An Essential Service in Penrose's Economies of Growth

Nobuo TAKAHASHI^{a)}

Abstract: The strategic theory of resource-based view (RBV) put Penrose (1959) in the spotlight. The key to understanding Penrose's assertion is the concept of economies of growth independent of economies of size. According to Penrose, even when economies of size are not working, economies of growth exist regardless of size. Further, the economies of growth are temporary in nature and disappear once expansion is completed. In which managerial services are the economies of growth embodied? This paper hypothesizes that the economies of growth occur where there are unused start-up expert managerial services. Regardless of size, where these services exist, paving the company's way by step-by-step growth should produce profits.

Keywords: RBV, economies of growth, economies of size, unused services, Penrose, start-up expert managerial services

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^{a)} Graduate School of Economics, University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo, Japan, nobuta@e.u-tokyo.ac.jp
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1. Introduction

Edith T. Penrose's (1914–1996) *The Theory of the Growth of the Firm* (Penrose, 1959, 1980, 1995, 2009) is an economics classic. This book went on to become a foundation in the field of strategic management, when the resource-based view (RBV) appeared in the mid-1980s. RBV is an attempt to explain the creation, preservation, and regeneration of a firm's competitive advantage by combining the properties of resources and its transformation.

In 1984, we have two noteworthy papers on RBV—Wernerfelt (1984) and Rumelt (1984)—both of which cited Penrose (1959) and were followed by countless significant studies on RBV. Penrose (1959) became known as the shared source of RBV, having advocated the view that companies are essentially a pool of resources, whose utilization is organized by the administrative framework that different companies use their resources in different ways, and even the same types of resources can provide different types of services depending on the company.

However, although this interpretation of Penrose (1959) was plausible, it does not explain why Penrose titled her book *The Theory of the Growth of the Firm* in the first place. The key to understanding Penrose (1959) is the concept of *economies of growth*. This paper hypothesizes that the economies of growth occur where there are *unused start-up expert managerial services*.

2. Unused Services in Operation

First, Penrose (1959) assumes that the company is more than a simple administrative unit. Penrose focuses on productive resources, including human resources such as managers, and defines the company as “a pool of resources the utilization of which is organized in an administrative framework” (Penrose, 1959, p. 149). However,

even though the company is viewed as a collection of productive resources, strictly speaking, the production processes of inputs are not the *resources* themselves (material and human resources), but the *services* that the resources render. While resources can essentially be defined independently of their use, services cannot be so defined because the word “service” implies a function or an activity (Penrose, 1959, p. 25). This is the major difference between resources and services. Furthermore, unlike resources, services cannot be stocked; they function well only when they are used frequently. This distinguishing characteristic of services is a fundamental pillar of the economies of growth.

As long as there are resources not being fully used in current operations, the company has an incentive to look for ways to make full use of those resources to avoid having them left idle. In reality, a company's internal inducements to expansion are mainly caused by unused productive services, resources, or special knowledge. The unused services “do not often exist in the open form of idle man-hours, but rather in the concealed form of unused abilities” (Penrose, 1959, p. 54). The existence of these unused productive services is a waste; but they are free even if used profitably, that is, if they can be put to good use, they give the company a competitive advantage (Penrose, 1959, pp. 67–68).

3. It's Not Economies of Size, but Economies of Growth

What are economies of growth when considering this concept as an independent notion of economies of size? First, economies of size, according to Penrose, is the idea that a larger company is able to introduce a higher volume or new products into the market more effectively than a smaller company simply due to its size (*economies of size of expansion*), and produce and sell products and services more effectively than a smaller company simply due to its size

(economies of size of operation).

The economies of size of expansion (a) relate only to the cost of effecting an expansion; (b) exist if production can begin at a lower average cost simply because of size; (c) include the cost of establishing a smooth operation for additional production and the cost of enlarging or creating the market for the additional product as part of the production start-up costs. By contrast, economies of size of operation (d) relate to the average cost of production and sales of the additional product after expansion is completed; (e) mean that the larger the size, the greater the reduction in average costs (Penrose, 1959, p. 96).

One of the sources of the economies of size is the learning curve discovered by Wright (1936). On the learning curve, Alchian (1963) studies aircrafts¹ and Hirsch (1952, 1956) studies machine tools (Dutton & Thomas, 1984; Dutton, Thomas, & Butler, 1984; Takahashi, 2001). Furthermore, these learning effects are researched on the basis of the organizational routine by many researchers (Sato, 2012), for example, Cyert and March (1963), Nelson and Winter (1982), Levitt and March (1988), March (1991), and Levinthal and March (1993).

On the other hand, “economies of growth,” an independent concept of economies of size, is difficult to understand and is puzzled by Penrose’s description: For example, the economies of growth “may exist at all sizes.” When economies of growth are not economies of size of operation, they are temporary in nature, and “they can only be obtained if the firm grows larger,” but disappear once expansion is completed (Penrose, 1959, pp. 100–101).

Her description is thus abstract and it is impossible to tell if it

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¹ Alchian completed his paper for the RAND Corporation using World War II airplane manufacturing data to analyze Wright’s phenomenon and its effects; however, it was not published until 1963 because the data used was then considered confidential by the military.

refers to anything concrete. Assuming that such economies of growth actually exist, paving the company's way by step-by-step growth should produce profits. However, at the same time, once the additional production gets under way and gains ground in the market, the additional part can be separated from the original company and carried on independently without loss in efficiency (Penrose, 1959, p. 97). In other words, from the viewpoint of such economies of growth, once expansion is completed, the large company as a whole is not any more efficient than the collection, whose parts would be operating (and growing) completely independently (Penrose, 1959, p. 103).

4. Concluding Hypothesis

What, concretely, are economies of growth that are not economies of size? Even when there are no economies of size, what are economies of growth existing regardless of size? Furthermore, what are economies of growth that result from constant creation of unused managerial services within the company?

For example, the planning of expansion and the expansion itself absorb managerial services; however, once the expansion plans are completed and put into operation, the absorbed managerial services will be released, and become available to use when drawing up plans for further expansion (Penrose, 1959, pp. 49–50). Thus, individual companies become profitable when they expand in a particular direction; this is economies of growth.

This paper's concluding hypothesis is that such Penrose's managerial services are, more specifically, managerial services required at the "start-up" of a company or project. These *start-up expert managerial services* are absorbed in planning and implementation when a company expands, and are released again once the expansion plan is completed, becoming unused services

(Penrose, 1959, p. 49). This is where economies of growth exist regardless of size. When reading Penrose (1959), imagining these start-up expert managerial services within the company makes understanding Penrose's economies of growth much easier.

Penrose herself does not use the terms "start-up" and "start-up expert." However, Penrose's description makes sense when read with these terms in mind. In fact, as Penrose (1959, pp. 45–49) points out, the success of continued growth over and above the small scale depends on the ability to build up a "start-up expert" team led by managers with experience in working together. In other words, some kind of Penrose's *management team* must carry out a function of a "start-up expert" team. Consequently, there are administrative limitations on the growth rate set by the size of the start-up expert team.

By contrast, there are no administrative limitations on the size of a company. This is because once there has been an investment into production and sales, the additional production gets under way and gains ground in the market, the "start-up expert" services are no longer required and should be released. In extreme cases, this additional part can be separated from the original company and administered independently without loss in efficiency. If the company has these unused "start-up expert" services, then paving the company's way by step-by-step growth is linked to the utilization of these free services, and the economies of growth exist regardless of size.

In fact, this even happens in major corporations. For example, when Nippon Telegraph and Telephone Public Corporation was privatized as Nippon Telegraph and Telephone in April 1985, there was a "new business development office" devoted entirely to developing new businesses (subsidiary companies) (Takahashi, 1989). This division was specialized in "start-up expert" managerial services and by March 1988 had established 143 new independent

businesses in a three year period.

Studies have identified the importance of company networks in an industry (Konno, 2003) and regions (Inamizu & Wakabayashi, 2009) in Japan; however, it is difficult to apply companies' concept of economies of size to the growth of the networks. However, it is possible to apply the concept of economies of growth to the growth of the networks, and such a case already exists. For example, Matsumoto and Takahashi (2002) and Matsumoto (2003) point out the following with regard to non-profit organizations (NPOs), which went onto be established after the enactment of the Law Concerning the Promotion of Specific Non-Profit Organization Activities in 1998. Some NPOs in the network specialized only in supporting the "start-up" of new NPOs, contributing to the growth of the network. In other words, even in a case of networks, which is completely unrelated to the economies of size, economies of growth occurred when start-up managerial services were in place.

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