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Corporate Advantage: Identifying and Exploiting Resources

The previous note, "Corporate Strategy: A Conceptual Framework," did not specifically define the resources which were identified as critical to value creation in the multibusiness corporation. This note provides that definition, and also demonstrates how these resources can be leveraged into new markets. It does this by drawing on recent theories in economics that highlight the role of commitments as the fundamental source of economic profit. Although this note is somewhat technical, it is important to demonstrate that the intuitive but loose notion of resources discussed in the earlier note can be supported by a rigorous theory.

Identifying Resources

A Definition of Resources

Recent writings on the "resource-based view of the firm" (which is the catch-all name for a variety of different, but related, perspectives on strategy) have produced a deluge of terms that describe what we have called resources. The most popular is "core competence,"[1] which recalls the original treatment of corporate strategy by Professor Andrews with his definition of "distinctive competence" as "what the company can do particularly well."[2] More theoretical treatments take a narrower perspective of resources and talk of "capabilities" defined as "firm-specific assets created over time through complex interactions among the firms factor inputs;"[3] or "commitments" and "irreversible assets," which are defined as "specialized and durable investments."[4]

This note defines two terms—one broad, one narrow—which reflect these two streams of thinking on resources. The first is *distinctive competence*, defined as the vector of resources along which the firm is uniquely advantaged. The second is a *resource*, defined as a specialized and

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[1]C.K. Prahalad and G. Hamel, "The Core Competence of the Corporation," *Harvard Business Review*, vol. 68, no. 3 (May-June 1990), 79-91.

[2]K. Andrews, *The Concept of Corporate Strategy* (Homewood, IL.: Richard D. Irwin, 1971).

[3]D.J. Teece, G. Pisano, and A. Shuer, "Firm Capabilities, Resources, and the Concept of Strategy," Consortium on Competitiveness and Cooperation, working paper, No. 90-8.

[4]P. Ghemawat, *Commitment: The Dynamics of Strategy* (New York: Free Press, 1991).

Professor David Collis prepared this conceptual note as the basis for class discussion.

durable, tangible or intangible asset. This distinction is important because to build a distinctive competence requires more than simply identifying what the corporation currently does well. As with competitive strategy, corporate strategy should be based upon what the corporation does better than anyone else. Thus, while every firm will possess some resources, distinctive competence represents the set of those resources which are competitively superior, and which can therefore be a source of corporate advantage.[5]

To understand why resources are defined as specialized and durable assets we must briefly review recent economic theory. In the early 1980s the theory of "contestability" emerged which claimed to revolutionize the field of industrial organization and which, more importantly, was used to justify deregulation in the United States. Its intuitively simple argument was that in contestable markets, the threat of entry whenever above average profits[6] were earned would prohibit firms, even monopolists, from earning abnormal profits. The argument is best illustrated in the most infamous example—the airline industry.

Contestability theory argues that even if American Airlines were the monopoly carrier between Boston and Chicago, it could not earn economic profits.[7] As soon as another airline (say United) saw that American was making such a profit, it would take a plane from elsewhere in its system, open a Boston to Chicago flight, undercut American's fare by one cent to win American customers, and make an economic profit itself. When American responded by cutting its fare, United would also cut fares until the return to be made on the Boston-Chicago route fell to normal. At that time United would put the plane back on its original route. Such a threat of "hit-and-run entry" would ensure that American never earned above-normal profits flying between Boston and Chicago.[8]

This argument, contestability theorists maintained, would also be true if there were economies of scale, as would be the case if American was flying a 747 on the route. United would then have to operate a 747 on the route or be at a cost disadvantage. Even though United could see that its entry would lead to overcapacity, in the absence of sunk costs, it would still enter and fly the route until the moment price competition made the route uneconomic for both airlines. At that time, one of the airlines would take its plane elsewhere. The theory did not address which airline would leave, but simply observed that with no sunk costs involved, there was no penalty for either airline to redeploy its assets to another route.

It is this condition, the absence of sunk costs, which permits hit-and-run entry and which, therefore, underpins contestability theory. Unfortunately, all industries probably involve sunk costs, and this eliminates hit-and-run entry in practice. In the airline industry example, sunk costs are present in the investment American has made in gates at Boston and Chicago. American cannot therefore realize the full value of the assets it employs on the Boston-Chicago route if it decides to move its plane off that route. Thus, it will continue to fly the route until it earns a below-normal rate of return on only that portion of its assets which can be used elsewhere or sold for their full value (e.g., the airplane). Knowing this, United, which must incur the full cost of entry to fly the Boston-Chicago route (including the investment in gates), will project that it cannot earn a normal return on investment. It therefore decides not to fly the Boston-Chicago route. American faces no threat of entry and can earn monopoly profits.

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[5] Indeed, some of the resources a firm possesses, for example, AT&T's organizational culture, can even be competitively detrimental.

[6] In economics, profit refers only to that return which is above the cost of capital, so firms earning profits at the normal rate of return will not be earning "economic profit."

[7] The original text is W.J. Baumol, J. Panzer, and R. Willig, *Contestable Markets and the Theory of Industry Structure* (New York: Harcourt Brace Jovanovich, 1982).

[8] The fallacy of this argument has been amply demonstrated by the experience of airline deregulation and is discussed in the ICA course.

It is, therefore, ultimately the sunk costs involved in flying the Boston-Chicago route which allows American to earn an economic profit. Ironically, it is the commitment to stay in the market, even when American's return on its total investment (but not on the asset value it can recover when it flies another route) is below normal, that generates profits.[9] Since profits only arise from having made such commitments, or sunk cost investments, strategy becomes the competitive struggle to make such investments.[10]

The importance of this for corporate strategy is that resources must have the characteristics of commitments, i.e., involve sunk costs, if they are to be a source of profit or value. These characteristics are that resources must be specialized and durable so that they cannot be instantaneously and costlessly redeployed among markets. If the asset is general purpose, such as a machine tool or a computer, it can be redeployed to another market with no cost penalty. Therefore, it involves no sunk costs and cannot be a source of profit. The airlines' computer reservation systems (CRS) are, for example, a source of profit not because of the investment in the computers, which could readily be recovered, but because of the thirty-year investment in software specialized to airline reservations which is valueless outside the industry. Similarly, assets must be durable to be a source of profit, or else they simply become current expenses with no commitment value.

These are important observations because they imply that corporate resources cannot be general and broad like "manufacturing skills," but must be narrowly defined and of limited applicability if they are to create value. For example, Minebea, a Japanese manufacturer of miniature ball bearings, diversified into semiconductor manufacturing because it viewed its distinctive competence as manufacturing "high volume, precision, miniature products." This definition applied to both miniature ball bearings[11] (of which Minebea makes over 500 million p.a.), and 256K DRAM semiconductors, (of which Minebea makes more than 50 million p.a.). While semiconductors and ball bearings appear to have little in common, careful understanding of Minebea's specialized skills suggests few other products are as alike. Indeed, Minebea has become the world leader in both products because of its accumulated skills in plant and process flow layout, production in clean rooms, and automation. In contrast, corporate strategies based on general management skills, such as the conglomerates of the 1960s, are doomed to failure because they do not possess specialized resources.

A Test of Resources

These conditions merely identify those assets which qualify as resources. To be part of a corporation's distinctive competence, resources must pass four additional tests. They must be:

- competitively superior and valuable in a product market
- inimitable
- nontradeable
- nonsubstitutable

The first test ensures that a resource will yield a corporate advantage by specifying that it both contributes to competitive advantage in a product market, and that it is superior to that possessed by all competitors. Not all resources pass this test. For example, owning a brand name in some commodity products is valueless, as Prelude discovered in the lobster business. Similarly, having an

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[9]Similarly, it is the commitment made by tying your foot to the accelerator that ensures you win the game of chicken played by driving two cars at one another.

[10]See Professor Ghemawat's book and course.

[11]These bearings, many with an outside diameter of less than 3mm, are made to an accuracy such that if the balls inside the bearing were the size of the earth, the largest blemish would be less than 20m high.

organizational culture of collegiality, informality, and empowerment may be a unique resource, but it is useless unless it can be demonstrated to contribute to competitive advantage in the marketplace. Kodak's resource in "imaging technology" is not a distinctive competence because Japanese corporations like Canon and Sharp possess better photographic and display-screen technology.

The second test of a resource's ability to contribute to a corporation's distinctive competence is whether it can be readily imitated. Possessing an asset that competitors can easily copy will only generate temporary value; it cannot be the basis of a long-term corporate strategy. Unfortunately, many corporations base strategies on resources that are imitable. The original LBO firms made phenomenal returns, but the skills they used were quickly copied. By the late 1980s, over 150 LBO firms existed (many founded by ex-employees of the original firms), and returns dropped dramatically. By 1991 many LBO firms were complaining of being unable to find an attractively-priced deal because of the increase in competition. It is therefore only those inimitable resources which can be a source of sustainable competitive advantage that contribute to distinctive competence.

In practice, deciding whether a resource is imitable is difficult and on occasion subjective. Resources that are readily acquired on a market are, however, more likely to be imitable than those developed internally because anyone else can, in principle, buy those same resources. Thus, intangible assets, like a brand name or technical know-how, tend to be more valuable than physical assets, like plant and machinery.

The third test applied to a resource is whether it is tradeable. This is not a test of whether the company can trade the resource, as Coca-Cola can license its brand name, but whether the resource, such as Kraft's marketing skills for dominant brands in mature product categories, is embodied in individuals who can trade it. The problem with such a tradeable resource is that employees, not the corporation, will appropriate all the profit. Again, the example of LBO firms is revealing. One critical resource such firms held was contacts and relationships in the investment banking community. Unfortunately, this resource actually vested in the individual investment bankers, not in the LBO firms. These bankers could, and did, trade their skills by setting up their own LBO firms, or moving to another firm which gave them a greater share of the profit their resource generated. The resource which LBO firms possess that generates some profit is their corporate reputation, which is supraindividual and so not tradeable.

The final test for a resource is whether it is substitutable. While Iowa Beef Packers had built a distinctive competence in the "disassembly of cattle," the value of that competence was reduced by changes in the meat packing industry. As the local, inefficient meat packers were replaced by the "big four" meat packers, manufacturing skills became less valuable than marketing skills and the ability to brand or add value to beef. Iowa Beef's distinctive competence, which it still retained, was therefore substituted by competitors like ConAgra that possessed a competence in marketing. Other examples of substitution abound, including US Steel's competence in open hearth steel technology that was substituted by basic oxygen furnace technology for steelmaking, and by the use of aluminum in many applications.

Examples of Resources

Corporate strategy should therefore be designed to build a distinctive competence around resources that meet the four tests outlined above. These resources can be both physical and intangible. Examples of physical resources are a distribution network or sales force that can be used in more than one market. Avon, for example, possessed a valuable resource for a long time in its network of Avon representatives. Plant and machinery, such as GE's Appliance Park at Louisville which manufactures the complete range of major home appliances, can also function as the physical component of a firm's distinctive competence. Examples of intangible resources are brand names, such as the portfolio of cartoon characters which are the distinctive resource of the Walt Disney

Company, or the previously described skills that Minebea possesses in manufacturing high-volume precision miniature products.

As mentioned before, the best resources are often intangible, not physical. Such assets like reputation or tacit collective know-how (knowledge which cannot be codified and written down, but which is known or understood by the organization) are only accumulated over time and are embedded in the organization as a whole, not held by one or two individuals. These characteristics make such assets nearly impossible to imitate, since an imitator has to go through the same process of investment as the original firm, and also very difficult to trade. They are, therefore, enormously valuable resources to possess. Marks and Spencer's reputation with its customers, employees, and suppliers, and the ability of its managers to "probe" for information because of their deep knowledge of the firm and their long-standing network of relationships with other employees, are wonderful examples of these sorts of intangible resources. Indeed, no competitor has managed to replicate the resources which M&S has accumulated over its 100-year history.

This exposes an irony which helps explain why the track record of corporate diversification has been so poor. The very fact that such resources are hard to imitate and impossible to trade means they are often very difficult to transfer or leverage into new markets. M&S has failed in its 20-year international diversification attempt because it cannot recreate what it does so well (the resources it possesses) in the United Kingdom. What gives resources their value as inimitable assets makes them difficult to leverage, as M&S demonstrates with the difficulty, it has recreating one hundred years of history when it enters a new market with new customers, employees and suppliers.

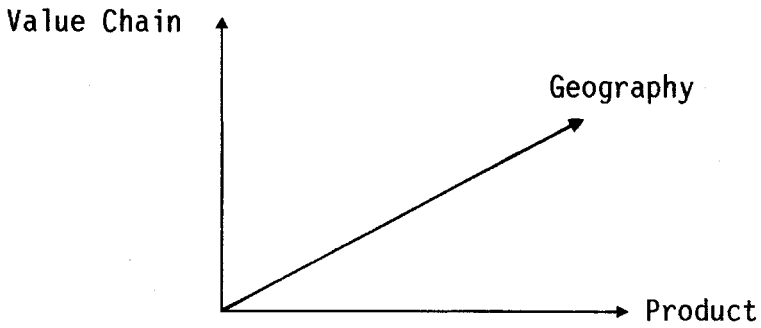
More generally, the irony is that to be a source of sustainable competitive advantage (represent a commitment) an asset must be specialized to a market so that it involves a sunk cost. However, to be a corporate resource the asset must be valuable in multiple markets. How then can any asset which could be a basis for diversification be valuable? The answer is that provided the resource cannot be instantaneously and costlessly redeployed among markets it will still have some degree of sunkeness to it, and so can function both as a commitment and be valuable in multiple markets. Nevertheless, the dilemma for corporations is clear: The more specialized and hence inimitable is the company's distinctive competence, the more difficult it is for the firm to successfully diversify using that competence. Conversely, the more broadly applicable the resource, which facilitates diversification, the less likely it is to be a source of sustained competitive advantage in any market.

Exploiting Resources

The definitions provided in this note should aid corporate strategists in the identification of a corporation's resources and hence of its distinctive competence. The corporate strategy must then involve continued *investment* in that distinctive competence. M&S was distinguished from Sears by its willingness to periodically reevaluate and reinvest in its core resources: its stores, people, systems, relationships and reputation. If a distinctive competence is based only on competitively superior resources, corporate strategy requires reinvestment in these resources to maintain that superiority.

Corporate strategy also involves the choice of product markets in which to deploy the corporation's distinctive competence. As these markets extend over three dimensions (see below), corporate strategy concerns the scope of the firm along each of these dimensions. It therefore covers geographic diversification, product diversification, and vertical integration. While these strategic options are ostensibly very different, many of the issues which arise with exploiting resources in one dimension also apply to the other dimensions. Thus, the research on managing multinationals is relevant to managing multiple product lines, and the transaction cost literature on vertical integration can be applied to product diversification. In the discussion that follows, examples of firms changing

their scope in one dimension will therefore illuminate principles that often apply to the other dimensions.



There are two ways in which extending the scope of the corporation creates value. The first is when a corporation *leverages* its resources by diversifying into markets where those resources contribute to a competitive advantage. This strategy capitalizes on an outward flow of value, such as when IBP applied its skills at cattle disassembly to enter the pork processing industry. The second way to create value occurs when a corporation diversifies in order to *build* its resources. This involves an inward flow of value, for example, IBP when backward integrated into feed lots to control the quality of cattle it processed in its packing plants. The distinction is between deploying an existing resource into a new market, and entering a new market in order to develop a unique resource. The distinction is important because in the former case the corporation must directly add value to the business unit it acquires (or establishes), while in the latter case the corporation can actually reduce value in the acquired business unit because it is gaining value elsewhere in the company. This note will address both ways to exploit resources.

Leveraging Resources

The outward flow of value generated by leveraging resources into new markets is intuitively obvious and has historically been the justification for most corporate diversifications. Since the corporation possesses a distinctive competence that will contribute to competitive advantage in a new market, provided the new business unit is appropriately incorporated into the corporate structure, such diversification will indeed create value.

The challenge for this method of exploiting resources is twofold. First, it must demonstrate that the corporation's resources are valuable and will be superior to those of competitors in the new product market. The second challenge is to demonstrate that the resources can be effectively leveraged into the new market without violating the internal consistency requirements of the other elements of the corporate strategy.

To meet the first challenge, the corporation must correctly understand the resources it is leveraging. If M&S believes it's competence is supply chain management, then a logical diversification is into other forms of retailing in the United Kingdom. Only if it believes its competence is in retailing a particular product range should it be attempting to diversify geographically. Incorrect identification of corporate resources is where many past diversifications have failed. James Dutt's view of Beatrice's distinctive competence as "the premier worldwide marketer of food and consumer products" was used to justify its diversification into car rental, lingerie, luggage, cosmetics and Coca-Cola bottling plants. The fallacy in his reasoning derives both from the belief that such a generic skill can be a profit-generating resource, and that it could really be competitively superior in all those markets. Such overly optimistic assessment of the corporation's resources explains the failure of many extensive diversifications.

To meet the second challenge, the new business unit must fit with the alignment of the other elements of the corporate strategy. It must not only be in an industry and pursuing a competitive strategy that is within the constraints of how the corporate resources are mobilized by the particular tasks performed by the corporate office, but it must also be able to be administered by the corporate structure, systems, and procedures already in place. Again, the difficulty of meeting a requirement for consistency among four elements of corporate strategy (rather than merely exploiting a "synergy"), explains why successful diversification is more constrained than many corporations have believed.

Nothing has yet been said about the mode of diversification. Should a distinctive competence be leveraged by extending the corporate scope through acquisition, internal development, joint venture, or some other form of alliance? This course does not include cases on that subject, which was to be covered by the canceled course, "Corporate Strategy and Firm Scope." The comments here will, therefore, necessarily be brief.[12] Of the two alternatives that involve 100% ownership—acquisition and internal development—the strategic trade-off is generally between speed and ease of integration. Acquisition yields an immediate presence in the market, but is accompanied by the managerial difficulties of assimilating an existing organization with a unique configuration of structure, systems, procedures, culture, etc. Internal development makes this organizational transition easier (although not trivial as the literature on intrapreneurship, for example, has suggested)[13] but leads to slower share gain in the new market. The choice between complete and partial ownership (joint ventures and alliances) is more complex. The strategic trade-off appears to be between control and access to additional resources. Owning the new business unit ensures complete control over the strategy and over any external spillover of resources. Conversely, a joint venture or alliance brings with it the difficulty of parties with different vested interests agreeing on a strategic direction, and the risk that a partner exploits what it learns about the other corporation's resources. However, a joint venture partner contributes its own resources to the new business unit. Most joint ventures and alliances, for example, appear to be intended to combine resources as occurs when U.S. firms offer access to their distribution channels to Japanese firms in return for their product technology. Perhaps the trade-off is determined by how needy the corporation is for the complementary resources of the partner.

Building Resources

The normative prescription to continually reinvest in the resources that constitute the corporation's distinctive competence assumes that a corporation possesses a distinctive competence. But what if the firm has no such competence? Or if, as in the case of Iowa Beef, its old competence has been substituted? What if a competence, like US Steel's is only valuable in structurally unattractive industries so that, however efficiently it operates, its financial returns will be poor? In these situations, a corporation may be forced to extend its scope in order to build new resources, but how do corporations effect this change?

One approach is to hire individuals to inject new resourcess into the corporation. A second is simply to buy resources on a market, such as a license for new technology. Unfortunately, neither of these is likely to produce a distinctive competence, since easily acquired resources are by definition imitable. A better approach might be to acquire another company with complementary (co-specialized) assets, such as Iowa Beef buying Perdue Chicken to gain marketing skills. This has the merit of buying an entire organization, complete with its distinctive competence in place, but has the attendant problems of how to transfer that competence to the acquiring corporation. (The Kraft General Foods case explicitly addresses this issue.)

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[12]The contractual alternative, such as licensing, is discussed below.

[13]Pinchot, G., *Intrapreneuring*, (New York: Harper & Row, 1985).

The optimal approach to developing a new distinctive competence is usually to accumulate the desired resources internally. Again, this is difficult to do, because it involves realigning the whole corporation.[14] Corporate resources should therefore probably be extended slowly, adding new competences sequentially. By stretching the organization and challenging it to master one new skill at a time, a corporation should be able to gradually migrate to a new distinctive competence. M&S, for example, learned to add food to its product range in the United Kingdom, and is now struggling to add overseas operations to its skills.

In contrast to this defensive rationale, corporations can also proactively build a resource by exploiting scope economies between markets. In this case the valuable resource is produced as a result of the corporation's multimarket activity. If, for example, scope economies come from sharing a manufacturing facility, then the valuable corporate resource becomes the shared manufacturing facility.

Economics has made technical developments in the analysis of scope economies by identifying necessary conditions for their existence, such as transray convexity of the production function,[15] but for our purposes the critical test for the existence of scope economies is:

- Am I better off in Market A by virtue of my presence in Market B?

If this condition holds, diversification into Market B builds a resource that has value in Market A.

Phenomena that lead to scope economies are cost drivers, such as scale and experience, that operate on activities shared across markets.[16] This is the case of global industries in which Boeing, for example, can share R&D across countries so that per-aircraft costs in the United States are reduced by selling a plane in Brazil. Similarly, demand-side scope economies exist. Placing the Trump name on a prestigious shopping center in New York (the Trump Tower), for example, builds the brand name and draws customers to the Trump casinos in Atlantic City.

An additional source of scope economies is informational. These arise when being active across markets provides knowledge that could not otherwise be acquired. Examples of this are the need to be active in all three major trading blocs in a product whose technology is changing rapidly in different directions in each bloc, such as is happening in HDTV, or the need to be vertically integrated in rapidly evolving upstream technologies, such as the car companies in engines. In either case, only corporate involvement in all the markets provides the access to information, and the learning necessary to compete successfully in the original market. In such cases, the corporation is building a valuable informational resource by virtue of its activity in multiple markets.

Scope economies can be identified by careful examination of the linkages between markets at each stage in the value chain. In their presence, corporations can indeed justify diversification in order to build a resource, as Maytag did in order to establish a viable sales marketing and distribution network for appliances.

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[14]Realigning the corporation to a new distinctive competence is as hard as changing a business unit's generic competitive strategy.

[15]See in particular Baumol et al., *Contestable Markets and the Theory of Industry Structure*. (New York: Harcourt & Brace Jovanovich, 1982).

[16]See M. E. Porter, *Competitive Advantage* for a complete list of cost drivers.

Multimarket Competition

A unique element of corporate strategy and a unique source of scope economies is the ability to participate in multimarket competition. Once corporations meet each other in more than one market, the range of competitive moves and responses is substantially expanded. A corporation is no longer limited to responding to a competitive price cut in the same market, but can respond wherever the two corporations compete.

The ensuing wide range of possible competitive interactions have given rise to a number of theories about their effect, and a number of prescriptions for how to play the game. One theory is that multimarket contact facilitates collusion because attacking a competitor in one market risks suffering retaliation in all markets. One prescription is to "cherry pick" a competitor by attacking those markets in which it earns most of its profits because retaliation will be inhibited by the disproportionately negative impact on its performance. A second prescription is to match a competitor's presence in every market in which it is active to prevent it gaining an advantage that can be turned against the company in the markets in which they do compete. To evaluate these and other options, we need to consider the range of possible multimarket competitive responses, and recognize the fundamental difference between multimarket competition across related and unrelated markets.

Consider first the range of possible multimarket competitive responses to a competitor's move in one of the markets where the two corporations meet. The response can be in:

- the same market
- his strong market
- your strong market
- a third market
- everywhere

Competitive strategy at the business-unit level is limited to the first response. The argument for the second response is that of "cherry picking" or "spoiling" by attacking in a market where increased competition will hurt the competitor more than you. It also has the benefit of directly signaling concern about the competitor's move. The third response can be justified as being the easiest and most effective to implement. The fourth opens up a new competitive front, while the fifth is the most aggressive possible form of retaliation. Note that all, except the first, require cross-business unit coordination. If, for example, GM asks Chevrolet to respond to a price cut on the Lincoln Continental by cutting prices against the Ford Escort, the Cadillac division benefits at the expense of Chevrolet. Thus, multimarket competitive interaction requires a degree of corporate coordination across autonomous business units that is often not found.

The theoretical implications of multimarket competition depend on whether the markets in which corporations compete are related, i.e., exhibit scope economies, such as Boeing and Airbus competing in multiple geographic markets, or are unrelated, such as Philip Morris and RJR Nabisco, which compete in cigarettes and certain food products. This is a vital distinction because the prescriptions for each are very different.

If two corporations only compete in Market A, should one be concerned that the other has built a strong position in market B? Clearly, if the markets are related, the corporation needs to be concerned because the competitor can exploit scope economies with market B to improve its competitive position in market A. If the markets are unrelated, the competitor's position in market B is irrelevant. It simply has no impact on market A.

In the same situation, should the competitor use funds from profit generated in market B to build position in market A? Again, if the markets are related, the answer is yes. The scope economies with A will enhance competitive position in market B, and justify the cross subsidization from B to A.

This is the justification, for example, for companies pursuing global strategies to subsidize market entry (often into the United States) in order to improve their global position. If markets are unrelated, this cross-subsidization is completely inappropriate; the markets are separate. If investment in market A makes sense on its own terms, then investment in market A makes sense, but the funds could be raised in the capital market—there is no need to subsidize entry with profits from market B. Thus, firms in multidomestic industries, like chocolate, should never use money from European profits to subsidize entry into the United States. U.S. entry either makes sense in its own right, or not at all.

Should competitors match each other's entry into additional markets? Again, if there are scope economies among the markets, the answer is yes. Failure to match a competitor allows it to exploit scope economies with detrimental consequences in markets where the competitors do meet. If the markets are unrelated, there is no economic reason to match presences. However, there is a strong managerial pressure to adopt such imitative behavior or "mimetic diversification." If a competitor goes to market C and is successful but the corporation chooses not to, the corporation is in some sense a loser—it is now smaller and less profitable than the competitor (even though its position in market A is unaffected). If the corporation matches by going to market C and both fail, management can excuse its failure by pointing to the similar mistake made by the competitor. This unbalanced incentive structure for managers has led many to naively mimic competitor moves. In the 1960s, for example, many U.S. corporations followed each other to Europe without considering the economic benefit of entry. The recent globalization of competition in home appliances appears to be a result of such mimetic moves because there is no compelling logic for global strategies in home appliances. Professor Pearson also maintains that when he ran PepsiCo he was under enormous pressure after Coca-Cola bought Columbia Pictures to buy a movie studio (wisely, he resisted the temptation).

Finally, should corporations at least maintain "footholds" (small market shares) in competitors' "safe havens" (markets which are the source of most of their corporate profits)? The answer this time is in both cases, yes. If markets are related, it is important to weaken a competitor wherever you can, If markets are unrelated, the argument is that footholds offer a credible threat of retaliation which fosters "mutual forbearance," or oligopolistic collusion. With footholds in each others "sphere of influence," each can threaten the other with powerful retaliation if anyone disrupts the equilibrium. This "mutual threat" of destruction is believed, as in the Cold War, to stabilize markets and reduce competition. It can also be used to account for the structure of industries, such as industrial gas and ball bearings, which are not inherently global, and in which Japanese firms have dominant shares in Japan, European firms in Europe, and U.S. firms in the United States, while all maintain small shares outside their domestic markets. This argument about the collusive benefits of such industry structures (which does not imply illegal behavior) also applies to related markets, and adds another reason to maintain at least a small share of your competitor's market when there are scope economies between markets.

The Contractual Alternative for Exploiting Resources

When considering extending the scope of the firm in order to build resources, the question must always be asked why those activities need to be carried out inside the corporation. Why not simply contract for the supply of a key component? The same issue came up in the consideration of leveraging resources. Why extend the scope of the firm in order to exploit existing resources? Why not, for example, just license a brand name (if that is the valuable resource) to someone else to use in that market? The contractual alternative to exploiting resources by extending the scope of the firm must, therefore, always be evaluated.

Our understanding of this issue is enlightened by transaction cost theory, which seeks to explain when it is better to integrate an activity inside the corporation, and when it is better to rely on the market. It achieves this by evaluating the pros and cons of the two institutional arrangements, the

corporate hierarchy and the market contract.[17] Most of transaction cost theory's emphasis, however, has been placed on explaining the failure of the market, so this note will first briefly summarize the faults and merits of integrating activity within the corporation.

The major fault of the corporate hierarchy, aside from its bureaucratic layering which can hinder effective decision making, is the "low-powered" incentives offered managers in business units. This reflects the agency problems that arise when a division manager's interests are not identically aligned with those of the owner of the corporation.[18] In that instance, managers will take some actions that are detrimental to the interests of the corporation. The Automotive Components Group at General Motor, for example, wanted to sell proprietary components outside GM to boost its own profits. Less prominent, but equally damaging, would be managerial decisions to avoid high-risk but nevertheless, high expected value projects because of managers' concerns that they would be fired if the project failed. Managers will also not have appropriate incentives to maximize their effort because they are not the owners of their own business. While choosing appropriate incentive and measurement schemes can minimize these principal/agent losses, they can never be entirely removed. Market contracts between discrete entities potentially improve the incentive structure by replacing the internal incentives with the pressures of market competition.

The major benefit of the hierarchy, in contrast, is its ability to achieve coordination between business units by exerting authority and without having to negotiate an agreement that is in all their interests, but which may be suboptimal. Authority also allows for internal auditing of business units, and guarantees access to information that could be withheld by a private company. It therefore potentially allows for better decision making.

The great benefit of market contracts are their incentive properties which reflect the pressures of the "invisible hand." Their drawbacks, as Williamson has outlined at great length, are that they can be costly to write and administer, and in certain instances, are likely to fail or are impossible to write. Contracts involve upfront costs as both parties need to negotiate a draft that covers all possible future eventualities, and incur ex post costs to monitor, enforce, and renegotiate the contract. Moreover, in the presence of great uncertainty, it is infeasible to even conceive of a contract that covers all future alternative outcomes.

In addition, contracts are vulnerable to ex post opportunism. This refers to the ability of one party to hold up the other once the contract has been written and investments made. One example was GM and Fisher Body in the 1930s when both were public companies. Once Fisher Body had invested millions of dollars in the dies specific to the supply of a particular car body to GM, GM could threaten to pay Fisher Body only the marginal cost of those bodies because Fisher had already sunk the money in the dies. (Conversely, Fisher could hold up GM because of the difficulty GM would have replacing Fisher with another supplier). The solution to this threat of "hold up" was for GM to acquire Fisher, thereby internalizing the transaction.

Williamson identified the conditions when contracts were likely to fail as high uncertainty (so contracts were impossible to write); high asset specificity (when assets, like the car body dies, are specific or dedicated to one contract partner, which leads to opportunism), and limited frequency (so that parties could not build a reputation for trust and fairness in contracting). In these instances, incorporation into the hierarchy is the efficient solution.

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[17]See, in particular, O.E. Williamson, *Markets and Hierarchies* (New York: Free Press, 1975) and *The Economic Institutions of Capitalism* (New York: Free Press, 1985).

[18]This is in addition to the agency problem that occurs when corporate executives are not shareholders. See M.E. Jensen and Meckling, W.H., "The Theory of the Firm," *Journal of Financial Economics*, vol. 3, no. 4, 1976, pp. 305-360. The treatment here covers issues discussed more fully in the course, "Control, Coordination, and Management of Organizations."

It is the trade-off between the costs and benefits of corporate hierarchy and market contracts which determines when it is appropriate for the corporation to exploit its resources inside the corporate hierarchy. However, this transaction cost explanation downplays the dynamic rationale for firms to be integrated. It appears, for example, that to achieve a coherent product design that effectively incorporates the ongoing learning about a critical component, requires integration, regardless of whether or not market contracts for the supply of the component can be written.[19] The more general lesson seems to be that effectively building or leveraging resources that involve dynamic learning requires 100% ownership. Thus, while market contracts might adequately leverage a brand name or the transfer of a mature technology, attempting to license emerging technologies; outsource a component whose design is continually changing; or rely on a distributor to provide information about a rapidly changing foreign market will, it seems, ultimately lead to the "hollowing out" of the corporation and the loss of distinctive competence. In those situations, the corporate strategy must recognize that it can only effectively exploit its resources by extending the scope of the firm.

[19]This can be attributed to high transaction costs in the market for information.