–996.

