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## DO ACQUIRER CAPABILITIES AFFECT ACQUISITION PERFORMANCE? EXAMINING STRATEGIC AND EFFECTIVENESS CAPABILITIES IN ACQUIRERS

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ABSTRACT

*This paper examines acquisition performance from the perspective of acquirer capabilities. It argues that the strategic capabilities underpinning a firm's competitive strategy can be utilized to create economic value in acquisitions. Acquirers with strong cost leadership capabilities are expected to leverage these capabilities to reduce post-acquisition costs as they integrate acquisition targets. Acquirers with strong differentiation capabilities are expected to utilize their strategic capabilities to increase post-acquisition revenues by improving branding, product design, sales, and services in their targets. We also explore the affect of an acquirer's effectiveness capabilities on acquisition performance. Lastly, we examine how acquirers organize these capabilities, either at the business unit or corporate-level, in order to maximize their affect on acquisition performance. Based on a sample of 204 horizontal acquisitions occurring in the banking industry, we find support for the link between acquirer cost leadership capabilities and post-acquisition cost reduction. Acquirer effectiveness capabilities are associated with improvements in post-acquisition revenues and profitability. We conclude that a better understanding of the competitive capabilities of acquirers is important to understanding acquisition performance. This contributes directly to horizontal acquisition research, but can be extended to several areas of strategy research on M&As including: diversifying acquisitions, acquirer experience, and how acquirers can avoid "synergy traps".*

Keywords: Acquisitions, acquirer capabilities, strategic capabilities, effectiveness capabilities, acquisition performance

Are all acquirers equally capable at making acquisitions? If not, what characteristics of acquirers contribute to creating value after an acquisition is completed? What acquirer characteristics interfere with value creation, or lead to value destruction, in acquisitions? This study seeks to address these questions by examining how acquirer capabilities affect post-acquisition performance. Based on theoretical and case evidence, we develop the concept of strategic capabilities and argue that these capabilities play an important role in acquisition activity. By linking competitive strategies and capabilities with the phenomenon of acquisitions, this research makes important contributions to our understanding of competitive strategy theory, resource-based theory, and M&A. Our empirical model provides evidence of the significant relationship between acquirer strategic capabilities and post-acquisition performance.

This research is motivated by existing research on M&A, but its design departs from previous research on M&A by focusing attention on the role of the acquirer and its capabilities in creating performance improvements in acquisitions. Much of the existing research on M&A focuses on the *diversification* strategy of acquirers and how it affects acquisition performance. This includes studies that examine different types of diversifying acquisitions and their affect on acquisition performance (Lubatkin 1983; Chatterjee 1986; Lubatkin 1987; Singh and Montgomery 1987; Shelton 1988; Seth 1990; Seth 1990; Brush 1996). There has been some work on acquirer and target resource allocations and their affect on acquisition performance (Harrison, Hitt et al. 1991), and resource redeployment and asset divestiture within an acquisition and how it affects acquisition performance (Capron, Dussauge et al. 1998; Capron 1999). In general, research on mergers and acquisitions (M&A) has been criticized for its largely inconclusive findings and its failure to identify antecedents that predict acquisition success (King *et al* 2004).

Why depart from previous research to emphasize the role of acquirer capabilities in contributing to improved acquisition performance? First, while much of existing research on M&A has focused on diversification strategy, it hasn't directly examined the role of the acquirer and its capabilities in affecting acquisition performance. This is a surprising gap since research on diversification has been emphasizing the role of "core competencies" in corporate strategies for some time. Diversification theory suggests that

a primary motivation for diversifying acquisitions is an acquirer's ability to utilize fungible capabilities associated with its pre-acquisition businesses to create performance improvements in the combining firms.

Second, our research design, focusing on acquirers and their capabilities, addresses a second criticism of M&A research - that it fails to consider an acquirer's strategic intent and has not accounted for significant variations in the strategies and integration processes of differing acquirers (Bower 2001). As a result, acquirers have been described as falling into "synergy traps" or falling prey to management hubris since most studies show M&As fail to achieve economic gains, yet we lack an understanding of what factors make particular acquirers more capable than others.

Third, examining acquisition performance from the perspective of an acquirer's strategic capabilities provides insights into several important topics in strategic management including competitive strategy, resource-based theory, corporate strategy, M&A, and strategic trade-offs. A great deal of theoretical and empirical research exists on topics of competitive strategy and the resource-based view, but there has been little work within strategic management research that integrates these theories and proposes a link between an acquirer's pre-acquisition *competitive* strategy, its capabilities, and its ability to create economic value in acquisitions. Although the original motivation for this research project is to better understand antecedents that explain variations in M&A performance, its focus on acquirer capabilities allows this research to make significant contributions to a broad set of fundamental issues in strategic management.

It develops the concepts of strategic and effectiveness capabilities and provides evidence of their affect on specific types of post-acquisition performance improvements. Specifically, acquirer cost leadership capabilities are associated with post-acquisition cost reductions and strategic trade-offs harming the combined firm's ability to differentiate. Acquirer's differentiation capabilities also affect post-acquisition performance and result in strategic trade-offs harming the combined firm's cost position. These findings improve our understanding of how resources and capabilities affect the significant strategic actions of firms – in this case an acquirer's ability to integrate and create economic value from its acquisitions. The findings also improve our understanding of how a firm's

competitive strategy affects its capabilities and how these capabilities interact providing evidence of trade-offs between cost leadership and differentiation.

In order to explore the question of how an acquirer's capabilities affect its acquisition outcomes, we identify three sets of capabilities: those associated with differentiation strategies or *differentiation capabilities*, those associated with cost leadership strategies or *cost leadership capabilities*, and those associated with operational effectiveness or *effectiveness capabilities*. These different types of acquirer capabilities are defined in greater detail in the following section. We also examine how an acquirer organizes these capabilities, at either the business-level or corporate-level, and how these organizational decisions result in differing implications for acquisition integration and performance.

This paper seeks to make four important contributions to strategic management research. First, it develops the concepts of strategic and effectiveness capabilities and grounds these concepts in case-based evidence, suggesting a way to integrate competitive strategy theory and resource-based theory. Second, it links acquirer capabilities with acquisition activity, showing the importance of strategic and effectiveness capabilities for both business-level competition and corporate-level strategic actions such as M&As. Our empirical evidence provides support for cost leadership and differentiation capabilities, their association with specific types of post-acquisition performance improvements, and trade-offs between these capabilities that interfere with the realization of synergies. This provides insights into resource-based theory and competitive strategy theory as it shows evidence of specialized strategic capabilities that directly impact a firm's cost or differentiated position. The evidence of trade-offs between cost leadership and differentiation capabilities provides additional insight into a fundamental issue of strategy emphasized by competitive strategy theory. Third, it examines how acquirers organize capabilities at both the business-level and corporate-level in order to improve their acquisition outcomes and avoid strategic tradeoffs. This is an important contribution to our understanding of how corporate strategy and business strategy interact to improve firm performance. The relationship between corporate strategy and business strategy and their respective effects on performance is a long standing topic of debate within strategic management research (recently highlighted by McGahan and Porter 2005; Ruefli and

Wiggins 2005). This research study shows that acquirers utilize corporate strategic and effectiveness capabilities to alter the business-level strategies of acquired firms in order to affect performance at the business-unit level. It also shows that business-unit capabilities and strategy contribute to the effectiveness of corporate-level capabilities and partially determine whether corporate capabilities enhance or conflict with those at the business-level. Last, it provides empirical evidence from a large sample of acquisitions to support the importance of acquirer capabilities in creating post-acquisition synergies, adding to our understanding of what types of acquirers are likely to be successful in realizing economic value in their acquisitions.

### Theory

The theory developed below seeks to integrate existing strategy theory, relate it to M&A activity, and ground it concretely in evidence from existing case studies and strategy process research. It makes two main assertions. First, firms develop specialized capabilities as the result of executing their business-level strategies. These capabilities can also be utilized to create specific sources of economic value in a firm's acquisition activity. For the purpose of this study, these capabilities are defined as strategic and effectiveness capabilities. Second, acquirers organize strategic and effectiveness capabilities at the business unit level and/or corporate level to improve their ability to extract economic value from acquisitions.

Competitive strategy theory has been primarily viewed as directing its assertions at a firm's competitive position within its external market. But, competitive strategy theory and research also argues that specific firm capabilities are associated with particular competitive strategies, most commonly with either cost leadership or differentiation strategies. For example, strategy researchers associate cost leadership strategies with capabilities such as procuring low cost inputs, highly efficient labor, scale manufacturing, and management capabilities that result in low overhead expense. Differentiation is associated with capabilities that include the manufacture and development of unique, high quality products, customer service, marketing and branding, research and development (Porter 1980; Hambick 1983; Dess and Davis 1984; Segev 1989; Kumar and Subramanian 1997, Miller and Friesen 1993; Barney 2002; Grant 2002). Competitive strategy theory asserts that firms specialize in one type of strategic

capability – either cost leadership or differentiation – in order to avoid tradeoffs between these capabilities that affect performance negatively.

Porter's theoretical perspective on competitive strategy has evolved to also include operational effectiveness as an important element of firm competitiveness (Porter 1996). Operational effectiveness is driven by capabilities which are not necessarily associated with a particular competitive strategy. Effectiveness capabilities include activities such as process reengineering, total quality management, benchmarking, among others which aim to improve firm performance by either improving a firm's level of differentiation, its level of cost leadership, or both simultaneously. For example, a firm seeking to improve its operational effectiveness may use total quality management practices to improve the quality and reliability of its products while simultaneously reducing its unit costs due to lower scrap or warranty costs. One firm may use benchmarking to compare their customer service functions with a competitor in order to improve its differentiation strategy, while another firm uses benchmarking to implement lean manufacturing practice to improve their cost position. On average, effectiveness capabilities are expected to be independent of these specific strategies.

In the spirit of X-Inefficiency (Leibenstein, 1978) and Porter (1996), these firms with low effectiveness are operating off the productivity frontier compared with other firms competing with similar competitive strategies. Thus, we equate effectiveness capabilities with the concepts of dynamic capabilities, which are primarily associated with economizing rather than strategizing to achieve a particular strategic position. As is argued of dynamic capabilities, effectiveness capabilities allow firms to effectively redeploy internal and external competencies in response to changing competitive conditions (Teece, Pisano, and Schuen 1997).

Although initially developed as a result of day-to-day competition with industry competitors, strategic and effectiveness capabilities can be leveraged to support corporate strategies such as diversification and M&A. Acquirers excelling at differentiation strategies, those with strong differentiation capabilities, are likely to utilize their strategic capabilities to improve the differentiation strategy of acquisition targets (or the combined firms) and as a result improve post-acquisition performance by increasing revenues and net income. Differentiation capabilities include activities such as product design and

innovation, research and development, marketing, and customer service, etc. - those focused on achieving high margins through premium pricing.

Similarly, acquirers with cost leadership capabilities are expected to use their strategic capabilities to improve the cost position of their acquisition targets, reducing post-acquisition costs and improving return on assets. Cost leadership capabilities include activities resulting in economies of scale in production and distribution, management systems that result in low overhead, and activities that use technology to automate manual activities, etc – those focused on achieving high margins through low costs. Lastly, acquirers with effectiveness capabilities are expected to improve the level of operational effectiveness in their acquisition targets, resulting in improvements in ROA.

Case studies of bank acquisitions show detailed evidence of acquirer strategic and effectiveness capabilities and their effect on acquisition performance. The case of Banc One's acquisition history provides an example of strategic and effectiveness capabilities in action. Banc One describes its strategy for acquiring and managing affiliate community banks as its "uncommon partnership"(Uyterhoeven 1993). In practice, Banc One's uncommon partnership is a balance between centralizing and standardizing certain functions, while maintaining local autonomy at its affiliate.

Banc One utilizes cost leadership capabilities to centralize its operations, gaining economies of scale in its backroom functions and information systems. Marketing capabilities allowed Banc One to create economies by standardizing its product offerings. Centralized procurement capabilities resulted in low costs in sourcing computer hardware, software, office furniture, equipment, courier services, and office supplies.

Banc One also takes advantage of scale to develop differentiation capabilities within a centralized group by offering specialized products not traditionally offered by smaller community banks. Banc One's diversified services group (DSC) requires significant scale to justify its investment in personnel with skills in brokerage and investments, specialized trust services, cash management products, and specialized corporate lending. Scale also supports investments in the computer systems, compliance functions, and dedicated sales and marketing functions required to offer premium fee-based products and services (Uyterhoeven 1993).

As an acquirer, Banc One also provide an example of effectiveness capabilities in its development and use of its management information and control system (MCIS) and performance management processes. MCIS creates consistent financial scorecards across each of Banc One's affiliate banks, driving affiliates to achieve high performance by using both cost leadership and differentiation capabilities within their local markets. Described as its "share and compare" program Banc One's performance management processes expose performance differences between affiliates and foster cooperation between affiliate banks to share knowledge and capabilities at the business-level.

Strategic and effectiveness capabilities may be organized and utilized at either the corporate or business-unit level. The examples of Banc One's cost leadership capabilities exhibited in their large scale centralized operations and IT, differentiation capabilities incorporated in its DSC, and effectiveness capabilities based on its MCIS and performance management processes are all capabilities organized at the corporate-level. Other strategic or effectiveness capabilities exist at the business unit level and interact with corporate-level capabilities.

In general, banks and bank holding companies organize business-level capabilities to match their competitive strategies to the particular markets served by their local or community banks. Corporate-level resources and capabilities complement these positions, allowing corporate functions to leverage scale and scope to achieve economies in operations, technology, administrative, and financial functions and/or to leverage scale and scope to invest in and develop specialized products and services. Both corporate and business-level capabilities are expected to be utilized by acquirers to generate performance improvements in the post-acquisition period. The specific approach used by any one acquirer to utilize its corporate and business-level capabilities is conditioned on both its parenting advantage (and its corporate-level capabilities) and its competitive advantage (and its business-level capabilities).

Banc One makes use of business-level strategic capabilities in its acquisition strategy of "uncommon partnerships". In order to maintain some level of local autonomy at an acquired bank, Banc One retains the existing management team and allows local management control over the range of products and pricing offered within their geographic market. Newly acquired affiliates are linked with experienced Banc One

affiliates with similar markets and size to improve the acquired bank's ability to: 1) strike the right balance between achieving efficiencies gained through standardization and centralization and maintaining local responsiveness, and 2) avoiding negative trade-offs from making use of cost leadership and differentiation capabilities simultaneously.

This ability to reconfigure a new affiliate's operations, products, and other strategic activities to best fit its local market conditions reflects Banc One's use of effectiveness capabilities. Rather than using its comparative strengths in strategic capabilities to reposition a newly acquired bank to a preconceived strategic orientation, Banc One and its "uncommon partnership" post-acquisition integration process allows acquired banks the flexibility to make strategic positioning secondary to effective execution.

As the example of Banc One shows an acquirer's strategic and effectiveness capabilities influence its acquisition integration activities, whether these activities are predominately focused on cost reductions (via cost leadership capabilities), revenue improvements (via differentiation capabilities), or a combination of both. Banc One's experience shows its use of both strategic and effectiveness capabilities, which resulted in improving the pre-acquisition profitability of its targets from 0.6% return on assets to a 2.0% ROA.

Other active bank acquirers utilize corporate and business-level functions in similar ways (see Calomiris and Karceski 1998 for a series of case studies on value creation in bank acquisitions). Many have corporate-level functions that support acquisition integration activities such as converting information systems, converting target products to the acquirer's standard products, training acquired staff on new systems and procedures, reviewing the compensation and benefits policies of the acquired bank to convert payroll functions and standardize pay and benefits. These teams also work to eliminate redundancies between the acquirer and target, centralizing operations, treasury functions, programming, and other non-customer oriented functions.

Studies of other bank acquirers and acquisitions provide additional evidence of how cost leadership and differentiation capabilities are used in acquisitions. Harris Bancorp's 1994 acquisition of Suburban Bancorp emphasized primarily differentiation capabilities and the realization of post-acquisition revenue synergies (Calomiris and

Karceski 1998). Harris Bancorp utilized its comparative advantage in marketing and loan origination to achieve additional revenue growth from Suburban's local customer base. Harris also increased post-acquisition fee income through its expertise in trust and investment services, mortgage origination, and home equity lending. Harris used its differentiation capabilities in cross selling and up selling in product and services where Suburban lacked expertise and infrastructure. In the case of this acquisition, Harris made a conscious choice not to pursue post-acquisition cost reductions. It chose not to consolidate operations, to retain Suburban's management team, and to allow Suburban's management local autonomy.

In contrast to Harris, Firststar's acquisition of First Colonial Bank provides an example of an acquirer using its cost leadership capabilities to primarily gain post-acquisition cost reductions (Calomiris and Karceski 1998). Firststar's aggressive push to centralize operations and cut costs resulted in a loss of autonomy at First Colonial. As a result, a large percentage of First Colonial's loan officers defected to other banks, taking customer relationships with them. Firststar realized significant reductions in costs, but was "blindsided by employee morale problems that hampered its revenue growth (Calomiris and Karceski 1998 p.92)".

In this section, we extended competitive strategy theory and resource-based theory to develop the concepts of strategic and effectiveness capabilities and argued that these capabilities can be utilized by acquirers to realize performance improvements in their acquisitions. For the purpose of this analysis, we defined strategic capabilities based on Porter's typology of cost leadership and differentiation and argued that cost leadership capabilities include activities such as high volume production of a relatively standard product, automated customer service, management routines that result in low overhead, among others while differentiation capabilities include the development and production of specialized products, excellent customer service, marketing and branding, convenient service locations, among others.

Effectiveness capabilities are defined as capabilities which are neutral to a particular competitive strategy, such as process reengineering, benchmarking, TQM. Primarily focused on economizing and allowing firms to recognize emerging opportunities and redeploy their resources and routines to effectively exploit them,

effectiveness capabilities can be utilized to improve firm performance by increasing its level of differentiation, or cost leadership, or both simultaneously.

We illustrate the existence of cost leadership, differentiation, and effectiveness capabilities and their use in acquisitions by examining case studies of bank acquisitions. The cases of Banc One, Harris Bancorp, and Firststar show their development and utilization of strategic and effectiveness capabilities in their acquisitions. The case evidence also provides evidence regarding how acquirers organize strategic and effectiveness capabilities at either the business unit or corporate-level and how corporate and business-level capabilities interact to improve post-acquisition performance.

Based on the theory and case evidence discussed in this section, the next section develops specific testable hypotheses. As we develop specific testable hypotheses, we apply the previously discussed theory of strategic and effectiveness capabilities to theory relating to mergers and acquisitions. As a result, these hypotheses are designed to examine how acquirers utilize their strategic and effectiveness capabilities to create performance improvements in acquisitions.

#### Hypotheses Development

With regard to merger and acquisitions, strategic management theory argues that acquisitions result from market failures in the exchange of specific resources. Individual firms face constraints in their abilities to adapt and improve their competitive positions due to the rigidity of existing routines and bounded rationality (Nelson and Winter 1982). Lacking the ability to develop new resources internally or to deploy existing resources toward existing growth opportunities, businesses turn to M&A to obtain new resources or employ existing resources toward new product and/or geographic markets (Capron, 1998; Harrison, 1991). Acquirers are expected to make acquisitions where their existing resources complement those of the target, allowing the acquirer to make use of acquired resources or employ its competitive strengths toward new opportunities (Penrose 1959; Harrison, Hitt, et al. 1991). Consistent with this reasoning, research on M&A process typically emphasizes the role of the acquirer and the acquirer's selection process as an important component in successful acquisition outcomes (Haspeslaugh, 1991; Hitt, 2001).

Acquirers with cost leadership capabilities are expected to select targets that complement a low cost strategy. A target can contribute to the acquirer's ability to create value through cost leadership in one of two ways. First, it can allow the acquirer to employ its existing resource advantage toward new markets (Harrison, Hitt, et al. 1991) and/or inefficiencies inherent in the target. Second, it may obtain underutilized resources in the target that can enhance its existing cost leadership position. This can occur through resource redeployment and asset divestiture (Capron, Dussauge et al. 1998; Capron 1999; Capron, Mitchell et al. 2001). The market for corporate control also makes this argument, suggesting that acquirers with strong competitive positions acquire targets with underutilized or mismanaged assets (Jensen and Ruback 1983).

From the perspective of competitive strategy theory, acquirers utilizing cost leadership capabilities are likely to identify opportunities for cost reductions in their acquisitions. They are expected to focus on eliminating redundancies and waste, centralizing operations, downsizing staff functions and cutting overhead, and standardizing products to allow for efficient, large scale production. Cost leader acquirers are likely to eliminate poor performing products, operations, and sales or service locations. Examples of acquirers utilizing cost leadership capabilities include Cooper Industries (Collis and Stuart 1995), Firststar Bank (Calomiris and Karceski 1998), Banc One (Uyterhoeven 1993), and Wells Fargo (Schmitt 1986).

Strategy theory argues that a firm's management capabilities create and shape its opportunities for expansion (Penrose 1959). Thus, the acquirer's managerial resources, administrative systems, low cost operations, sales, marketing, and distribution processes reflected in its cost leadership competitive strategy are expected to contribute to acquisition success. Thus, the capabilities of an acquirer are expected to determine the amount and type of post-acquisition synergies. These arguments result in the following hypothesis:

*H1a-b) Cost leadership capabilities in acquirers are expected to be positively associated with post-acquisition cost reductions (H1a) and improvements in ROA (H1b).*

In contrast to cost leaders' emphasis on cost management capabilities, differentiation capabilities include highly trained sales and customer service staff,

systems that support fast response to customer needs, product development processes aimed at unique designs and features, fast delivery and order processing, operations that produce defect free products that match a range of customer preferences, and brand management (Porter 1980; 1985; Hambrick 1983; Dess and Davis 1984; Barney 2001; Grant 2002). Along with these capabilities, differentiation capabilities are reinforced by a culture that emphasizes and rewards excellence in customer service, product design and delivery, and marketing.

Acquirers with differentiation capabilities are expected to select targets that complement a differentiation strategy. Similar to the case of cost leader acquisitions, the target can contribute to the acquirer's ability to create value through differentiation by 1) allowing the acquirer to employ its existing resource advantage toward new markets and/or products (Harrison, Hitt, et al. 1991) and 2) obtaining underutilized resources in the target that can enhance its existing differentiation position. This may occur through resource redeployment (Capron, Dussauge et al. 1998; Capron 1999; Capron, Mitchell et al. 2001).

Acquirers utilizing differentiation capabilities are likely to identify opportunities for synergistic revenue growth in their acquisitions. They are expected to focus on making use of superior sales, marketing, and distribution capabilities. Acquirers with high levels of differentiation may also improve product quality and features and increase product innovation in their acquisitions (Harrison, Hitt, et al. 1991). Lastly, brand reputation may be transferred between firms increasing the sales of the combined firms. Examples of acquirers utilizing differentiation capabilities include Harris Bancorp (Calomiris and Karceski 1998), Banc One (Uyterhoeven 1993), and Cisco Systems Inc. (Wheelwright 1999).

As in the case of acquisitions made by cost leader acquirers, the acquirer's managerial resources, administrative systems, operating, sales, marketing, and distribution processes reflected in its differentiation strategy are expected to contribute to acquisition success. Similarly, acquirer's selection decisions are influenced by their differentiation strategies. Differentiation acquirers are expected to target firms where their differentiation capabilities will improve the target's competitive strategy and

performance or where target resources will contribute to improving the combined firm's revenues. This results in the following hypothesis:

*H2a-b) Differentiation capabilities in acquirers with are expected to be positively associated with post-acquisition revenue growth (H2a) and improvements in ROA (H2b).*

Competitive strategy theory also argues tradeoffs occur when firms attempt to mix differentiation and cost leadership strategies, resulting in weak financial performance (Porter 1980; 1985; 1996). But this assertion has been a point of debate with strategic management research. Other perspectives on competitive strategy have argued that firms making investments in mass-produced differentiated brands, total quality management, and process reengineering can improve performance while combining cost leadership and differentiation strategies (Karnani 1984; Murray 1988, Miller and Dess 1993). Indeed, the difference of opinion may depend on whether capabilities associated with different strategies have cumulative benefits or whether these capabilities substitute or interfere with each other.

As the previously discussed example of Banc One shows, acquirers may approach acquisitions with strong cost leadership and differentiation capabilities (Uyterhoven 1993). Can acquirers simultaneously utilize cost leadership capabilities to cut costs and increase revenues during acquisition integration, improving the post-acquisition price-cost margins of the combined firm? Or will this add to the complexity of acquisition integration, resulting in increased costs and coordination efforts to reconcile post-acquisition integration activities that pull in different directions? Ultimately this is an issue resolved by empirical examination. We propose the first of two opposing hypotheses:

*H3a) Acquirers with both cost leadership and differentiation capabilities are expected to realize increases in post-acquisition revenues, decreases in costs, and improvements in post-acquisition ROA.*

Executing strategy within the context of post-acquisition integration is likely to create unique challenges for an acquirer with both cost leadership and differentiation capabilities. The capabilities associated with an acquirer's competitive strategy are the result of routines and investments developed over extended periods of time. This is especially true in instances where an acquirer has developed a mix of both cost leadership

and differentiation capabilities. With the benefit of developing strategic capabilities over time, firms may be able to successfully blend differentiation and cost leadership capabilities while avoiding harmful tradeoffs. But within the context of acquisition integration and the time pressures associated with creating value in acquisitions (Sirover 1997), acquirers with both cost leadership and differentiation capabilities may complicate the integration process with negative consequences.

Haspeslaugh and Jemison (1991) describe the transfer of capabilities between acquirer and target as a process requiring time and an appropriate “atmosphere” that allows for learning both the routines of the acquirer and their organizational and competitive context. This allows an acquirer and target to evaluate whether transferring specific skills and routines improves the efficiency or effectiveness of an existing organization function or capability. They argue that “the organization receiving the capability needs to be able to understand how and why the capability worked in its original context (Haspeslaugh and Jemison 1991, p.111)”, whether it will work within the new organizational context in its post-acquisition state, and how to transfer and replicate or adapt the capability within this new organizational context.

This is expected to be extremely difficult within the context of acquisition integration. Along with changes to operational and managerial processes which have minimal strategic impact but are required to link acquirer and target, cultural frictions, new reporting relationships, and challenges in coordinating and communicating the change process, all work to complicate the transfer of resources and capabilities during acquisition integration. Transferring conflicting strategic capabilities and determining whether the interactions between cost leadership and differentiation capabilities result in negative tradeoffs or positive operational improvements is likely to present a significant challenge. Under pressure to produce positive post – acquisition results, managers may be inclined to push for the transfer of strategic capabilities without fully understanding their effect on performance. As a result, we predict negative impact on acquisition performance when acquirers have both cost leadership and differentiation capabilities as opposed to strengths in either cost leadership or differentiation exclusively.

*H3b) Acquirers with both cost leadership and differentiation capabilities are expected to realize decreases in post-acquisition revenues, increases in costs, and decreases in post-acquisition ROA.*

An acquirer's effectiveness capabilities are also expected to contribute to the realization of synergies in acquisitions. Effectiveness capabilities are those associated with operational effectiveness, which measures a firm's ability to effectively execute its strategy regardless of whether its strategy is oriented toward cost leadership or differentiation. Effectiveness capabilities are aimed at increasing a firm's technical efficiency given a particular competitive strategy position (Porter 1996). Thus, a firm's level of operational effectiveness is independent of its choice of competitive strategy. Operational effectiveness is argued to be associated with dynamic capabilities (Teece, Pisano, and Schuen 1997) or capabilities related to execution (Bossidy and Charan 2002) and economizing (Williamson 1991).

Effectiveness capabilities allow firms to adjust their competitive strategies to suit the needs of specific markets. Rather than making competitive positioning the primary focus, firms with high operational effectiveness emphasize the need to change and adapt to preferences of customers, based on effectiveness capabilities or dynamic capabilities. Thus, effectiveness capabilities allow firms to adjust to the changing competitive conditions within their industries, innovating to develop best practices and discarding inefficient practices in order to maintain high levels of performance and efficiency. From the perspective of dynamic capabilities, firms exhibiting effectiveness capabilities respond rapidly to market changes, innovating products and effectively coordinating and redeploying internal and external competences. Effectiveness capabilities which are focused on recognizing emerging opportunities and organizing to effectively and efficiently exploit them are argued to be more important than "strategizing" as it relates to achieving a particular competitive position, such as low cost or differentiation (Teece, Pisano and Schuen 1997; Williamson 1991).

Similar to strategic capabilities, we hypothesize that effectiveness capabilities can be utilized and transferred to create economic value in acquisitions. Acquirers with effectiveness capabilities are expected to utilize these capabilities in acquisition integration. Acquirers with high levels of effectiveness are expected to improve post-acquisition performance by fine-tuning the target's competitive strategy to best fit its specific market. Rather than managing acquisition integration activities with the goal of

achieving a specific strategic position, acquirers with effectiveness capabilities are expected to maintain flexibility within integrating the combining firms in order to achieve the most effective strategic position. Hitt, Harrison and Ireland argue that maintaining flexibility in the post-acquisition integration process is essential to acquisition success (Hitt *et al* 2001). Since effectiveness capabilities are not expected to be associated with a specific competitive strategy, effectiveness capabilities in an acquirer are not expected to be associated specifically with post-acquisition cost reductions or revenue improvements, but enable either or both depending on the opportunities that surface as integration progresses. This results in the following hypothesis:

*H4) Effectiveness capabilities in acquirers are expected to be positively associated with post-acquisition performance improvements in ROA.*

In summary, the capabilities developed by acquirers as a result of achieving a competitive strategy position and operational effectiveness provide the means for realizing potential synergies. Acquirers utilizing cost leadership capabilities are likely to select targets which will benefit from the acquirer's comparative advantage in cost leadership capabilities, manage integration to exploit cost leadership capabilities, and realize post-acquisition synergies through cost reductions. Acquirers utilizing differentiation capabilities are expected to select targets which will gain from the acquirer's comparative advantage in differentiation capabilities, manage integration to exploit capabilities in product design, marketing, or service, and realize synergistic revenue growth. Acquirers with effectiveness capabilities are hypothesized to improve the acquirer's acquisition integration processes and improve overall acquisition performance.

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#### Previous Research

The case studies of Banc One, Harris Bancorp, and Firststar provide rich detail of how acquirers use strategic and effectiveness capabilities in their acquisitions. These capabilities, originally developed as a result of day-to-day competition against industry

rivals, can be utilized in the context of acquisition integration to improve the competitive strategy and operational effectiveness of the acquired firm or combining firms. But, these studies don't provide a large sample analysis of the effect of strategic and effectiveness capabilities on acquisition performance. Consequently, no existing study provides an empirical analysis of how acquirer capabilities affect acquisition outcomes.

Previous work has looked at acquisitions in three basic ways. The first looks at the effect of different types of acquisitions (whether the match of acquirer and target is related or unrelated/ conglomerate, vertical, or horizontal) on acquisition performance. These studies would benefit by also paying attention to the acquirer's capabilities and how the acquisition aligns to the acquirer's competitive strategy.

The second approach to acquisitions has focused on the role of acquirer experience in contributing to better post-acquisition performance (Hayward 2002; Fowler and Schmidt 1989; Kusewitt 1985). Studies examining the role of acquisition experience on acquisition performance have resulted in inconsistent findings. A recent meta-analysis showed acquisition experience to have no significant effect on post-acquisition performance (King et al 2004). Studies of acquirer experience would benefit by controlling for experience they have had with targets having similar competitive strategies.

The third approach identifies motivations for acquisition that are tied to the productivity, either high or low, of the target. The third approach has focused on the comparative strengths and weaknesses of targets. Lichtenberg and Siegel (1987) examines the pre-acquisition productivity level of targets and how target productivity affects acquisition performance. Within their sample of manufacturing plants, they find that plants with below industry average productivity were likely to experience a change in ownership. Ownership changes of manufacturing plants are associated with improvements in productivity in the period after the ownership change occurs. This study seems to indicate that plants lacking strategic and/or effectiveness capabilities benefit from a new source of these capabilities in the acquiring firm. In another twist on this approach, Ravenscraft and Scherer (1987) focus on the target's pre-acquisition profitability and its effect on acquisition performance. Within their study, the target firms had above industry average profitability prior to being acquired, but performance

declined after being acquired. In contrast to Lichtenberg and Siegel's findings, this study shows that targets that appear to have effectiveness capabilities, reflected by their above industry average profitability, do not benefit from acquisition and, in fact, experience declines in profitability in the post-acquisition period.

Neither Lichtenberg and Siegel (1987) nor Ravenscraft and Scherer (1987) test or control for differences in the strategic or effectiveness capabilities of acquirers in their studies or examine how the capabilities of the acquirers affected their ability to improve performance of the acquired firm or plant. Relative to this research project, Lichtenberg and Siegel show that a lack of effectiveness capabilities in a manufacturing plant prompts a change of ownership and is associated with improvements in productivity in the post-acquisition period, while Ravenscraft and Scherer show that the existence of strategic and/or effectiveness capabilities in targets, indicated by their above average profitability, are associated with reductions in post-acquisition performance. These studies would also benefit by controlling for the variation in acquirer capabilities in addition to focusing on productivity changes with ownership change.

As detailed by review of these three groups in the acquisition literature, this study shows how focusing on acquirer capabilities complements previous work on horizontal acquisitions and future research could extend to vertical, and diversifying acquisitions. In the next section, we develop the model and discuss the sample used to test the proposed relationships between acquirer capabilities and acquisition performance.

### Sample Description and Methodology

The following model is used to explore the relationships between acquirer characteristics and acquisition outcomes:

Acquisition synergies =  $f$ [Acquirer's cost leadership, differentiation, and effectiveness capabilities].

The competitive strategy of acquirers is measured relative to industry competitors along dimensions of cost leadership and differentiation. Operational effectiveness is a fourth measure of acquirer competitiveness used in the study. Post-acquisition performance

improvements are measured as changes in accounting performance between the pre-acquisition period and post-acquisition period. These measures are described in greater detail later in this section.

The sample is drawn from the population of U.S. commercial and savings banks operating between 1993 and 1998. Accounting data was acquired from the Federal Reserve and includes data provided by all U.S. banks via FDIC call reports. Call reports are required by regulation and used by federal and state bank examiners to assess the safety and soundness of U.S. financial institutions (Siems and Barr 1998). This database has the benefit of including information on the entire population of U.S. banks and containing high quality accounting information due to its scrutiny by bank examiners.

The sample contains observations on 8,881 banks and bank holding companies (BHC). Accounting information is aggregated to the parent entity (when a BHC existed) under the assumption that acquisition activity is associated with the highest level of a banking organization. The sample of acquirers and targets includes 230 matched pairs from bank acquisitions that occurred in 1994 and 1995. Information on mergers and acquisitions in the banking industry is drawn from the journal *Mergers & Acquisitions* and includes all acquisitions with information on both acquirers and targets in the sample of 8,881 banks. The sample of acquisitions was reduced by 26 observations, which were identified as outliers and eliminated from the sample (18 observations with excessive DFIT values) and eight observations that were missing performance information, resulting in a final sample of 204 bank acquisitions (Neter *et al* 1996).

Dependent Variables: Three measures of post-acquisition performance improvements are used in this study: change in ROA ( $\Delta$ ROA), change in cost ( $\Delta$ COSTS), and change in revenue ( $\Delta$ REV). These measures are consistent with measures of economic value used in M&A studies used in strategy (Seth 1990; Harrison, Hitt, et al 1991) and economic research (Ravenscraft and Scherer 1987). Each is calculated by netting the aggregate accounting performance of the individual firms during the year prior to acquisition from the accounting performance during the three years after the acquisition. The change in ROA is calculated as follows:

$$\Delta ROA = (\Sigma \text{Net Income}_C / \Sigma \text{Assets}_C)_{t,t+1,t+2} - (\text{Net Income}_A + \text{Net Income}_T)_{t-1} / (\text{Assets}_A + \text{Assets}_T)_{t-1},$$

where: Net Income<sub>A</sub>, Net Income<sub>T</sub>, Net Income<sub>C</sub> are the values of net income associated with acquirers, targets, and combined banks (post-acquisition) respectively.

The change in costs ( $\Delta \text{COSTS}$ ) and revenues ( $\Delta \text{REV}$ ) are calculated likewise using the pre-acquisition (t-1) and post-acquisition (year of acquisition plus two years following acquisition) cost levels and revenues levels. The equation would be identical to the calculation for  $\Delta \text{ROA}$  with either total costs or total revenue substituted for net income. Using a three-year period to evaluate post-acquisition synergies is similar to Ravenscraft and Scherer's study (1987).

Independent Variables: The independent variables used in the models include three instruments: two measuring dimensions of competitive strategy and one measuring operational effectiveness. These measures capture the acquirer's differentiation, cost leadership, effectiveness capabilities prior to making the acquisition along with a term to examine the interaction between cost leadership and differentiation capabilities. These measures and their proposed effects on acquisition synergies are summarized in Table 3.1.

We base our methodology for assessing cost leadership and differentiation on Miller and Dess (1993). This methodology measures cost leadership and differentiation along continuous axes in two dimensional space. Miller and Dess measure cost leadership based on a measure of 'relative direct cost' based on a PIMS definition of this term. Differentiation is measured based on a PIMS score for 'relative product quality' which results from a company's self reported assessment of a broad definition of product quality including factors such as product features, delivery, service, financing, and customer perceived sources of differentiation such as advertising and reputation. Miller and Dess' study shows a positive relationship between differentiation and various accounting ratios including investment expense/revenue, purchases/revenue, marketing expense/revenue, R&D/revenues. Low cost strategies are shown to be negatively related to these accounting ratios.

Following Miller and Dess' approach, a bank's cost leadership capabilities are measured using a composite measure that captures the degree its property and equipment expense, its personnel expense, its other operating expense, its cost of funds, and its product pricing are below average compared with similar industry rivals based on market type (metropolitan, non-metropolitan, and rural) . A bank's differentiation capabilities are measured using a composite measure of the degree its property and equipment expense, its personnel expense, its other operating expense, its product pricing, and product mix are above average compared with similar industry rivals (see Mudde (2004) for a more detailed development of these measures). Based on these measures, banks can pursue mixed strategies combining low cost and differentiation. For example, a bank could have low relative property and equipment expense and cost of funds compared to its competitors and high relative personnel expense, other operating expense, product pricing, and product range, resulting in a position mixing cost leadership and differentiation. Similar to Miller and Dess, banks that correspond with Porter's "stuck-in-the-middle" strategy exhibit a lack of both low cost and differentiation with operating ratios that are near industry average across all dimensions.

The independent variable used to measure the effectiveness capabilities of the banks within the sample is based on a data envelopment analysis (DEA) (Charnes, Cooper et al. 1978) for all of the banks in the full sample. The actual model used in this study is based on Siems and Barr (1998). It reflects a bank's technical efficiency in converting five critical inputs (salary expense, premises and other fixed expense, other non-interest expense, interest expense, and purchased funds) into three income-generating outputs (interest income, non-interest income, and earning assets). Sample statistics and correlations are shown in Table 3.2.

The methodology used to test the proposed hypotheses uses OLS regression models. Model 1 uses  $\Delta ROA$  as its dependent variable. It includes independent variables of acquirers' competitive strategy and operational effectiveness. Model 2 is similar to Model 1 but uses  $\Delta COSTS$  as the dependent variable. Model 3 uses  $\Delta REV$  as its dependent variable. Control variables included measures of asset size, whether a bank was organized as a bank holding company (BHC) or not, and indicator variables to identify whether the bank is located in an urban market (population greater than 1

million), a mid-size market (population between 1 million and 50,000), or a rural market (population below 50,000). In order to maintain consistency with Porter's full typology of competitive strategies, focused strategies are identified by an indicator variable for banks in the bottom 20% based on asset size. None of the acquirers in the sample were identified as having a focused strategy. As a result, a variable accounting for focus/broad strategies is not included in the descriptive statistics, correlation matrix, or the regression models. Only banks in the sample with broad strategies made acquisitions during the period used in the study.

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Insert Table 2 about here

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### Results

Before proceeding to examine the specific hypotheses, we first test whether acquiring banks have accounting performance that differs from that of non-acquiring banks. Comparing the mean change between pre- and post-acquisition ROA for each acquisition with the mean change in ROA from the same time periods for banks not involved in acquisitions shows no significant difference in accounting performance between acquisition banks and non-acquisition banks ( $F = 1.09$ ,  $p < 0.298$ ). This evidence shows that, in general, banks executing acquisitions achieve no measurable performance improvements or declines relative to competitors that were not active in the M&A market.

This does not mean that all bank acquisitions fail to produce improvement in ROA. It also doesn't mean that acquirer strategic and effectiveness capabilities have no affect on acquisition performance. Model 1 in Table 3.3 shows the relationship between acquirer cost leadership, differentiation, and effectiveness capabilities, and post acquisition performance. Two of the four hypothesized independent variables have significant effects on post-acquisition ROA. Model 2 using  $\Delta\text{COSTS}$  as the dependent variable and model 3 using  $\Delta\text{REV}$  as a dependent variable show that cost leadership, differentiation, mixed strategies ( $\text{DIFF} * \text{COSTLEAD}$ ), and operational effectiveness all have significant relationships with post-acquisition partial synergies of cost reductions

and/or revenue growth. Models 2 and 3 are used to provide greater detail regarding how acquirers create economic gains from acquisitions via post-acquisition cost reductions or revenue growth, respectively. The results of each of the models are reviewed below for each independent variable used in the model.

Hypothesis 1a-b predicts that an acquirer's cost leadership capabilities are expected to be associated with post-acquisition cost reductions (H1a) and improvements in ROA (H1b). The results of model 2 show the expected relationship between cost leadership capabilities and post-acquisition cost reductions. The negative and statistically significant coefficient on the COSTCAP variable shows support for H1a: cost leadership capabilities in acquirers are associated with post-acquisition cost reductions ( $p < 0.000$ ). This finding provides support for the hypothesized link between the capabilities that underlie business-level strategies and type of performance improvement achieved in acquisitions.

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Insert Table 3 about here

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The evidence from model 1 did not show the expected association between an acquirer's level of cost leadership and improvements in post-acquisition ROA (H1b). The reason for this is shown in model 3. Although not specifically hypothesized, model 3 shows a significant relationship between an acquirer's level of cost leadership and reduced post-acquisition revenues. This loss of revenue offsets the value of the reduction in post-acquisition costs and renders the overall effect of acquirer's level of cost leadership on post-acquisition ROA insignificant.

Hypothesis 2a-b predicts that an acquirer's differentiation capabilities are expected to be associated with post-acquisition revenue growth and improvements in ROA. The results of models 1 and 3 do not support this hypothesis. The results of model 3 show a significant and negative coefficient on the differentiation variable (DIFFCAP), opposite that predicted by hypothesis 2b. The coefficient on DIFFCAP in model 1 is not significant, showing no significant association between differentiation capabilities and post-acquisition ROA (H1b). Although not in the direction predicted by H2a, the significant negative association between differentiation capabilities and post-acquisition

revenues is an important finding and may indicate the possibility that differentiation strategies of acquires may conflict with sources of differentiation in targets, resulting in the alienation on loss of target customers. This will be discussed in more detail in the conclusion section.

Hypothesis 3b predicts that acquirers using strategies mixing cost leadership and differentiation capabilities realize decreases in post-acquisition ROA. This hypothesis specified a direct link between mixed strategy and increased post-acquisition costs. The negative and significant coefficient on the  $DIFFCAP * COSTCAP$  variable in model 1 shows that mixed strategies harm post-acquisition ROA. Examining models 2 and 3 helps to explain this result. Model 3 shows that acquirers that mix cost leadership and differentiation capabilities achieve significant post-acquisition revenue growth ( $p < 0.026$ ), but increases in post-acquisition costs more than offset the growth in revenue. Hypothesis 3b is supported both in its prediction that acquirers using both cost leadership and differentiation capabilities in acquisition integration are associated with increases post-acquisition cost ( $p < 0.001$ ) and declines in post-acquisition ROA ( $p < 0.040$ ). Thus, hypothesis 3b is supported, while H3a is rejected, which suggested mixing cost leadership and differentiation affects post-acquisition performance positively.

Hypothesis 4 predicts effectiveness capabilities in acquirers contribute to improvements in post-acquisition ROA. This hypothesis did not specify a direct link between effectiveness capabilities and cost reductions or revenue growth. The positive and significant coefficient on the variable  $EFFCAP$  in model 1 shows that an acquirer's effectiveness capabilities are associated with improvements in post-acquisition ROA ( $p < 0.054$ ). Again, models 2 and 3 provide detail about how effectiveness capabilities contribute to improvements in ROA. Model 3 shows that  $EFFCAP$  has a large positive effect on post-acquisition revenue growth ( $p < 0.004$ ), which results in the improvement to ROA.

Lastly, the control variable for acquirer size is found to be significant and positive in its effect on post-acquisition ROA. The coefficient on  $ASSETSIZE$  is positive in sign and highly significant. Examining models 2 and 3 shows that the positive effect of asset size on ROA is the result of post-acquisition cost reductions that exceed declines in revenue, suggesting economies of scale in large acquirers. The indicator variable

identifying whether the acquirer is a BHC is not significant in any of the models estimated. This is also the case for the controls identifying what type of market the acquirer is based in. No acquirers are based in rural markets. The correlation matrix shows that CITY and BHC are almost perfectly negatively correlated. To test the effect of CITY in the model, a separate set of models were estimated - replacing BHC with CITY. CITY was not significant in its association with any of the 3 dependent variables.

These effects are both significant statistically and economically. For the average sized acquiring bank within the sample, holding all other measures constant, a one standard deviation improvement in operational effectiveness is predicted to increase post-acquisition profits by \$1.0 million. Increases in asset size amplify the benefit associated with an acquirer's effectiveness capabilities. The effect of variations in acquirer effectiveness capabilities on post-acquisition net income is shown in Figure 1.

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Insert Figure 1 about here

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Acquirers with higher levels of mixed strategies are estimated to reduce post-acquisition profits by \$1.6 million (based on a one standard deviation increase in  $\text{DIFF} \times \text{COSTLEAD}$  and an average-sized acquirer, holding all other measures constant). The estimated economic value of the improvements in ROA associated with a one standard deviation increase in an acquirer's asset size is \$3.4 million of economic value. A two standard deviation increase in asset size results in gains of \$33.4 million dollars of economic value. The escalating value of the economic gain results from two conditions. Larger acquirers benefit from 1) better accounting performance (improved post-acquisition ROA) and 2) the larger size of their asset base, which makes an equivalent change in ROA even more valuable.

### Discussion and Conclusions

These findings tell an interesting story about how acquirer capabilities affect M&A. First, this study provides additional evidence about the challenges of achieving economic gains through acquisitions. In general, bank acquisitions had no significant

effect on financial performance, since there was no measurable difference between the mean ROA of banks involved in M&A activity and those that were not. But, significant variations exist in the range of post-acquisition performance of banks involved in acquisitions.

One of the goals of this research was to explore the question whether all acquirers are equally capable in making acquisitions and, more specifically whether an acquirer's strategic and effectiveness capabilities contribute to better post-acquisition performance. Based on case study data, we developed the concepts of cost leadership, differentiation, and effectiveness capabilities. The concepts of strategic and effectiveness capabilities were operationalized and applied to the full population of banks operating in the U.S. from 1993-1998. Our sample of acquirers included 204 banks making horizontal acquisitions. In general, our findings support the hypotheses that strategic and effectiveness capabilities affect economic value in horizontal acquisitions.

The evidence from our review of case and empirical analysis shows a significant relationship between an acquirer's cost leadership capabilities and its ability to reduce post-acquisition costs. Utilizing existing cost leadership capabilities, acquirers achieve post-acquisition cost reduction by consolidating information systems and operational functions, eliminating redundant or low volume/inefficient products or branches, standardizing products to gain efficiencies and scale, centralizing or automating service functions, etc. Consistent with the perspective of competitive strategy theory, it appears that acquirers are successful at utilizing their cost leadership capabilities to improve the combined firm's cost position by emphasizing standard products and services, large scale operations, and centralized control and management.

Although not hypothesized, the finding that acquirer cost leadership capabilities are associated with declining post-acquisition revenue provides insight into competitive strategy as well. Competitive strategy theory debates the issue of trade-offs between cost leadership and differentiation strategies, namely whether or not a firm moving toward a position of cost leadership experiences a reduction in differentiation (unit cost improves while unit price, or value-added declines). Support for, and opposition to, the existence of strategic trade-offs has largely been based on anecdotal evidence or cross-sectional studies with inconclusive results.

This study shows that an acquirer's use of cost leadership capabilities in its acquisitions results in strategic trade-offs. Cost leader acquirers are able to improve the combined firm's cost position, but at the same time they incur a loss in revenues. In the context of bank acquisitions, post-acquisition revenue reductions can be the direct result of executing cost leadership capabilities such as eliminating low volume, low margin products and services and the indirect result of customers' negative reaction to altering product features in order to standardize products. Customers may also react negatively to an acquirer's decision to eliminate redundant or low volume branches and transfer customer accounts to different branch locations.

Due to the strategic trade-offs resulting in post-acquisition cost reductions and revenues declines, acquirer cost leadership capabilities do not have a significant effect on post-acquisition profitability as predicted by hypothesis 1b. We interpret this as further evidence supporting the existence of strategic trade-offs between cost leadership and differentiation strategies. We conclude that, although acquirers are effective at utilizing their cost leadership capabilities in acquisitions, strategic trade-offs interfere with the link between cost leadership capabilities and improvement in the overall profitability of acquisitions.

The evidence regarding the effects of differentiation capabilities on post-acquisition performance provides additional insights into competitive strategy theory. Our findings show that acquirer differentiation capabilities are negatively associated with post-acquisition revenues. This result opposes hypothesis 2a and our theoretical arguments suggesting an association between acquirer differentiation capabilities and increases in post-acquisition revenues. Upon further reflection, this result is not entirely contradictory with competitive strategy theory. Unlike cost leadership strategies which suggest pursuing a low cost position by providing a relatively standardized product and achieving efficiencies through scale, differentiation can be achieved through a variety of means. Multiple competitors can achieve a differentiated position by emphasizing different product features, focusing product or service design to the preferences of particular set of customers, or emphasizing other dimensions of differentiation such as after-market service, timeliness of service, convenient locations, etc.

This creates the possibility for acquirer differentiation capabilities that enhance or conflict with those of the acquired firm. The case of Banc One shows an acquirer with differentiation capabilities centralized in a corporate function, its diversified services group (DSC). By centralizing this function, Banc One is able to develop the scale for specialized services in brokerage, trust, cash management, and specialized corporate lending. Managed properly, this corporate-level resource can enhance the mix of products and services offered by a new Banc One affiliate. The case of Harris Bancorp's acquisition of Suburban Bancorp provides another example of an acquirer utilizing differentiation capabilities to "cross sell" and "up sell" customers into higher priced, fee-based products where Suburban lacked expertise and infrastructure.

The new, specialized services associated with an acquirer's differentiation capabilities are likely to appeal to a subset of a target's customers, since in many cases if these customers had a strong preference for specialized banking services they could have moved to a bank or other financial service company offering this set of products and services. Thus, depending on how aggressively these differentiation capabilities are applied to the target's existing customer base, the change in differentiation strategy within the target's market may be perceived as an enhancement to a target's products and services or may be perceived as "hard selling" which irritates existing customers and results in customer turnover and losses in post-acquisition revenue. The empirical evidence indicates that on average acquirers attempts to utilize differentiation capabilities in acquisitions have a negative affect on post-acquisition revenues, suggesting that in general target customers prefer the target's pre-acquisition approach to differentiation over the acquirer's post-acquisition differentiation strategy.

The evidence regarding acquirers with mixed strategies, who utilize both cost leadership and differentiation capabilities, provides additional insights into how strategic capabilities affect acquisitions. The combination of both cost leadership and differentiation capabilities in acquirers is associated with post-acquisition revenue growth in acquisitions. This seems to indicate that combined strategies in acquirers improve an acquirer's ability to exploit its differentiation capabilities more effectively.

Providing further evidence supporting the existence of trade-offs between differentiation and cost leadership capabilities, mixed capabilities in acquirers is found to

be associated with increased post-acquisition costs. Acquirers mixing cost leadership and differentiation capabilities face the strategic trade-off as well: improvements in post-acquisition revenues with increased post-acquisition costs. In the case of acquirers mixing cost leadership and differentiation, we find the significant effect on post-acquisition costs exceeds the growth of revenues, which results in a significant negative effect on post-acquisition profitability. We conclude that acquirers attempting to utilize both cost leadership and differentiation capabilities in acquisitions increase the complexity of integrating their targets and as a result increase costs and ultimately reduce the post-acquisition profitability of the combined firm. This finding is consistent with hypothesis 3b and supports the theoretical perspective associated with Porter's view of competitive strategies, namely that cost leadership and differentiation strategy require trade-offs and combinations of these strategies result in lower financial performance.

This study adds to our understanding of cost-reduction and revenue-enhancing synergies (Capron 1999). The evidence on strategic trade-offs supports the view that cost and revenue synergies are fundamentally different and, in some cases, appear to be mutually exclusive. It also supports the assertions of competitive strategy theory that firms face trade-offs in developing and executing cost leadership and differentiation capabilities. There are a number of possible explanations for the evidence that post-acquisition revenue improvements are associated with increasing costs and post-acquisition cost reductions are associated with declines in revenue.

One explanation is Porter's arguments that pursuing cost leadership and differentiation require tradeoffs (Porter 1980). This explanation suggests that altering the competitive strategy of the acquired firm (or combined firms) has a cost associated with the change. In the case of a shift toward more differentiation, additional expense is required to support the development of revenue-enhancing capabilities. In banking, differentiation acquirers (banks utilizing differentiation strategies and differentiation capabilities) may be especially concerned about customer defection during the turbulence of post-acquisition integration. Additional marketing and sales expense may be required to reassure acquired customers and generate brand awareness in a new geographic market. Investment may also be necessary to upgrade the acquired banks existing facilities and train its personnel to support a differentiation strategy.

In the case of a shift toward cost leadership and the use of cost leadership capabilities, some revenue loss may be associated with cost reducing activities. For example, closing redundant or unprofitable locations and eliminating non-standard products is likely to result in the loss of some customers, resulting in a decline in revenue. A cost leader may reduce the fees and rates charged for the acquired bank's products and services to align with a low price strategy, causing a near-term decline in revenues.

Another explanation is that poor management or implementation, not strategic trade-offs, is to blame. Cost leader acquirers may be myopic in their attention to achieving cost reduction synergies and not recognize the corresponding reduction in revenues. Target management, lacking confidence and experience with the acquirer's cost leadership strategy, may be inclined to unnecessarily waive fees to retain customers. As the previously discussed case of Firststar's acquisition of First Colonial Bank shows, unanticipated employee and management turnover at the acquired firm may contribute to customer defection and reduced revenues. Similarly, differentiation acquirers may be myopic in their pursuit of revenue growth. Lack of controls during post-acquisition integration may allow high levels of expense growth while the combined bank attempts to meet its aggressive goals for synergistic revenue growth.

Next, we discuss the role of acquirer effectiveness capabilities in creating value in acquisitions. Based on the case evidence and previous theory regarding dynamic capabilities and strategic execution, we argued that effectiveness capabilities are aimed at improving firm performance, but they may not be universally associated with a particular competitive strategy. Specific capabilities that have been associated with operational effectiveness (Porter 1996) or economizing (Williamson 1991; Teece, Pisano, and Shuen 1997) include activities such as benchmarking, total quality management or six sigma practices, and reengineering. These effectiveness capabilities can be used by firms to improve either their cost position, their differentiation position, or both simultaneously. Thus, effectiveness capabilities are not expected to be associated with a particular change in competitive strategy (either in the direction of cost leadership or differentiation) and should be exempt from strategic trade-offs.

Based on the empirical evidence, we find that effectiveness capabilities play an important role in creating value in acquisitions without the negative effects of strategic

trade-offs. Effectiveness capabilities are positively related to improvements in post-acquisition revenues, which ultimately results in higher post-acquisition profitability. The evidence from the Banc One case provides possible explanations for this finding. The case evidence shows that Banc One used its capabilities in forming “uncommon partnerships” between new acquisitions and experienced Banc One affiliates, its information systems, and its internal performance scorecard as effectiveness capabilities to drive performance improvements in its affiliate banks.

Banc One uses corporate-level strategic capabilities aimed specifically at improving its affiliate’s cost positions such as those associated with its centralized MIS or operational functions and its affiliate’s differentiation position such as those associated with its diversified services group. In support of operational effectiveness, Banc One allows its affiliates the autonomy necessary to utilize its corporate strategic capabilities in varying degrees to best match their local market conditions. It provides effectiveness capabilities through partnerships between its subsidiary banks to share information and improve execution and through published performance scorecards that provide feedback on a monthly, quarterly, and annual basis.

Previous research on M&A has advised acquirers to create an appropriate “atmosphere” for acquired firms to learn the routines or strategic capabilities of their acquirers and the organizational and competitive contexts that support the successful execution of these capabilities (Haspeslaugh and Jemison 1991). Other authors have emphasized the importance of flexibility in acquisition integration. We conclude that effectiveness capabilities are critical to acquisition success and serve to facilitate learning and flexibility in acquisition integration.

Additional research is needed to better understand under what conditions post-acquisition revenue growth and cost reduction are mutually exclusive and under what conditions they are complementary. Additional research is also needed to understand the reasons that partial synergies (revenue growth or cost reduction) don’t translate into overall improvements in ROA. If strategic trade-offs are to blame, it suggests greater caution on the part of banks considering acquisition as a strategy for growth. If poor implementation is to blame, it suggests an integration process that focuses on managing both costs and revenues and the complexity of utilizing strategic capabilities within

differing organizational contexts. In either case, this study suggests that acquirers benefit from effectiveness capabilities, which are likely to address either problem.

Another goal for this research was to examine how acquirers organize capabilities at both the business-level and corporate-level in order to improve their acquisition outcomes and avoid strategic capabilities. Much of the previous discussion applies to these issues, but we highlight a few additional insights as well. First, while acquirers may benefit from developing cost leadership capabilities by economies of scale within centralized operational functions or differentiation capabilities by leveraging scale in business units to create differentiated, specialized products and services and organizing these capabilities at the corporate-level, acquirers should be careful not to autocratically impose these capabilities on its targets. The case evidence from Firststar's acquisition of First Colonial Bank substantiates this caution. Firststar's use of its corporate cost leadership capabilities resulted in an aggressive push to centralize operations and standardize products and services, but also caused First Colonial loan officers to defect to competitor banks, taking customers with them. As noted above, Banc One's choice to allow flexibility in organizing and executing strategic and effectiveness capabilities at both the corporate and business-unit level provides better conditions for improving post-acquisition performance.

Second, we show evidence of how corporate-level capabilities and strategy affects business-level capabilities and strategy. The relationship between corporate strategy and business strategy and their respective effects on performance is a long standing topic of debate within strategic management research (recently highlighted by McGahan and Porter 2005; Ruefli and Wiggins 2005). This research study provides clear evidence that corporate strategic and effectiveness capabilities interact with business-level strategies to affect performance at the business-unit level. It also shows that business-unit capabilities and strategy contribute to the effectiveness of corporate-level capabilities and partially determine whether corporate capabilities enhance or conflict with those at the business-level.

Third, we anticipated that by organizing cost leadership capabilities at the corporate level and isolating these activities from differentiation capabilities at the business unit level, firms could avoid strategic trade-offs that might occur if these

capabilities were combined at the same level of the organization. The evidence shows that avoiding strategic trade-offs requires more than creating organizational distance between differing strategic capabilities. It requires flexibility in managing the interactions between business and corporate-level capabilities.

Our final goal for this study was to contribute to research on value creation in M&A. The general conclusion of years of M&A research is that acquisitions fail to create economic value for acquirers. Indeed, some studies have concluded that acquirers fall prey to “synergy traps” or management hubris, but no research has examined how acquirer capabilities affect acquisition performance. Most research on M&A has focused on the acquisition as the unit of analysis without directly examining the acquirer’s role in executing and integrating acquisitions.

This study shows the importance of acquirer strategic and effectiveness capabilities in creating economic value in acquisitions and avoiding problems due to synergy traps or hubris. It suggests that acquirers relying on strategic capabilities may be prone to synergy traps or hubris, especially those mixing cost leadership and differentiation capabilities. These acquirers may over estimate the value created in their acquisitions by focusing on partial synergies of cost reduction or revenue improvement without understanding the strategic trade-offs that interfere with net economic gains in acquisitions. The empirical evidence shows that acquirer effectiveness capabilities and size contribute to post-acquisition performance improvements. More research focusing on acquirers and acquirer capabilities is needed to develop a better understanding of why some acquirers succeed and other fail in executing acquisitions.

The conclusions of this study are subject to several possible limitations. First, this study examines M&A in a single industry, the U.S banking industry. The use of a single industry sample allows for a more precise focus on measuring relative strategic and effectiveness capabilities of acquirers and how acquirer capabilities affect M&A performance. A single industry study is limited in its ability to be generalized to M&A in other industries or across industries. However, the findings of this study suggesting that effectiveness and size provide advantages to acquirers is consistent with the battle for scale and comparative advantage that is evident in the general M&A market. A second

limitation is due to the cross-sectional nature of the study, which limits its ability to determine the dynamic, or causal, relationships between the constructs used in the study.

The contribution of business-level competitive strategy in realizing synergies in M&A is an important finding for many areas of research in M&A. While firm competitive strategy and effectiveness are of central concern in horizontal acquisitions, they are also likely to be important in diversifying acquisitions. It suggests another finer-grained dimension of relatedness within groups such as related, unrelated, horizontal, or vertical M&A – relatedness in competitive strategy and operational effectiveness. Interestingly, the research on diversifying acquisitions may also include acquirers who exhibit primarily cost or differentiation strategies or effectiveness and use these capabilities to support non-horizontal acquisitions. (Maritan and Brush, 2003). Understanding the competitive strategy and operational effectiveness of acquirers and targets in diversifying acquisitions may explain variation that currently confounds the conclusions of research on how relatedness affects M&A performance (Lubatkin 1987; Shelton 1988; Seth 1990a).

Research on acquirer strategic and effectiveness capabilities may also be useful in understanding M&A process. This study has used M&A process theory to develop its propositions but has not directly examined M&A process or integration directly. The evidence that different competitive strategies result in different types of post-acquisition synergies raises interesting questions for research in M&A process. Do the competitive strategies of acquirers affect their selection, negotiation, planning, and integration processes? Case evidence shows some evidence that acquirer strategic and effectiveness capabilities affect these processes but, additional research is necessary to explore these issues further.

It also may be useful in other areas of M&A research. Topics such as top management teams (TMT) (Shanley, 1992), the affect of learning and experience in M&A (Hayward 2002; Singh and Zollo 1998), cultural conflicts and acculturation in M&A (Pablo 1994; Jemison and Sitkin 1986) post-acquisition resource sharing and restructuring activities (Capron, Dussauge et al. 1998), and many others could benefit from understanding of how acquirer capabilities influence M&A.

This research offers several important implications for managers. First, it adds to the mounting evidence on how difficult it is for acquirers to achieve positive synergies in acquisitions. It suggests would-be acquirers focus on improving their operational effectiveness and building effectiveness capabilities prior to making acquisitions. This has two potential benefits: 1) it can contribute to immediate improvements in financial performance and 2) it can contribute to improved acquisition outcomes.

The benefit of large asset size presents a “catch 22” for acquirers. To achieve large size, acquisitions may be necessary, but acquisitions results are expected to be poor until large scale is achieved. This finding is consistent with the patterns of M&A activity in the banking industry, where the larger banks continue to increase their size in waves of acquisitions.

Another important implication for managers resulting from this study is the findings regarding the realization of synergistic revenues and cost reductions. Are manager misunderstanding their acquisition outcomes? Are managers of differentiation acquirers focusing solely on the creating of synergistic revenue growth, without recognizing that post-acquisition costs are increasing hand-in-hand with new revenues? Are managers of cost leader acquirers making similar errors in exclusively focusing on post-acquisition cost reductions? These are interesting questions for future research. This may be part of the explanation for the pervasiveness of hubris in M&A decisions (Roll 1986) or “synergy trap (Sirower 1997).

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Table 1: Hypothesized Relationships Between Strategic and Effectiveness Capabilities and Post-Acquisition Performance Improvements

Acquirer Characteristics	Hypothesized Effect on Acquisition Performance	Hypothesized Type of Performance Improvement
Cost Leadership Capabilities (COSTCAP)	+ (H1b)	Cost reductions (H1a)
Differentiation Capabilities (DIFFCAP)	+ (H2b)	Revenue growth (H2a)
Mixed Strategy Capabilities (DIFFCAP * COSTCAP) (H3a)	+ (H3a)	Revenue growth Cost reductions (H3a)
Mixed Strategy Capabilities (DIFFCAP * COSTCAP) (H3b)	- (H3a)	Revenue declines Cost increases (H3a)
Effectiveness Capabilities (EFFCAP)	+ (H5)	

Table 2: Descriptive Statistics and Pearson Correlation Coefficients

Variable	N	Mean	StDev	1	2	3	4	5	6	7	8	9
1. ΔROA	204	-0.00024	0.00193									
2. ΔCOSTS	204	-0.00313	0.00727	-0.132 (0.060)								
3. ΔREV	204	-0.00523	0.00552	0.185 (0.008)	0.856 (0.000)							
4. A-COSTCAP	212	1.1357	0.7148	-0.027 (0.704)	-0.159 0.023	-0.164 (0.019)						
5. A-DIFFCAP	212	1.5562	1.3734	-0.022 (0.758)	0.028 (0.688)	-0.065 (0.355)	-0.222 (0.001)					
6. A-DIFFCAP*COSTCAP	212	1.551	1.748	-0.087 (0.216)	0.044 (0.532)	-0.054 (0.446)	0.431 (0.000)	0.562 (0.000)				
7. A-EFFCAP	212	0.64674	0.10396	0.086 (0.222)	0.038 (0.593)	0.15 (0.032)	0.337 (0.000)	0.021 (0.761)	0.277 (0.000)			
8. A-CITY	212	0.0377	0.191	-0.055 (0.431)	0.037 (0.601)	0.043 (0.544)	0.183 (0.008)	-0.16 (0.019)	-0.133 (0.052)	0.018 (0.797)		
9. A-BHC	212	0.9575	0.2021	0.055 (0.431)	-0.037 (0.601)	-0.043 (0.544)	-0.197 (0.004)	0.178 (0.009)	0.147 (0.032)	-0.014 (0.840)	-0.94 (0.000)	
10. A-ASSET SIZE	212	15.059	1.817	0.173 (0.013)	-0.169 (0.016)	-0.195 (0.005)	0.006 (0.931)	0.447 (0.000)	0.386 (0.000)	-0.012 (0.863)	-0.208 (0.002)	0.243 (0.000)

Cell contents: Correlation coefficients  
p-values

Table 3: Results for OLS Regression Models:

Independent Variables	Model 1	Model 2	Model 3
	(Dependent Variable= $\square$ ROA) Coefficients	(Dependent Variable= $\square$ COSTS) Coefficients	(Dependent Variable= $\pi$ REV) Coefficients
Constant	-0.006317 *** (0.000)	0.014805 * (0.019)	0.001999 (0.673)
A-COSTCAP	0.0001048 (0.707)	-0.004046 *** (0.000)	-0.0030952 *** (0.000)
A-DIFFCAP	0.0000045 (0.976)	-0.000901 (0.112)	-0.0008603 * (0.044)
A-DIFFCAP*COSTCAP	-0.0002684 * (0.040)	0.0016026 *** (0.001)	0.0008121 * (0.026)
A-EFFCAP	0.002651 + (0.054)	0.003865 (0.445)	0.010963 ** (0.004)
Controls:			
A-ASSET SIZE	0.00027243 *** (0.001)	-0.0008523 ** (0.006)	-0.0005228 * (0.026)
A-BHC	0.0005638 (0.531)	-0.004189 (0.208)	-0.002919 (0.243)
R-sq	7.9	11.6	13.3
F	2.81	4.32	5.03
P	(0.012) *	(0.000) ***	(0.000) ***
N	204	204	204

Cell contents: Coefficients  
p-values

Figure 1: Predicted Effects of Acquirer Effectiveness Capabilities on Post-Acquisition Net Income Realized in Acquisitions for an Average Sized Bank

