

THE U.S. PUBLIC ACCOUNTING INDUSTRY: MAXIMIZING POST-MERGER AND
ACQUISITION PERFORMANCE ON A FIRMS' SCOPE ECONOMIES, STAKEHOLDER VALUE
ADDED AND ECONOMIC PROFIT.

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ABSTRACT

The complex phenomenon that mergers and acquisitions had on the U.S. certified public accountancy industry has fascinated stakeholders throughout the decades. Historically, the industry has matured from smaller standalone practices towards larger consolidated enterprises that established cost efficiencies and service differentiation. Literature suggests there are financial and operational advantages and disadvantages with mergers and acquisitions; however, limited research has fixated this position on the U.S. certified public accountancy industry. Specifically, its impact on post-merger and acquisition performance in maximizing scale economies, stakeholder value added and economic profit.

This study analyzes the impact that post-merger and acquisitions have on maximizing a public accountancy practice's performance in scope economy, stakeholder value added and economic profit. We examined the maximization effects of the merger and acquisition using financial statement data amongst a Participant and the Target, analyzing synergistic related benefits at the combined level, the establishment of pro-forma income statements and utilization of the discounted cash flow model. Collectively, this information was used to calculate post-merger and acquisition performance effects on scale economies, stakeholder value added and economic profit.

Overall, we found at the consolidated level, post-merger and acquisition performance between two certified public accountancy practices, will not maximize scale economies, stakeholder value added and economic profit, unless synergistic benefits were realized in several income statement categories. Specifically, realized synergistic related benefits must incorporate either synergistic cost efficiencies in rent and salary expenditures or synergistic enhancements to gross revenues, or a combination of the three. Although maximization efforts could not be achieved amongst the Participant and the Target, we suggest that by consolidating operations into a single stand-alone enterprise, or through establishing a more efficient organizational structure, maximization could occur.

The results shed light on valuable learning points in a post-merger and acquisition performance between two certified public accountancy practices. Simply by engaging in a merger and acquisition strategy does not award a maximization of post-merger and acquisition performance, especially if both practices are operating as stand-alone entities, rent and salary cost efficiencies are not recognized and synergistic engagement offerings are lacking. This analysis has illustrated and provided evidence to suggest that a post-merger and acquisition performance between two U.S. certified public accountancy practices, would need to establish enough strategic related benefits in order to maximize post-merger and acquisition performance related to scale economies, stakeholder value added and economic profit.

CHAPTER 1: U.S. CERTIFIED PUBLIC ACCOUNTNACY INDUSTRY – A HISTORICAL

INTRODUCTION

Highly competitive industries are faced with fierce price competition, eroding market share and collapsing entry barriers, as companies' offerings shift, unknowingly away from heterogeneous to homogeneous products and services. Inquiry has suggested, that U.S. certified public accountancy practices (herein referred to as, "public accountancy practice(s)", "accountancy practice(s)" or "practice(s)") appear to dismiss eroding competitive positioning as economic conditions or seasonality, as many fail to accurately address the competitive nature of the industry. Inquiry has also indicated that public accountancy practices have begun to struggle with how to increase growth opportunities beyond traditional methods while reducing operating costs in order to remain competitive. Subsequently, their corporate growth strategic model suffers, as operations vastly differ from the rigor and relevance of academic theory, founded by scholars such as Barney (1997), Grant (1991) and Porter (1980). As a result, public accountancy practices begin to feel indirect competitive pressures and embark with implementing populististic strategic growth measures that provide no relevant improvements.

The certified public accounting industry (herein referred to as, "public accounting industry") corporate growth strategy commonly includes a two-fold populististic method, beyond simply word-of-mouth. Networking is a common approach, where practices devote enormous resources in interacting with and sourcing potential clientele. Networking involves, typically, a senior employee who attends paid events, similar to local and national business association lunch-ins, in order to interact with other prospective business owners, assuming that additional clientele can be obtained. Another common approach relates to expansion via employment. Public accountancy practices commonly employ experience practitioners, who service a book of clientele, to which can be absorbed accordingly. Simply, the organization provides overhead and support for the new employee, and the employee oversees and services their clientele, although the organization does retain operational risk.

Although both growth models are conceptually acceptable, it does, however, impose strategic questions on whether it is an appropriate corporate strategic growth methodology for a highly competitive market. For example, the economic and financial cost to deploy marketing initiatives to gain clientele is extensive, and often leads to conflicting results. In addition, many public accountancy practices operating structures resemble franchise models, where Partners operate in silos overseeing their personal book of clients, and in return, they are provided organizational support. This perceived growth deviates away from an organic growth model and commonly results in profitability swings when Partners depart.

This brief explanation begins to illustrate the importance that mergers and acquisitions have on growth and cost efficiencies, specifically for public accountancy practices. Literature illustrates there are financial and operational advantages and disadvantages in mergers and acquisitions see for example Anthony (2017), Sinkkonen (2019) and Agrawal et al. (1992); however, there is limited research surrounding its impact between private entity acquisitions. Furthermore, there is limited literature surrounding merger and acquisition impacts on maximizing scale economies, stakeholder value added and economic profit for the fragmented portion of the public accounting industry. Here we will be defining performance and success based on how the firm uses their combined resources to improve relatedness following Porter (1985) and Barney (1991), at the consolidated level, and how such improvement can maximize scale economies, stakeholder value added and economic profit (Barney, 1997). Comparing academic theory and financial measurements to an actual merger and acquisition analysis, is an opportunity for public accountancy practices to evolve towards enhanced strategic positions that could be more appropriate for longevity. The importance and motivation of this thesis is to look at and explore mergers and acquisitions between two public accountancy practices and measure its impact on maximizing scale economies, stakeholder value added and economic profit. This exploration will provide a robust perspective on specific actions required to be taken and implemented in order to maximize synergistic benefits and shareholder wealth.

A merger or acquisition is typically undertaken in an attempt to realize some form of synergy that could lead to the creation of shareholder value. In many cases, this will revolve around the concept of economies of scale, whereby a larger entity can achieve greater efficiencies and reduced costs. There are other objectives as well, such as creating a market leader with a stronger market presence or extending the reach of a company's products and services into new geographic regions. However, in order for a merger or acquisition to be successful in maximizing post-merger performance and overall value, it is essential that the buyer be able to establish enough synergistic benefits to offset any potential problems that may arise. If the buyer is unable to do so, the merger or acquisition is likely to fail in its objective of maximizing value for shareholders.

While merger and acquisition activity can be a great way to achieve these objectives, it is important to carefully consider the potential risks and rewards before moving forward. One of the key risks associated with merger and acquisition activity is the potential for value destruction. Value destruction can occur when the synergies that are expected to result from the merger or acquisition are not realized, or when the costs of integrating the two companies exceed the benefits. While value destruction is a risk that must be managed carefully, it is important to remember that it is not the only possible outcome of merger and acquisition activity. In some cases, merger and acquisitions can lead to increased shareholder value, economies of scale, and other benefits that more than offset the risks. The success of these deals depends on the ability of the buyer to establish synergistic benefits, which can be achieved through a variety of methods such as economies of scale, enhanced customer service, or cross-selling opportunities. While each merger and acquisition have unique challenges, the ultimate goal should be to create value for the shareholders. This can be done by maximizing strategic related benefits amongst both entities. In conjunction with supporting literature, practitioners and researchers can further evaluate how to maximize post-merger and acquisition performance on a firms' scope economies, stakeholder value added and economic profit.

The study will commence with Chapter 2, in discussing the U.S. public accounting industry competitive industry structure to gain an understanding of its complex nature and overall fragmentation. In addition, this chapter will then explore historical evolutions of merger and acquisitions in the public accountancy industry and identify the strategy behind the consolidations. Further in Chapter 2, we will explore corporate business strategic value in mergers and acquisitions and discuss reasons why buyers might desire to engage in such a strategy. Finally, we will begin to examine growth strategies specifically related to the public accounting industry and post-merger performance and measurement techniques. In Chapter 3, we will explore the thesis merger and acquisition action research methodology and commence with the exploration of simple accounting measures in determining firm competitive advantages. This Chapter will also discuss limitation on the use of adjusted accounting measures of firm performance and shift to an alternative action sequence methodology. Chapter 4, the thesis will discuss action sequence of events in a post-merger and acquisition implementation and in Chapter 5 we will calculate post-merger and acquisition performance on a firms' scope economies, stakeholder value added and economic profit to measure maximization benefits.

CHAPTER 2: LITERATURE REVIEW

The public accountancy industry appears to have evolved into two separated, but distinguished, market structures, one of differentiation and the other, fragmentation. As such, growth tends to be slow in nature, competition increases, profit margins decrease, service differentiation becomes homogeneous. However, during particular phases in a business life cycle, there are opportunities to remain competitive. In particular, for fully mature and fragmented industries, implementing a corporate merger and acquisition strategy, to which synergistic value can be recognized, will lead towards increased competitive advantages. However, it appears that key stakeholders in the accountancy industry have rejected this notion and continue to engage within populist ideals, leading towards competitive parity. This is likely due to perhaps a number of factors, including the belief that such a strategy would lead to less choice for consumers, as well as the increased regulation and financial uncertainties.

This literature review will first explore the U.S. public accountancy competitive structure and illustrate that fragmentation has occurred. Second, the literature will explore historical perspectives surrounding public accountancy mergers and acquisitions and strategic achievements in corporate business mergers and acquisitions. Understanding the historical perspectives and implementations of public accountancy practices have adopted throughout the decades, allow us to understand how increased competition led into consolidation to improve strategic positioning. Third, the literature review will examine corporate business strategic value in merger and acquisitions and discuss reasoning behind why merger and acquisitions are pursued. This discussion allows us to establish concepts on how public accountancy practices could benefit from a merger and acquisition. Finally, the literature review will identify growth strategies, post-merger performance and measurement techniques, adopted by academic scholars, to utilize and benchmark from in order to measure the merger and acquisition analysis conducted.

U.S. PUBLIC ACCOUNTANCY INDUSTRY COMPETITIVE STRUCTURE

Years ending in two and seven, the U.S. Census Bureau issues the Statistics of U.S. Businesses (SUSB) analysis, which is an annual series of national and subnational economic data by business establishment size and industry. The SUSB includes the number of firms, number of establishments, employment, and annual payroll for most U.S. based business. The data is arranged by geographic area, industry, and employment size for each business establishment. The most recent tabulated data is gathered and utilized based upon the North American Industry Classification System (NAICS) code of the Offices of Certified Public Accountants.

The dataset from the Census (2017) depicts the overall competitive structure in relation to establishment employment size, the number of public accountancy practices, number of staff employed, annual payroll, and preliminary gross receipts. Further extrapolating the data, additional information estimations can be identified such as the percentage of public accountancy practices to employment size, total gross receipts to market cap, the average gross revenues, payroll expenditures and profits based on industry averages. Below is an excerpt of the data including calculated estimations steered by the Practice Employment Size and Number of Public Accountancy Practices.

As the data in Table 1 below illustrates, the public accountancy industry consists of about 53,167 public accountancy practices operating in about 56,705 locations and generating about \$102.7 billion in annual revenues (Census, 2017). Collectively, 68.7% of public accountancy practices employ less-than five employees and their gross revenues average \$247,011, payroll expenditures of \$83,864 and profits of \$98,805. Further, 95.6% of public accountancy practices have less-than twenty employees and maintain average gross revenues of \$471,714, payroll expenditures of \$190,694 and profits of \$188,686. The data also illustrates that 99.9% of the industry captures around 41.7% of the market value, whereas the remaining 0.1% captures the remaining portion of 58.3%.

TABLE 1: U.S. Public Accountancy Industry Statistics (2017) ***

| Practice Employment Size | Number of Public Practices | Number of Public Practices (in %) | *Preliminary Receipts (in \$1,000) | Preliminary Receipts (in % of Total) | **Est. Mean Annual (Per Practice) | | |
|--------------------------|----------------------------|-----------------------------------|------------------------------------|--------------------------------------|-----------------------------------|-------------|-------------|
| | | | | | Gross Revenues | Payroll | **Profits |
| Total | 53,157 | | \$ 102,760,834 | | | | |
| < 5 | 36,507 | 68.7% | \$ 9,017,646 | 8.78% | \$ 247,011 | \$ 83,864 | \$ 98,805 |
| 5-9 | 10,058 | 18.9% | 7,709,869 | 7.50% | 766,541 | 325,227 | 306,616 |
| 10-19 | 4,270 | 8.0% | 7,252,089 | 7.06% | 1,698,381 | 787,165 | 679,353 |
| < 20 | 50,835 | 95.6% | 23,979,604 | 23.34% | 471,714 | 190,694 | 188,686 |
| 20-99 | 2,023 | 3.8% | 11,432,927 | 11.13% | 5,651,472 | 2,757,606 | 2,260,589 |
| 100-499 | 242 | 0.5% | 7,402,992 | 7.20% | 30,590,876 | 13,888,124 | 12,236,350 |
| < 500 | 53,100 | 99.9% | 42,815,523 | 41.67% | 806,319 | 350,914 | 322,527 |
| 500 + | 67 | 0.1% | 59,945,311 | 58.33% | 894,706,134 | 303,181,806 | 357,882,454 |

*Receipts (net of taxes collected from customers or clients) are defined as operating revenue for goods produced or distributed, or for services provided. Receipts excludes local, state, and federal sales and other taxes collected from customers or clients and paid directly to a tax agency. Receipts are acquired from economic census data for establishments in industries that are in-scope to the economic census; receipts are acquired from IRS tax data for single-establishment businesses in industries that are out-of-scope to the economic census; and payroll-to-receipts ratios are used to estimate receipts for multi-establishment businesses in industries that are out-of-scope to the economic census. Statistics of U.S. Businesses tabulations provide summed establishment receipts which creates some duplication of receipts for large multi-establishment enterprises. Receipts data are available for years ending in 2 and 7 only (Census, 2017).

** Calculations based on data from Census (2017). Estimated mean annual profits were calculated based on a 40.0% industry average.

*** The 2017 data was utilized as the foundation of this study as more recent datapoints in the 2019 report lacked disclosures on Preliminary Receipts.

As the data illustrates, the public accountancy industry consists of about 53,167 public accountancy practices operating in about 56,705 locations and generating about \$102.7 billion in annual revenues (Census, 2017). Collectively, 68.7% of public accountancy practices employ less-than five employees and their gross revenues average \$247,011, payroll expenditures of \$83,864 and profits of \$98,805. Further, 95.6% of public accountancy practices have less-than twenty employees and maintain average gross revenues of \$471,714, payroll expenditures of \$190,694 and profits of \$188,686. The data also illustrates that 99.9% of the industry captures around 41.7% of the market value, whereas the remaining 0.1% captures the remaining portion of 58.3%.

Interestingly enough, the data suggests that, overwhelmingly, there is a high level of fragmentation, full maturity or perfectly competitive positioning occurring for 95.6% of the industry, while the remaining 4.4% of the industry has established sources of differentiation or monopolistically competitive positioning.

As fragmentation occurs in mature markets, strategic theory suggests that growth is more effective in corporate consolidation, as it becomes more cost effective and enables an organization to retract, temporarily, leftward down the business cycle (Barney, 1997, Porter, 2008). Unfortunately, inquiry has suggested that public accountancy practices residing in this fragmented section, continue to ignore strategic opportunities and evolve in a less effective and efficient manner. As such, this merger and acquisition analysis study will only focus attention upon the fragmented portion of the industry, in particular, outlining consolidation opportunities and its impact on scale economies, stakeholder value added and economic profit.

HISTORICAL PERSPECTIVES ON PUBLIC ACCOUNTANCY MERGER AND ACQUISITIONS

A company can accomplish expansion, diversification and influence over competitors in two particular methods (Goldberg, 1973). The first method is engaging in a merger and acquisition strategy, while the second is through internal organic growth. During the first half of the twentieth century, large public accountancy practices primarily expanded through organic growth, while smaller public accountancy practices expanded through mergers. However, in the latter half of the twentieth century, large public accountancy practices shifted towards consolidation via mergers and acquisitions. As a result, by the end of the twentieth century, the overall number of major public accountancy practices were reduced to five and begun enacting differentiation strategies, vastly different than their rivals (Wootton et al., 2003).

Mergers and acquisitions are conceptualized as a recent phenomenon; however, history has shown that many public accounting practices have enacted such strategies to gain competitive advantages. Public accountancy practices, such as KPMG and Ernst & Young, were organized based on dozens or perhaps hundreds of local, national and international companies (Wootton et al., 2003). This growth strategy has enabled public accountancy practices to diversify risk portfolios and gain specialization through management consulting and niche assurance services, in order to achieve a competitive advantage. Growth via mergers and acquisitions appears to have allowed public accountancy practices to capture synergistic

values, acquire locations in new geographical areas, expand services offered, all while becoming a full professional service provider, which has become a large part of their success. Willmott and Sikka (1997) documents that mergers have given public accountancy practices a size advantage, thereby providing enhanced expertise, capacity and international scope. In relation to the international perspective, the recognition of economies of scale has spread the expenditures of information technology development, employee training and other stakeholder value added activities throughout such global sales revenues (Porter, 2011). Therefore, similar to other business enterprises, growth in mergers and acquisitions have served as a path for public accountancy practices to respond to their ever-changing business environment (Wootton et al., 1994).

For decades, growth, globalization and mergers have been an essential growth strategy for public accountancy practices. A quarter decade subsequent to the partnership formation of Price Waterhouse & Co. (Thomas, 1997, DeMond and Price, 1951) in London in 1849, the practice expanded operations internationally by opening offices in New York City and Chicago, under the leadership of Jones, Caesar & Co. (DeMond and Price, 1951). By the late nineteenth century, the Price Waterhouse brand gained strategic advantages within the U.S. and over the next two decades, begun to consolidate Jones, Caesar & Co. (Allen and McDermott, 1993) into Price Waterhouse. In 1901, Haskins & Sells, understood the importance of globalization and the position that mergers have on growth and development for a practice, and, as competitors begun to gain additional positioning in Europe, Haskins & Sells determined to establish an office in London, to which they acquired a London accounting firm Conant & Grant (Foye, 1970). Even though the practice was unprofitable for many years, it provided a platform to enter into the European market and allowed them to expand operations globally.

As public accountancy practices consolidated, additional operational and strategic problems emerged. Flourishing and expanding across the U.S., they were faced with how to properly service such clientele. Relocation caused public accountancy practices to consider decentralization via opening branch offices (Wootton and Spruill, 1994); however, a less intrusive and capital intensive

strategy was through a merger (Allen and McDermott, 1993). This allowed public accountancy practices to acquire offices in desired locations, gain access to local clientele and lower the client acquisition costs. Arthur Lowes Dickinson, a senior partner with Price Waterhouse, understood the necessity of correlating the expansion of corporate growth with practice growth. Dickinson essentially suggests that, an accounting practice should not be confined within a geographical area, but rather, mimic the industrial corporate growth (Wootton et al., 2003) via expansion (DeMond and Price, 1951). As such, Price Waterhouse expanded into the State of California via an acquisition, which lacked competitive presence and with a successful penetration, it would allow Price Waterhouse an opportunity to be the first mover and capture clientele while gaining cost advantages and competitive positioning. Reflecting upon the Price Waterhouse expansion, Allen and McDermott (1993) noted that the acquisition would instantaneously ensure engagements which would avoid capital intensive promotional efforts in order to capture new clientele. In addition, for a newly formed practice, clientele may be reluctant to depart their existing accounting practice for a new practice that may lack the professional local business acumen (Hanlon, 1994). Rather than establishing new office locations, a merger and acquisition would allow both favorable terms and mitigate client attrition.

Under the leadership of Colonel Arthur Carter, Haskins & Sells managing partner, gained a reputation of orchestrating the arrangement of several merges with a dozen public accountancy practices in the early twentieth century, including public accountancy practices located in Dallas, Denver, Detroit and Boston (Foye, 1970). Although Carter recognized advantages mergers had in establishing or enhancing offices in strategic locations, it also often sourced and produced partners for the firm. Competitors, such as Ernst & Ernst and Arthur Young, responded by initiating relationships with established and viable international public accountancy practices. After an aggressive U.S. expansion in the early twentieth century, Ernst & Ernst determined that if a continued full-service engagement of international clients were to be recognized, then overseas facilities would be required (Ernst, 1960). As such, in 1924, Ernst & Ernst founded an engagement relationship with Whinney,

Smith & Whinney, a London accountancy practice (Ernst, 1960). Whinney, Smith & Whinney would be responsible for performing audit engagements of Ernst & Ernst's U.S. clientele, for clients that had European operations (Jones, 1981). This relationship continued until both public accountancy practices eventually merged, establishing an international firm of Ernst & Whinney.

There was a period during the mid-twentieth century, where mergers occurred in abundance, similar to what had occurred during the early twentieth century. In the 1950s, public accountancy practices began to focus upon organizational size and leadership positioning. It was portrayed that organizational depth and vast size was required in order to properly service almost any clientele. This was evident with the practice at Peat Marwick, where they conducted a growth strategy by merging fifty-three public accountancy practices, domestically and internationally (Allen and McDermott, 1993). Leadership position was deemed necessary in order to establish a leadership position in the industry in order to become an equal competitor with other public accountancy practices. This was evident with Leonard Spacek, the managing partner at Arthur Anderson during 1947, who spoke about the motivation for Arthur Anderson to expand operations and how the leadership role must rest upon the shoulders of larger successful public accountancy practices (Spacek, 1985).

Regardless of the purpose of expansion, during the mid-twentieth century, a shift occurred from growing via internal organic growth towards expansions through mergers and acquisitions. For instance, prior to 1950, Arthur Young & Co. did not engage with any mergers or acquisitions; however, during the 1950s, two mergers were completed. The value of the merger was evident and expressed by both parties in Thomas G. Higgins, the senior partner at Arthur Young & Co., autobiography. In Higgins (1965) perspective, Arthur Young & Co. was in dire need to maintain a larger presence in Kansas City and expand operations in Wichita, via an acquisition of Lunsford, Barnes & Co., as Arthur Young & Co. maintained clientele in that vicinity. In addition, the merger would also expand Arthur Young & Co.'s talent pool. In Lunsford, Barnes & Co.'s perspective, a merger would allow senior partners to retire and a merger with a reputable practice as ideal for client retention. Interestingly enough, Hughes et al. (1984) reflected upon

such value suggesting that actual mergers could be one of the most profitable path for a closely held accounting practice to which owners can liquidate upon retirement. This reflection directly correlates with Selig and Glickman (1999), suggesting that due to the lack of retirement plans, succession plans and funded retirement plans, smaller public accountancy practices would be more prone to merge with larger public accountancy practices and the merger would be deemed economically rational. However, Arthur Young's merger with Wideman, Madden & Dolan demonstrated difficulty in servicing their clientele as activities became more robust, extended across the country and clients became public entities. Again Arthur Young's learned from experience that establishing an office from scratch often created long-range issues, and with the merger with Wideman, Madden & Dolan, it instantly provided them with two well established locations in Toledo and Detroit, which were properly staffed who were knowledgeable of the local business segments (Wootton et al., 2003).

Undoubtedly, one of the most momentous mergers during this period, was amongst two of the most prestigious and tenured U.S. public accountancy practices – Barrow, Wade, Guthrie & Co (BWG) and Peat, Marwick, Mitchell & Co. (PMM). BWG, maintained total billings of roughly \$4.5 million similar to the size of Arthur Young (Wise, 1982), at the commencement of the merger; however, the practice was in the midst of a major lawsuit pertaining to one of their public audit clients, as they were found to be negligent in detecting and overstatement of income. BWG determined that the negligence was due to a lack of strong staff, training and supervision and in order to overcome this lack of positioning, a merger with PMM was deemed appropriate. From PMM's perspective, a merger would establish significant synergistic values as it would consolidate duplicate offices located throughout fourteen locations, in addition to capturing BWG's market share in assurance services within the insurance sector, to which PMM identified a significant potential for growth. From BWG's perspective, a merger would maintain a significant psychological impact within the industry, particularly amongst the founders of smaller public accountancy practices. Many of the smaller public accountancy practices focused their expertise via specialization; however, such public accountancy practices founders were aging and there is a lack of succession planning, many faced

estate-tax payments and there evolved an increase threat of personal liability (Wise, 1982). The combination of founders age, the increasing responsibility and the balance of risk and reward, concerned founders whom desired to protect their investments and retire without conflicts.

Another perspective in engaging with a merger and acquisition is to increase clientele base and specialization (Wootton et al., 2003). This was evident with Price Waterhouse's merger with R.G. Rankin & Co. in 1955. Prior to this, Price Waterhouse growth strategy relied strictly upon the reputation of the practice, in fact, Price Waterhouse was not involved in any merger activity for over twenty-five years; however, by the mid-twentieth century, the practice began reconsidering their existing strategy to incorporate merger activity as the competitive landscape increased. Price Waterhouse growth strategy shifted to emphasize growth to include strategic specialization such as enhancing or developing special expertise, to enter into a particular practice location (Allen and McDermott, 1993) or to retain blue-chip clientele. As a result of the changed growth policy, Price Waterhouse engaged in various strategic mergers, which gained notable clients all while reinforcing Price Waterhouse's corporate image as one of the leaders in the manufacturing industry (Allen and McDermott, 1993).

Throughout the 1960s and 1970s, public accountancy practices continued to utilize mergers and acquisitions as a strategic growth path, as it became apparent that in addition to global geographical diversification, mergers also provided scale economies for high-volume processes, which resulted an increase in market and profit power (Chandler Junior, 1990). It was here in the 1960s where the ideology of scale economies became incorporated within merger and acquisition decision making (Wootton et al., 2003). Touche, Ross, Bailey & Smart realized this scale economy ideology, as during their growth initiative in the 1950s, it incurred a tremendous amount of expenditures on research and training, as a result, in order to remain competitive, Touche, Ross, Bailey & Smart needed to expand operations and diversify their base to gain scale economies (Wootton et al., 2003). For ten years, Touche, Ross, Bailey & Smart merged with an estimated fifty public accountancy practices, all while achieving international exposure with formal relationships with public accountancy practices located in seventy-five countries (Wootton et al., 2003,

Swanson, 1990). Interestingly enough, in 1965, Arthur Young's senior partner, Thomas Higgins, mirrored Touche, Ross, Baily & Smart's scale economies expansion, suggesting that in order to remain competitive and respond to the expanding international clients needs and overall size, a practice also must be similar in stature.

Consolidation continued to occur for decades and during the second half of 1984, Price Waterhouse & Co. and Deloitte Haskins & Sells began to make the first significant endeavor to combine two successful first-tier public accountancy practices (Wootton et al., 2003). By 1984, collectively, both public accountancy practices employed over 17,000 professionals with approximately 200 office locations in the US (Allen and McDermott, 1993). Operationally, both public accountancy practices concentrated on auditing companies actively listed on the NYSE and collectively, worldwide billings were noted at \$2.1 billion (Wootton et al., 2003) and specialized in dissimilar industries; therefore, strategically, a merger would be ideal. However, at the same time, public accountancy practices expanded operations towards more economically profitable management consulting engagements, which Price Waterhouse and Deloitte Haskins & Sells were lacking. A combination between the parties was sought to be an opportunity to establish a more robust consulting division, diminish joint costs, limit duplications all while attempting to increase the overall competitive advantage in audit engagements (Businessweek, 1984).

The reality of the benefits of economies of scale and specialization has on public accountancy practices were even more apparent for smaller first-tier public accountancy practices as questions arose regarding their ability to survive and compete with their peers. Inquiring about future growth abilities, the requirement to reduce expenditures, the pressure of globalization and a slowdown of domestic growth in the audit segment, public accountancy practices ideology changed from strength through organic growth towards strength through specialization and consolidation (Wootton et al., 2003, Allen and McDermott, 1993). Consolidations provided an opportunity for expansions of various non-assurance services and shared cost advantages. A combined practice would provide an extraordinary capability to convey accounting, tax, audit and consulting services for all types of complex clientele, currently and in the

upcoming years. The Ernst & Whinney and Arthur Young & Co. merger, later combined to form Ernst & Young, illustrated this as they recognized an increase in economies of scale and industry specialization. As the overall public practice evolved towards specialization there became a greater need for public accountancy practices to complement this strategy (Mednick and Previts, 1987). However, with the implementation of specialization, it was believed that public accountancy practices would recognize an increase in overhead allocated expenditures, which they could devote additional resources towards professional training, development and research, in particular research pertaining to industry specified ideals (Wootton et al., 2003). While merger activity produced economies of scale, the implementation proved to be costlier and more time consuming than expected. During 1994, Phil Laskaway, the managing partner of Ernst & Young reflected on the challenges, noting that despite the ideology of economies of scale and perhaps the benefits it provides, public accountancy practices will continue to recognize major expenditures when combining two large public accountancy practices together (Wootton et al., 2003). Although expenditures include the costs of combining local offices, technology and payouts to partners upon departure, there are also less quantifiable expenditures such as personal conflicts in management styles between partners and other professionals (World, 1994).

Through consolidation, specialization and diversification, public accountancy practices could offer more robust, industry specific, services, all while creating an enhanced market expertise which have been in demand (Middlemiss, 1998). Baskin and Miranti Jr (1999) call attention to other imperative motives for multinational mergers – the reduction of risk and synergistic efficiencies. In addition, Baskin and Miranti Jr (1999) suggest that one can reduce risk via portfolio diversification which can also be accomplished for public accountancy practices. Public accountancy practices could reduce their risk by subsidiary acquisitions that are positioned in highly dissimilar business sectors as diversification becomes most effective once each portfolio element maintains negative activity correlation coefficients (Baskin and Miranti Jr, 1999). In addition, an accountancy practice could capture higher synergistic efficiency resulting from the implementation of innovative management public accountancy practices (Baskin and Miranti Jr,

1999). Agreeing that corporate risk could be mitigated via diversification, Mueller (2003) continues the discussion suggesting that diversification is a intention to evade a slow or declining growth potential for an accounting practice, which was the issue for top-tier public accountancy practices during the latter part of the twentieth century. Expansion opportunity was through engagement consulting, and as public accountancy practices sought out diversification and increased economic profit, public accountancy practices established alliances with various consulting public accountancy practices, investment companies, real estate public accountancy practices and various other companies. This was the case for Coopers & Lybrand when they acquired Kwasha Lipton, a retirement and benefit management consulting practice (Wootton et al., 2003). With revenues reaching \$80 million, the merger would allow Coopers & Lybrand to not just capture the expanding specialized marketplace, it would also allow them to expand such engagement services, exert expertise that was similar to their acquisition of Kenneth Leventhal and provide access to the target's retirement and benefit notable clientele (Report, 1997).

Although, the twenty-first century encountered mergers between public accountancy practices, the initiation of specialization, globalization and process improvements continue to play a significant process in remaining competitive. The conglomerate of top-tier public accountancy practices has resulted in a more condense and competitive lower-tier industry that demands public accountancy practices to replicate what has been initiated. By the end of the twentieth century, the accountancy industry has illustrated a natural evolution from strategic growth via organic expansion towards globalization, specialization, economies of scale, economics of scope and diversification; however, other public accountancy practices remain idle, attempting to compete via organic growth. Although acceptable, one must question why the latter continues to occur, perhaps it's due to management decision making and assumptions that are bound by the practice or perhaps it's due to the lack of knowing. Ultimately, failure to move beyond the organic growth model, may directly impact strategic positioning and competitive advantages as it has in other industries and business segments (Shih et al., 2007, Zentner, 2008, Harris et al., 2019).

CORPORATE BUSINESS STRATEGIC VALUE – MERGER AND ACQUISITIONS

Mergers and acquisitions are common methods for combining or transforming a firm's operations, and they are an important element of today's competitive economy. This form of corporate strategy is popular among businesses for a variety of reasons, including expansion into new markets, develop new goods and services, acquire talent and technology, generate operational efficiencies, and capitalize on synergistic benefits. Such benefits associated with successful merger and acquisitions transactions can be significant, which is why the decision to pursue such strategy must be made carefully, with a clear understanding of the goals and objectives of the transaction. The two most popular theories for mergers and acquisitions are divided into two categories: value-maximization motives and non-value-maximization motives. Hubris, synergy, free cash flow, and the market for corporate control are some of the competing theories regarding merger and acquisition motives.

A merger and acquisition strategy should be an attractive activity for shareholders who are directly involved, if the activity increases the share value. Value creation can result from factors including the establishment of economies of production scale, enhanced distribution and management specialty, shared technology, the procurement of new distribution channels, human capital, and cross-selling products and services. Non-financial and financial motives for merger and acquisitions also exist together. Financial motivation allows the acquiring company to achieve risk reduction while possibly maintaining the firm's rate of return by allowing it to take on more debt. When two firms that benefit from opposing phases of the cycle combine, their variance in performance is reduced. Non-financial driving forces include the desire to expand management and marketing capabilities, as well as the acquisition of new goods or services. Perhaps the most important management goal for a merger is the possible synergistic value it may establish. Combining business activities creates value in a variety of ways. More efficient management, scale economies, improved manufacturing processes, the integration of complementary assets, the redeployment of resources to more lucrative purposes, market power exploitation, and numerous other value-generating mechanisms fall under the umbrella term of corporate synergy. The advantages of this synergy are the

result of eliminating overlapping responsibilities in production and sales. Mergers and acquisitions are expected to improve company performance as a result of synergies, market power, increased profitability, and risk diversification. Firms that are restricted in the market should combine their efforts by merging or acquiring in order to improve their profitability since the merger and acquisition is not only for the benefit of management, but also shareholders, since it results in an increase in shareholders' wealth rather than each financial institution operating independently (Anthony, 2017, Sahu and Agarwal, 2017).

The concept behind acquiring value is a complex one, with several theoretical roots and conflicting empirical evidence. Jensen and Ruback (1983) outlines reasons why buyers might desire to engage in merger and acquisition strategy, perhaps, first to reduce production or distribution costs and second, to improve financial health. For such a strategy to be economically valuable, the bidding and target firm need to meet the same criteria as diversification strategies so that the two public accountancy practices are more valuable cooperating through some sort of corporate strategy, than operating separately (Barney, 1997). Such cooperation can result in either cost savings or enhancement of the revenue cycle via economies of scope. More importantly, such economies of scope must be less costly for the merged firm than for outside equity holders. Essentially, if the bidding and target firm are strategically related, then the economic value of the two firm together is much greater than if they were operated separately. However, in terms of fit, the study of strategic complementarity between an acquirer and target as a predictor of synergy has produced conflicting findings for two primary reasons: the conceptualization of the fit construct and its link to integration concerns following a merger. By contrast, Bauer et al. (2018) applied exploration and exploitation as two different ways to think about learning to conceive the organizational complementarity among organizations. Bauer et al. (2018) study found that the ability to apply learning modes improves performance, there is a synergistic interaction between exploration and exploitation, ambidextrous post-merger development in exploration and exploitation lowers merger and acquisition success rates, and fourth, acquisition expertise benefits the transfer of pre-merger strategic fit to subsequent activity.

The value generated by merger and acquisition transactions provide value in a variety of ways, and one such way is through synergy (Sinkkonen, 2019). The allocation of resources between the buyer and seller is frequently linked to closeness. If business operating activities are related in various areas, they could combine them via consolidation to achieve synergies (Harrison et al., 1991). Relatedness, according to theory and anecdote, causes shareholders' systematic wealth increases after a merger (Chuang, 2017). The merger and acquisition diversification hypothesis suggests that related acquisitions have a higher synergy-production potential than unrelated ones. In addition, relatedness has been shown to increase in situations where both firms share similarities, and when one compares two businesses that may bring synergy through cooperation, one thing to consider is the allocation of resources between the acquiring and acquired firm (Harrison et al., 1991). Researchers generally connect synergies with operating synergy, which is the result of economies of scope and scale (Bösecke, 2009) and the combination of acquirer and target firms' resources, resulting in revenue and cost savings (Rabier, 2017). To further connect relatedness and performance, Gupta et al. (2021), in particular, contributes to the body of research on target selection in merger and acquisitions, as well as the influence of strategic collaborations on merger and acquisition success and performance. The major goal of this research was to evaluate the influence of related and unrelated merger and acquisition on value creation and innovation in India's non-financial sector companies. The aim of this research was to determine whether related merger and acquisition outperforms unrelated merger and acquisition when it comes to value creation and research and development. According Gupta et al. (2021) research, related merger and acquisition contribute value while affecting research and development negatively.

Complementary research has provided theoretical evidence that when bidder and target firms are related, synergistic value increases (Robinson and Rhodes-Kropf, 2008, Grossman and Hart, 1986, Singh and Montgomery, 1987). Relatedness can be conceptualized as when the acquirer and the target have the same two-digit or four-digit SIC code, a relatedness commonality is presumed (Berger and Ofek, 1995, Nejadmalayeri et al., 2017, Adhikari et al., 2018). These concepts also suggest that the degree of bid-target

relatedness, the number of firms sharing the same relationship between a bidder and a target, should have an impact on merger and acquisition synergy creation. However, the empirical evidence on this relationship is sparse, owing to the difficulties of empirically quantifying bidder-target relatedness. From an economic standpoint, the distinctiveness of a bidder-target connection may influence synergy development through greater investment and or improved operational efficiency. On one hand, mergers and acquisitions create synergy by eliminating underinvestment in relationship-specific projects. The fewer firms that are connected to the bidder-target link, the more significant the underinvestment issue becomes because it is more difficult to resell the relation-specific investment. In this case, a merger of uniquely related bidders and Targets leads to a greater improvement in investments and thus greater synergies.

On the other hand, according to previous empirical research, merger and acquisition synergies are mostly driven by reduced investment spending rather than increased operating earnings (Devos et al., 2009). When fewer bidders share the bidder-target relatedness, overinvestment in overlapping projects is more likely, since reducing such investments unilaterally may lead to greater market share losses for the rivals. A combination of uniquely linked bidders and targets produces synergies by lowering wasteful expenditures that would occur if the two were independent. Liu et al. (2022) looked at how the bidder's uniqueness affects its target relationship, specifically, the number of firms linked with the bidder-target relationship, on merger synergies. The study indicated that unique relatedness is linked to a significantly larger increase in merger synergies than non-unique relatedness. The acquirer's post-merger operating results revealed that the unique relatedness generated synergies through improved operational efficiency rather than additional investment or revenue. In an international perspective, Kwilinski et al. (2019) study found that as a result of mergers and acquisitions, international firms can gain synergies and organizational advantages; however, the economic synergy that results from corporate consolidations is an important incentive for mergers, but it has little societal benefit. As a result, synergistic effects take time to develop, and some of them should not be included when assessing the phase of steady growth.

To appreciate the full economic value in any strategic similarity existing between the bidding and target firm, the newly merged companies must be organized appropriately. The realization of Lubatkin (1987) list of potential sources of strategic relatedness between the bidding and target firm, requires, at minimum, coordination and integration after an acquisition occurs. As an example, to recognize any scale economies, both the bidding and target firm must examine, coordinate and implement processes in the new combined firm that are sensitive to such economies of scale. Essentially, the post-acquisition coordination and integration becomes important if the companies involved are to realize full value and potential of the strategic relatedness, which directed the acquisition. A relatedness ideology, or perhaps hypothesis, has been reconsidered by arguing that sustaining practice relatedness is not an adequate condition for acquiring public accountancy practices in order to achieve and recognize abnormal returns. Barney (1988) suggests that only when a bidding practice encounters private and distinctively valuable synergistic cash flows with a target, unmatched and distinctively valuable synergistic cash flows with at target, or unexpected synergistic cash flows with the target, a bidding practice will only then recognize abnormal returns for shareholders. As such, Barney (1988) suggests that there needs to be a reconsideration of the relatedness hypothesis.

Although firms consider merger and acquisitions for synergistic benefits and relatedness factors, firms also consider access to talent, enhancing niche services and to establish geographic positioning (Sinkin and Putney, 2017). Mergers are becoming more popular among accounting companies in order to acquire talent for development. Creating an internal succession team for the long-term security of both the successor and the acquired company is another aim. The merger not only adds depth of personnel and partners, it also creates possibilities for development, which might lead to increased chances for inside promotion of talent (Sinkin and Putney, 2017). Lee et al. (2018) examined the difference between real assets and human capital in a merger and acquisitions. Ultimately, it is challenging to achieve human capital synergies in mergers since it is difficult to keep and re-deploy the combining firms' workforces, as well as lay off duplicative or less productive staff. However, the study noted that a firm's human capital

relatedness improves its bargaining power over the combined firms' workforces, allowing it to reduce wages and or select which employees stay with the merged organizations. Lee et al. (2018) discovered that when firms have comparable human capital, mergers are more likely and merger returns and post-merger performance are better. Following mergers with high human capital relatedness, reductions in employment and salaries suggest that the combined firm has a greater ability to layoff low-quality and or duplicate employees, which leads to lower labor costs.

Successor firms are frequently seeking to expand or enhance niche services. The client mix for the firm's existing specialty services might be underserved; and an acquired business with the same specialty can provide extra capacity. The acquirers of these firms are typically searching for a larger client base and a broader menu of engagement services, both of which provide potential. These firms frequently refer out basic activities such as auditing, review and complications and specialized consulting, and a merger allows the buyer to keep those services within the newly created company. In many ways, then, an acquisition can be thought of as a way to extend the market reach of a professional services. Through merger and acquisitions, a company can quickly gain access to new geographic markets or industry sectors and in some cases, an acquisition is the only way for a firm to enter a particular market. When performed correctly, a merger and acquisition can help a professional services firm better serve its existing clients and gain efficiencies in operations (Beck et al., 2019).

Essentially, an acquired firm that shares the same specialty as the acquirer can provide additional capacity and expertise and even if the acquired firm does not share the same specialty, it might still have valuable relationships with key decision-makers in the target market. The motivations for firms to engage in spatial dispersion can be grouped into three categories: growth, prestige, and efficiency. The first group, growth, encompasses the desire to increase market share or enter new markets. This strategy is often pursued by firms in declining industries as a way to remain competitive (Dubinsky & Murphy, 1994). Additionally, many larger firms have a geographic growth plan; for example, firms in Detroit may seek to expand into Ohio, Illinois, or surrounding cities. In addition, some firms believe a presence in certain

markets is necessary for their brand's prestige and advances in technology have made it easier for firms to operate in disbursed locations (Sinkin and Putney, 2017).

Researchers have extended synergistic relatedness and studied individual as well as corporate financial decisions in the light of the behavioral consistency theory, which claims that people's desires, attitudes, and personal characteristics can be maintained consistently across a variety of decision challenges (Wernimont and Campbell, 1968). For example, Cronqvist et al. (2011) paper documents the behavioral consistency of Chief Executive Officers' (CEOs) leverage options in their primary homes, as well as the debt ratios of their businesses. According to the research, personal political views have a significant impact on individual investors' and professional money managers' investment decisions as well as equity analyst predictions (Bonaparte et al., 2012, Hong and Kostovetsky, 2012, Jiang et al., 2011). Hutton et al. (2014) investigated whether CEOs' personal political views have an impact on the level of company frugality. Their conclusion indicates that companies with Republican CEOs have more conservative corporate policies in terms of lower leverage ratios, lower capital and R&D spending, less risky investment, higher dividend payouts, and greater profitability.

Elnahas and Kim (2017) extend this research by looking at the consequences of CEOs' political ideologies on their organizations' merger and acquisition choices. The study used CEOs' personal political contributions to determine their political orientations, with the goal of assessing their political and fiscally conservative leanings. The impact of CEOs' political beliefs on their merger and acquisition decisions is crucial since acquisitions are one of the most important investment decisions that CEOs make, which can have a significant impact on shareholders' wealth. Using data on individual financial donations for the years 1993 to 2006, they discovered that company investment choices are affected by CEO political ideology. For example, Elnahas and Kim (2017) study found that Republican CEOs are less likely to engage in merger and acquisition activities; however, when they do make acquisitions, they are more inclined to utilize cash as payment method and their Targets are more frequently public firms from the same industry. Furthermore, when it comes to high information asymmetry transactions that utilize "earnout"

clauses, they avoid such application. CEO political ideology appears to have a significant impact on long-run firm valuation conditional on the merger; however, they detected no evidence that CEO political belief adds value in the short run and all of the findings are robust to controlling for CEOs' overconfidence (Elnahas and Kim, 2017). Hauser (2018) further extended firm-level corporate governance by examining whether having multiple board appointments has an impact on company success. Hauser (2018) used variation generated by mergers that terminate entire boards to shock the appointments of those terminated directors to overcome endogeneity in board appointments. The study found that increased profitability, market-to-book ratio, and the likelihood of directors taking board roles are all linked to board reductions. When directors are located far from the company headquarters, gains in performance were particularly striking. Others, on the other hand, argue that corporate boards are irrelevant. The significance of the board of directors to shareholder value has long been debated, with many doubting whether boards' power is genuine and first-order (Yermack, 2006).

Interestingly enough, research has also examined merger and acquisition activity with gender participation. Levi et al. (2014) aimed to determine whether the presence of women on corporate boards is linked with firms' tendencies to acquire and the premium bid paid. They found that less overconfident female directors are more realistic about merger gains. As a result, companies with women on the board are less likely to acquire and, if they do, pay lower bid premiums (Levi et al., 2014). Specifically, the study utilized the bids from S&P 1500 companies during 1997–2009, and found that each additional female director was linked with 7.6% fewer acquisition bids and 15.4% less bid premium paid by bidders (Levi et al., 2014). The study supports the notion that female executives' influence on acquisition decisions helps create shareholder value. Although, Adams and Ferreira (2009) concluded that, female directors are more likely to participate in monitoring groups and have better board attendance records than male directors, in another study, Haslam et al. (2010) found that Female CEOs are not significantly connected to accounting success in the UK's FTSE 100 firms, but they are negatively linked to stock market performance. In response to mandated changes in Norwegian boards, Ahern and Dittmar (2012) discovered that the quota

for increased female representation on company boards is negatively linked to company performance. Matsa and Miller (2013) further noted that female directors on Norwegian corporate boards were linked to reduced employee lay-offs, higher labor costs, and less revenue. Similarly, Tate and Yang (2015) found that female CEOs contribute to the development of more gender-inclusive corporate cultures in the United States.

In terms of merger and acquisition firm valuation and terms and conditions, Roll (1986), raised awareness of a possible explanation for the takeover phenomenon. This hypothesis is very basic, decision makers in acquiring firms pay too much on average for their targets in the studies that were reviewed. Roll (1986) suggested that when the acquiring firms' valuation of the target comes up with a figure below the present market price, prospective bids are abandoned. Also, when the valuation surpasses the price, bids are produced. If takeover bids do not provide a return, hubris is required to explain why managers continue to pursue them when reflection would suggest that such efforts are certain to be misguided in valuing. Roll (1986) has also advanced the hubris hypothesis, which claims that the benefits to target shareholders are not necessarily synergistic, but rather represent wealth transfers from acquiring firm shareholders. As a result, the hubris hypothesis may be used as the null hypothesis for corporate takeovers since it claims that all markets are strong-form efficient.

In order to ensure a successful merger, it is important that the successor firm carefully consider the type of acquisition plan that will best fit its needs and objectives. In some cases, it may be necessary to create a new compensation plan specifically for the newly merged entity. There are a number of factors that should be taken into account when designing a compensation plan, including areas such as the types of services offered by the successor firm, the geographic locations of the successor firm's offices, the size and structure of the client base, the experience and skills of the employees, synergistic benefits that can be recognized, and the financial condition of the successor firm. Once these factors have been considered, the successor firm can develop a compensation plan that meets the needs of the seller and buyer.

Equity generally dictates how much of the firm's profits each owner is entitled to receive. This can be a fixed percentage, a formula based on owners' billable hours or some other metric. Equity also often determines how much each owner must contribute to the firm's capital account and whether there are any restrictions on distributions from that account. As for buyouts, equity usually dictates how ownership interests are valued when an owner leaves the firm. In a deal structure, the most common method used to calculate the value of a business is some multiple of earnings, revenues, or assets (Sinkin and Putney, 2017). The valuation process is often further complicated by the fact that businesses come in all shapes and sizes, making it difficult to compare one business against another. Furthermore, businesses are constantly changing, which can make it difficult to determine what a business is actually worth at any given moment. Given all of these factors, it's not surprising that there is no single "right" way to value a business; however, for buyers, establishing cost synergistic values and increasing growth potential becomes a dominant factor to consider. If the selling firm has a very low profit margin and is unprofitable, it will be difficult to find enough cost synergies to make the deal work. In terms of revenue growth potential, a key question is whether the acquired firm has a significant customer base that could generate cross-selling opportunities for the acquiring firm's products and services. If there is little or no overlap in the customer base, it may be hard to generate meaningful revenue synergies. Additionally, if the acquired firm's products are not complementary to the acquiring firm's existing offerings, it may be difficult to realize any revenue synergies. Finally, if the acquired firm has a relatively small customer base, it may be difficult to expand into more profitable segments for further growth opportunities.

Just as valuation is important, so are the terms and conditions. There is empirical evidence that stockholders of both target and acquiring firms benefit from corporate mergers that are achieved through tender offers (Dodd and Ruback, 1977, Bradley, 1980). Furthermore, evidence shows that these profits are not the result of a market's re-evaluation of previously undervalued assets (Bradley et al., 1983). The studies note that the target's shares were deemed to have permanently improved in value only if the acquisition was successful, meaning, only if the resources of both firms are combined. The existence of significant overlap

between the acquiree and the acquirer's businesses provides further support for this synergy theory of tender offers, which claims that gaining control over the target allows the acquirer to reallocate the combined assets of the two firms toward more valuable uses. However, none of the above studies have documented the magnitude of the synergistic benefits that may be obtained from successful bids made through tender offers.

To test this, Bradley et al. (1988) examined the synergistic gains by using the revaluation of target-firm and acquiring firm shareholders' combined wealth as a starting point. They also looked at the variables that influence how shares are allocated between the firm's stockholders and document how the split and overall gains have evolved as a result of the tender offer process's changing environment. Bradley et al. (1988) study found that a successful tender offer raises the combined value of the target and acquiring companies by an average of 7.4% in terms of dollar value. The study also noted that competition among bidding firms improves target earnings and lowers acquirer profits, that the supply of target shares is favorably sloped, and that legal and institutional changes have had no effect on total synergistic gains, but have significantly influenced their distribution between stockholders of the target firm and the acquiring company (Bradley et al., 1988). A tender offer is assumed to be a bidding firm's attempt to take advantage of a profit opportunity created by an economic transformation. It may be caused by an external cause such as a supply or demand change, technological improvements, or deliberate investments by the bidding company. Bradley et al. (1988) essentially argues that if there are more than one firms capable of effecting a value-increasing allocation of the target resources, the firm with the ability to realize the greatest synergistic gain will obtain control of the target.

According to Sinkin and Putney (2017) the value of the acquired firm are driven by three key components to the terms of a transaction: price, payment schedule and earn-out. The price is what the successor firm pays for the business, and is generally expressed as a multiple of some metric like EBITDA or multiple of gross revenues. The payment schedule is how that purchase price will be paid out, and can be structured in a variety of ways. An earn-out is a portion of the purchase price that is contingent on the

performance of the business after the sale, and serves to align the interests of the seller with those of the buyer. The key to negotiating good terms is understanding what each side wants. The seller wants to maximize the upfront payment, while minimizing the risk that they will not be paid at all if the deal terminates in the future. The buyer wants to minimize the upfront payment, extend the earn-out provisions and connecting the payout to client retention. The key to a sound agreement is to keep the interests of both companies in mind and make sure that the terms of the merger are fair to both. The way a sale or acquisition is structured needs to fit the situation, especially true for the seller. The structure of a sale should be different depending on whether the seller is prepared to immediately slow down or retire. For sellers wanting to continue working full time, and who are approaching retirement but realize that the transition of their business, and therefore the value, will be improved if they begin acclimating their clients to the incoming firm now. Although they recognize the need for a succession plan, they are hesitant to cede control of their professional day-to-day life as well as their income.

The ultimate goal of any merger or acquisition is to create shareholder value (Haspeslagh and Jemison, 1991) rather than capture value. Ultimately, the true value realized in any acquisition depends upon how well the combined entity identifies, manages and executes on value creation and value capture opportunities. Bidding public accountancy practices can establish specific avenues to navigate more successfully the value creation process by following a well-defined, disciplined and transparent approach to creating value and tracking synergies. A common approach to achieve this is via two most frequent mentioned strategies behind mergers and acquisitions: cutting operational costs and increasing revenues (Amel et al., 2004, Berger et al., 1999). As an example, Pricewaterhousecoopers (2017) follows the Value Drive Lifecycle approach, which documents key steps to delivering deal value and assists buyers in capturing synergies. Launching integration efforts to capture deal value commences with synergy analysis at pre-announcement due diligence to tracking synergy achievements subsequent to the deal close. Essentially, similar to other studies, the actions follow a sequence of coordinated steps to identify, prioritize, execute and track the various drivers of value across the integration continuum.

Although enacting a merger and acquisition strategy may appear logical, it can bear significant issues and the existing literature surrounding post-merger performance of bidding public accountancy practices is divided (Agrawal et al., 1992, Langetieg, 1978, Asquith, 1983, Mandelker, 1974, Malatesta, 1983); nevertheless, merger and acquisitions can maintain significant source of value and opportunity. For example, Sinha et al. (2010) found that the impact of mergers and acquisitions on the financial efficiency of the studied financial institutions in India had a significant change in shareholder earnings and there were positive correlations between the financial performance and the merger and acquisition deal, while in the long run, the bidding firm was able to generate value. In addition, the utilization of cost cutting techniques and revenue enhancements have shown to improve profitability gains, for example several merged banks in European institutions (Campa and Hernando, 2006, Cornett et al., 2006) and between the merger involving Antena 3's takeover of La Sexta in October 2012 (Romero-Martínez et al., 2017).

What has been identified is that mergers and acquisitions are very common and are an economically important corporate strategy; however, a careful implementation and measurement process is essential for success. What is less clear is whether such strategies create superior financial performance and strategic advantages. In particular, how has the merger and acquisition corporate strategy directly impacted the economic value of the bidding firm within the accounting industry. A technique to measure this is examining four adjusted accounting measures of a public accountancy practices' economic performance and competitive advantage: return on invested capital (ROIC); economic profit (EP), market valued added (MVA) and Tobin's q and benchmark the performance to the S&P 500. Barney (1997) argues that when taken these four adjusted accounting measures together, it provides a clear picture of a firm's true economic performance and competitive advantage.

Studies suggest that mergers are organized to enhance shareholder value and subsequently attribute such gains towards efficiency improvement expectancy, strategic augmentations, industry influence, the readiness and development of internal wealth and the overall risk decline from diversification (Betton et al., 2009). Studies surrounding stock takeovers illustrate that bidding companies generally breakeven;

however, the newly merged equity value of the bidding and target companies increase due to the actual takeover (Healy et al., 1992). The upsurges in equity value are characteristically attributed to various unmeasured sources of material economic synergistic advances. Although merger activity tends to be one of the most studied topics in corporate finance, there are still numerous issues yet to be solved. While empirical research tends to concentrate upon daily stock returns on announcement dates, few examine the long-term performance of acquiring companies subsequent to the combination, and how such performance impacts the private sector lacks in its entirety. Literature suggests that such companies experience negative abnormal returns during the first three years subsequent to a merger (Langetieg, 1978, Asquith, 1983, Magenheina and Mueller, 1988) and such findings guided Jensen and Ruback (1983) to suggest that the post-merger results in negative abnormal returns are disturbing as they differ from market efficiencies and alterations in stock prices throughout takeovers, which perhaps overestimate future efficiency enhancements.

The acceptance of financial underperformance may not be justified as Langetieg (1978) argues that post-merger performance is not considerably dissimilar from a controlled organization in the same industry. In addition, the studies by Mandelker (1974), Malatesta (1983) and Coffee Jr et al. (1988) indicated any significant post-merger underperformance; although both Coffee Jr et al. (1988) and Franks et al. (1991) did not indicate any significant underperformance over the first three years post-merger. Furthermore, empirical literature tends to examine post-merger returns collectively apart of a more significant study that centers around announcements; therefore, an exhaustive examination fails to occur on long-term performance. Another issue pertains to the adjustment for organizational size which is argued to be imperative for studies involving long-term performance (Dimson and Marsh, 1986). And finally, empirical research has incomplete realization in linking the equity value advances to improvements in subsequent corporate performance (Caves, 1989). As such, advances in equity value may be attributable to capital market inefficiencies, ascending from the establishment of overvalued security.

Interestingly enough, Agrawal et al. (1992) conducted a thorough examination of companies post-merger performance and noted that, subsequent to adjustments for organizational size and beta risk, acquired companies' stockholders experienced a statistically significant capital loss, around ten-percent over five years post-merger, and neither organizational size nor beta were the causations of the decline. In order to conclude whether actual equity value advancements in takeovers are from economic gains or from capital market inefficiencies, numerous empirical research examined stock price impacts for unsuccessful takeovers (Dodd, 1980, Asquith, 1983, Dodd and Ruback, 1977, Bradley et al., 1983, Ruback, 1988). For example, there is empirical evidence to show that stockholders of both the target and acquired firms benefit economically from takeovers via tender offers (Dodd and Ruback, 1977) and these profits are not the result of a securities markets reappraisal of formerly undervalued assets (Bradley et al., 1983) and that a successful tender offer increases the combined acquiring and target firms on average of 7.4% (Bradley et al., 1988). However, such literature fails to differentiate amongst the real economic advancements and market inefficiency. What is indicated is that stock prices revert back to pre-offer levels for targets of unsuccessful mergers, which corresponds to the loss of such predicted premium. In addition, due to the anticipation of the projected real economic advances is similar to the market mispricing; therefore, it becomes challenging to envision a study that could resolve the ambiguity. Gains from mergers perhaps could arise from numerous sources similar to operation synergies, the recognition of tax savings and even the reduction of professionals.

Healy et al. (1992) examined organizational performance subsequent to a merger for the 50 largest mergers in the US between 1979 and through mid-1984. The study found that merged companies indicated a significant improvement towards asset productivity compared to the competed industry, which led towards increased operating cash flow returns (Healy et al., 1992). In particular, increased strength was displayed within companies that maintained a highly overlapping business. Further, there was a positive correlation between post-merger operating cash flows and abnormal returns on stock upon the publicized announcement, which would indicate that the expectations of future economic improvements trigger the

equity reevaluations. Almeida et al. (2011) suggests that companies that are in need of capital liquidity, become motivated to enact merger strategies, especially in industries that require significant capital investments, while Fulghieri and Sevilir (2012) predict that the likelihood of establishing predicted synergies subsequent to combinations is greater with merges enacted via scope economies rather than scale economies. In relation to establishing synergistic affects, Fee and Thomas (2004) and Shahrur (2005) suggest that companies that maintain monopsony power, horizontal mergers incur significant synergies, while Klein et al. (1978) argue that the motivation of vertical mergers is a result from the ability to extract collusive rents from maintaining additional market power.

Andrade et al. (2001) has noted that empirical research, have neglected to illustrate the relationship between value gains and the fundamental synergies, as the use of short-term abnormal returns upon announcements of mergers are used as the metric and definition of value gains. Maksimovic et al. (2011) and Fulghieri and Sevilir (2012) illustrates that synergistic efficiency gains are time sensitive as companies continually remap boundaries for years subsequent to mergers only if the merging companies cooperate regarding the establishment of such synergies. Existing literature appears to categorize mergers similarly, within tiers, all erected via similar intentions, while researchers' reason that the basis and enormity of synergies and the latent biases differ across mergers. Furthermore, research on merger synergies either categorize related and unrelated as similar relationships all guided through parallel intentions (Bhagat et al., 2005) or segregate mergers to quarantine precise synergies (Almeida et al., 2011, Fan and Goyal, 2006). Moreover, Almeida et al. (2011) suggests that access to capital, motivates companies to commence in merger activity, particularly within highly capitalized asset industries. Furthermore, Fulghieri and Sevilir (2012) argues that expected post-merger synergistic levels are greater for mergers encouraged by scope economies compared to scale economies (Alhenawi and Krishnaswami, 2015). Existing literature has also acknowledged and controlled for endogeneity in regards to combination decisions which establish downwards biases in the excess of post-merger values (Matusaka, 2001, Graham et al., 2002, Campa and Kedia, 2002), all while ignoring the self-selection issues that contribute towards post-merger Tobin's q

upwards biases (Jovanovic and Rousseau, 2002). Via the examination of both Tobin's q and the excess in value, one could regulate the various self-selection biases that could occur.

PUBLIC ACCOUNTING GROWTH STRATEGIES – MERGERS AND ACQUISITIONS

The public accounting industry has faced challenges as many have begun to struggle with how to generate additional revenues while reducing costs in a fragmented segment. More concerning, there appears to be conflicting market pressures that collide, directly affecting the firm's profitability. Within a highly competitive industry, public accountancy practices typically are faced with price competition, firm market valuation begins to be challenged, barriers to entry collapse, and growth in market share shrinks as firm's products, unknowingly, shift away from a heterogeneous to homogeneous where consumers conceptualize no differentiation. Although most public accountancy practices attempt to rationalize and dismiss their competitive positioning as 'economic trend's' or 'seasonality', many fail at properly addressing the competitive nature of how their industry is slowly changing. As a result, public accountancy practices begin to feel the pressure and discomfort that resides upon them through competitive forces, to which many begin to implement non-strategic measures that provide no relevant changes. For example, public accounting practices encounter both homogeneous and heterogeneous issues. As a result of the competitive nature, services have forced public accountancy practices to commence a cost leadership business strategy to which costs are suppressed in order to gain margin. As costs are reduced, public accountancy practices can enjoy temporary cost advantages; however, as competitors gain additional insight, such advantages erode. On the other hand, operationally it appears that there is a necessity for public accountancy practices to employ individuals who are, in their own nature, differentiated, and as such, are heterogeneous. Heterogeneous products, in this case individuals, have a differentiated business strategy to which they begin to dictate price, much in conflict of the cost leadership business strategy surrounding the public accounting industry. Needless to say, as both collide, it becomes extremely difficult for public accountancy practices to properly compete as there is a continuous pull and tug. More importantly, as public accountancy practices cannot suppress their most dominant costs, employment salary, the threat of

substitutes emerge (e.g., alternative tax software products) which places even more pressure on the industry. Perhaps public accountancy practices need to shift towards a strategic management model in order to remain competitive.

In the accountancy industry, there is an opportunity for public accountancy practices to evolve into a more strategic position that, perhaps, that could be more appropriate for longevity. Our attention shifts from types of actions public accountancy practices can take within a single market or industry in order to gain competitive advantages, towards actions that public accountancy practices can take to gain competitive advantages by leveraging their core competencies, existing resources and capabilities across several markets or industries simultaneously. Implementing a merger and acquisition strategy as a corporate strategic discipline option to diversify and gain synergistic benefits is difficult to ignore. Deloitte (2016) noted that merger and acquisition deal making is poised to accelerate, throughout 2017, and perhaps significantly extend the increase in deal making identified during the latter part of 2016. This demand is driven by record-high levels in stock prices, lower historical interest borrowing rates and increased levels of cash-on-hand public accountancy practices have (Deloitte, 2016).

Thus far, we examined the public accounting industry growth crisis and historical perspectives on mergers and acquisitions within the public accounting industry. We now will examine post-merger performance and measurement techniques to evaluate firm performance. Limited attention has focused upon various merger and acquisition implementation strategies that establish diversification, which can be a source of competitive advantage. Public accountancy practices engaging in diversification strategies should be aware of various merger and acquisition strategies that can lead towards competitive advantages. As discussed, the number of public accountancy practices that have consolidated and diversified their engagement services over the past several decades are astounding. What is apparent is that mergers and acquisitions as a corporate strategy is common and economically imperative. What is less apparent is whether such strategies establish superior profits for bidding public accountancy practices. In particular,

under what conditions will merger and acquisition strategies become a source of economic profits for the bidding firm.

The value of any merger and acquisition strategy is contingent upon the market context to which such strategies are deployed. To the scope a merger and acquisition provides a firm to take advantage of competitive opportunities or to defuse competitive pressures, the merger and acquisition will enable a firm to diminish their costs and, or, improve their revenues, leading towards an economically valuable position. However, the merger and acquisition depends upon whether the combination is strategically related or unrelated, as the latter is argued will not establish superior economic performance for the bidding and target public accountancy practices (Barney, 1997, Alhenawi and Krishnaswami, 2015). In this discussion section, we will be focusing our attention on areas to which a firm can establish cost advantages specifically through cost advantages.

ECONOMIES OF SCOPE

In order for any strategic corporate diversification to be economically valuable, the combined companies must recognize some economy of scope within operations and the firm must become more efficient in managing such economies of scope via hierarchical types of governance (Williamson, 1975) compared to intermediate governance or market governance. The presence of economies of scope, alone, is not an adequate situation for a diversification strategy to be economically valuable. Precisely, in order for corporate diversification to become economically valuable, two conditions must occur.

Economies of scope amongst the various business segments must be recognized and management over such economies of scope must occur via hierarchical forms of governance compared to another intermediary or market methods of governance. The establishment of economies of scope become valuable when the value of the multiple business segments, to which the firm operates, is greater as a whole, than if operated independently. For example, consolidated measures between two independent public accountancy

practices that have a reliable operational production can engage in and recognize economies of scope, only if at the combined level, the net present value of its future cash flows exceed the summation of the present value of net cash flows, collectively, between the public accountancy practices operating alone, independently. This will be explained in greater lengths in the upcoming discussions. According to Barney (1997) the thought is formulized as:

$$NPV \sum_{i=1}^n B_i > NPV(B_1) + NPV(B_2) + \dots + NPV(B_n) \quad (1)$$

whereas, the $NPV(B_i)$ represents the present value of Business (i). If a firm fails to recognize any economies of scope, then there is no economic rationale to operate such business separately.

Economies of scope are deemed valuable if the worth of the public accountancy practices to which a firm operates is greater-than the overall worth of such public accountancy practices operating independently (Barney, 1997). Therefore, if there is no presence of economies of scope, then there is no logical economic rationale to operate such public accountancy practices simultaneously. Generally, economies of scope occur due to cost savings and, or, revenue enrichments that a firm incurs as a result from the various business segments in which they operate. Commonly, this can occur when multiple business segments utilize a common input, while the cost of the input becomes incorporated within the firm's production or service volume. Simply, for economics of scope to become economically beneficial, first, it must truly exist and second, it also must be less costly to recognize such economies within both an intermediate and hierarchical form of governance (Williamson, 1975, Teece, 1980, Williamson, 1985b, Williamson, 1985a). Essentially, if a firm has established some sort of valuable, rare and costly to replicate resources and capabilities and desires to utilize such resources and capabilities in establishing economies of scope, then such actions should be implemented within the firm boundaries (Williamson, 1975). In doing so, it allows a firm to maintain its scope-based advantage proprietary and a capture more of the economic profits that are established. However, if another firm also maintains such valuable, rare and costly to

replicate resource to establish economy of scope, but the cost to acquire or develop such resources are high, a corporate diversification strategy and the utilization of hierarchical governance to recognize such potential could be too much to overcome (Barney, 1997), therefore, an intermediate governance structure would be favored in order to realize the economies of scope.

Collectively, the logic behind the realization of economies of scope advocates that corporate diversification becomes economically valuable only if alternative methods of realization of such economies are not efficient. In particular, governance via market or intermediate methods to realize economies of scope become less effective when there is an extensive transaction-specific capital investment required in order to recognize such scope and when such scope is deemed to be a source of sustained competitive advantage (Barney, 1997). However, exploiting operational economies of scope come in various forms which can lead towards corporate diversification. Some of these forms consists of operational economies of scope, financial economies of scope, anti-competitive economies of scope and employee and stakeholder incentives for diversification.

At times, economies of scope could imitate connections between business operations to which a firm materializes. Such operational economies of scope characteristically reside within a firm's shared activities and their corresponding core competencies. Shared activities between business operations may become a source of operational economies of scope for diversified public accountancy practices when a firm's value-chain operation activities can be shared. This is common amongst related diversified public accountancy practices to which less-than seventy percent (70%) of firm revenues comes from a single business operation. Although there are abundant methods to which a firm's activities can connect business segments together, what is apparent is that such shared activities can increase value via the reduction of costs or through increasing ones willingness to pay for a product or service (Rumelt, 1974, Porter and Kramer, 2002, Ansoff, 1965).

ECONOMIES OF SCALE

Public accountancy practices can maintain cost advantages in a variety of ways over their competitors even when competing public accountancy practices sell homogeneous products or services. One method in accomplishing this is via size differentiation and economies of scale. It is generally perceived that larger public accountancy practices have cost advantages over smaller public accountancy practices (up to a point in time) as there tends to be significant economies of scale in segments such as manufacturing, marketing, distribution and services. Economies of scale theory suggests that as the volume of production increases, the allocated cost of such production decreases until it reaches an optimal level of production. Subsequent to that, diseconomies of scale occur to which the average costs per unit increases. Economies of scale can be represented computationally as follows:

$$AC(q) = \frac{TC(q)}{q} \quad (2)$$

whereas, $AC(q)$ represents the actual average cost of producing a good or service (q), $TC(q)$ represents the total costs of producing a good or service (q), and (q) represents the quantity of a good or service being produced (Barney, 1988).

Equation (2) illustrates that a firm will recognize economies of scale as long as $AC(q)$ decreases in conjunction when q increases. When public accountancy practices recognize heightened levels of q , or production, they are typically able to acquire and utilize such specialized technology, erect larger operations, create employee specialization all while having the ability to allocate such overhead costs over more units thereby reducing overhead allocated costs per unit. However, there are limitations to economies of scale as if public accountancy practices become large enough and grown beyond the optimal size, a smaller firm who maintains production at the optimal level, could begin to obtain cost advantages. In particular, limitations on physical limits and firm size (Moore, 1959, Lau and Tamura, 1972), managerial

diseconomies (Hamermesh and Rosenbloom, 1989), worker motivation (Hackman, 1980) and distance to markets and suppliers illustrate limitations on recognizing economies of scale.

LEARNING CURVE ADVANTAGES

Another possible source of cost advantage relates to experience differences and the learning curve economies. In some circumstances, companies that have extensive experience in manufacturing a product or service will recognize the lowest cost in the market that leads towards a cost advantage. The connection between the collective production volumes and cost is what creates the learning curve. The learning curve is closely correlated to the economies of scale curve, as the only difference is that the relationship is between the cumulative volume and average unit cost, compared to the volume of production at a given point and average unit costs. Essentially, the learning curve theory applies whenever the cost of completing a function decreases as a function of the cumulative number of times a firm has engaged in that function (Lieberman, 1970, Lieberman, 1984, Barney, 1997). The learning curve can be computed as follows:

$$y = ax^{-\beta} \quad (3)$$

whereas, (a) represents the amount of time to produce the first unit, (x) represents the total number of units produced, (y) represents the average time to produce all (x) units and β represents the rate of learning in output production (Barney, 1988).

Via utilizing equation (3), a firm can compute their learning curve to anticipate the average time in producing a product or service. In particular, suppose for an accountancy firm, it takes one professional 60 minutes to complete a Client's A 20X1 1120 tax return preparation engagement. Ideally, upon the following year 20X2 1120 tax return preparation for Client A, the additional learning should essentially take less time, say 40 minutes, if the same professional prepares the return. Based on these two observations, it is possible to compute the rate of learning for Clients A 1120 tax return preparation engagements. The time to produce the first tax return, a , is 60 minutes, the total number of tax returns produced, x , is one (1) and the average

time to produce the returns, y , is 50 minutes $[(60+40)/2]$. Therefore, the rate of learning β , equals - 0.2630344 $[\log (40/60) / \log (2)]$ and the learning curve for Clients A 1120 tax return preparation is as follows:

$$y = (60)(x)^{-0.2630344} \tag{4}$$

Interestingly enough, equation (4) can be utilized to anticipate costs of public accountancy practices services in the future in addition to benchmarking the relative costs for two different public accountancy practices and engagements. For example, referring to Table 2, assume the following for Firm A and B:

| TABLE 2: Learning Curve Analysis | | |
|---|--|--|
| | Firm A | Firm B |
| Time to produce 1 tax return (in minutes) | 60 | 50 |
| Time to produce 2 tax returns | 50 | 40 |
| | Learning Curve Equation | Learning Curve Equation |
| | $y = (60) (x)^{-0.2630344}$ | $y = (50) (x)^{-0.3219281}$ |
| Average time to prepare 3 tax returns: | $y = (60) (3)^{-0.2630344}$ = 45 minutes | $y = (50) (3)^{-0.3219281}$ = 35 minutes |
| Total time to prepare 3 tax returns: | = (3) (45) = 135 minutes | = (3) (35) = 105 minutes |
| Average time to prepare 30 tax returns: | $y = (60) (30)^{-0.2630344}$ = 25 minutes | $y = (50) (30)^{-0.3219281}$ = 17 minutes |
| Total time to prepare 30 tax returns: | = (30) (25) = 750 minutes | = (30) (17) = 510 minutes |

As illustrated, comparing Firm A’s learning curve production time and costs to Firm B’s learning curve production time and costs reveal that Firm B is much more productive, which results in lower costs

in tax preparation; however, a further analysis would need to be conducted to determine the quality of clientele and types of returns prepared as larger returns are deemed to be more complex and time intensive.

The learning curve model that is recapitulated in equation (3), in addition to the illustration in Table 12.1 has been utilized in establishing a model of cost-based advantages which correlates learning with market share and average production cost. The most significant advocate of the learning curve ideal in establishing competitive advantages has been led by the Boston Consulting Group (Henderson, 1974, Group, 1970). Essentially, the learning curve theory appears easily understood – the first firm that shifts successfully down the learning curve will establish cost advantages over their rivals, simply as Firm B did in Table 12.1. In order for one to move down the learning curve and recognize lower costs, a firm would need to achieve higher levels of cumulative volume of production (Barney, 1997). Theoretically, public accountancy practices which have the ability to decrease learning curves, reduce the average cost per engagement, can accept additional work due to the lower preparation time incurred all while establishing costs advantages over rivals. When selling such output, public accountancy practices are, essentially, increasing market share.

The learning curve theory has been criticized suggesting that although gaining market share is likely, the actual costs to achieve this acquisition is expensive (Montgomery and Wernerfelt, 1991, Buzzell et al., 1975). When a firm acquire a share in the market, it often will need to increase advertising and, or, other consumer acquisition methods and reduce prices. Certainly, Barney (1997) implies that the mere quantity of market share that is acquired often equals to the value of such market share by reducing a firm's production costs. Therefore, Montgomery and Wernerfelt (1991) and Buzzell et al. (1975) advocate that in order to move down the learning curve via acquisition of market share, are most likely to result in generating only competitive parity. Essentially, if there is a competitive market for market share, then any acquisition of market shares will only generate average economic returns. It is only upon competitors unknowing of such share value discrepancy can acquiring public accountancy practices acquire a source of competitive

advantage. This typically occurs within emerging industries to which sources of value may not be widely understood.

Another criticism towards the learning curve model is, theoretically, if a firm is focused upon the application of learning curve and its low-cost approach, it assumes that there are no other corporate or business strategies that can be logically implemented. Most industries maintain some characteristics of other strategies and, therefore, the harsh application of the low cost, learning curve theory could be deceptive (Hill, 1988).

Criticisms aside, there is truth that within numerous industries, public accountancy practices that can achieve increased cumulative levels of production, all else equal, will recognize lower average production costs; therefore, maintaining experience within the production components can lead towards cost advantages.

LOW-COST PRODUCTION

Public accountancy practices that produce similar products or services, within an industry, could create cost differences if there is access to low-cost production factors which are utilized by a firm in conducting business activities. Such inputs would include lower cost labor, capital, land and raw material. A firm that can establish lower cost production access, within one or more business activities, will most likely recognize lower economic costs compared to its rivals (Barney, 1997). Consider a low-cost access to production within the globalized copper industry. Between 1984 and 1986, copper prices were \$0.61 per pound. As copper demand outpaced supply in the late 1980s, prices subsequently rose to \$1.47 per pound in the mid 1990s. Due to the excess demand, market entry occurred via global mining public accountancy practices located in Australia, Japan, South Africa and the United States, which opened mines in Chile and throughout South America. Compared to its rivals, the South American mines maintained richer sources of copper and through the application of mining technology, the mines were able to extract more ore at

lower costs compared to its rivals. Therefore, as copper supplies increased, prices decreased, and it became difficult for traditional, but less rich mines, to endure profitability (Friedland and Ortega, 1995). Differential access to cost can become important determinants of maintaining costs advantages, especially when a public accountancy practices maintains higher volume of production, which can lead towards increased supplier purchasing power for raw materials and other supplies, which may not be available to smaller public accountancy practices (Aguilar and Bhambri, 1983, Taylor and Archer, 1996).

Public accountancy practices, may obtain cost advantages via the utilization of different technologies in managing their businesses. Although it has been suggested that larger public accountancy practices may maintain technological cost advantages which enable public accountancy practices to achieve economies of scale, public accountancy practices that deploy technology-based cost advantages that don't depend on economies of scale can also be achieved. Commonly, the technology based cost advantage dialogues, focus attention upon the utilization of tools to manage business operations similar to machines and computers; however, such differences could create cost differences, even if both public accountancy practices are similar in production size, as found with the steel manufacturing industry, semiconductors, automobiles, consumer electronics and other products (Ghemawat and Stander III, 1992, Shaffer, 1995, Monteverde and Teece, 1982, McCormick and Stone, 1990). Interestingly enough, such technological cost advantages extend to service industries as Schultz (1989) indicated between discount brokers Charles Schwab and Kaiser Permanente.

Throughout advanced economies, productivity expansion is contingent upon technology innovation and the organizational alterations led by such technology. For several decades, due to the rapid technological innovation of computerization, the industry has expanded to a quality adjusted price decline of 20% or more per year (Brynjolfsson and Hitt, 2003, Berndt and Griliches, 1993, Gordon, 2000) although such decline has slowed in the early twenty-first century (Byrne et al., 2015). As such, many companies invested and implemented large and small modernizations in work processes, business organization, supply-chain management and consumer relationship management software applications (Brynjolfsson and

Hitt, 2003) all attempting to streamline processes, gain access to valuable data, lower costs and other competitive cost reductions and improvements in order to remain relative and competitive. Such investment has contributed to output growth, especially at the turn of the twenty-first century (Oliner et al., 1994, Jorgenson and Stiroh, 1995). Interestingly enough, Brynjolfsson and Hitt (2003) found that productivity output growth, from the effect of computerization, during the first year of investment and implementation correlates to its normal returns on computer investments; however, such effects are five-times more over longer periods – five to seven years – for public accountancy practices examined during 1987 to 1994.

In the public accounting industry, computerization has played a significant role in providing services to domestic and global clientele. As expected, the public accounting industry underwent a tremendous shift at the turn of the millennium, due to the rapid changes in information technology (Elliott, 2000), in particular to audit and knowledge sharing software applications. Interestingly enough, the automation of audit tasks and the utilization of specialized audit software has replaced intensive labor all while restructuring the audit engagement teams (Banker et al., 2002). More importantly, the utilization of progressive technology that shares knowledge bases throughout various business segments, has enabled public accountancy practices to leverage human resources more efficiently (Gogan et al., 1995). Implementation of technology can be expanded to incorporate, not just the technological hardware, but also any organizational process such as the quality of relationships between labor and management, a public accountancy practice organizational culture and the quality of managerial controls (Barney, 1997, Ouchi, 1981, Pascale and Athos, 1981, Peter and Waterman, 1982, Womack et al., 1990), all to which can directly impact a public accountancy practices economic costs (Barney, 1991).

With the prompt improvements in information technology, various literature as emerged within practitioner oriented accounting journals to which debate how one can continue to evolve with the current technology (Smith, 1997, Zarowin, 1994). In order to rationalize an investment in information technology, executives need to comprehend the potential benefits directly stemming from an investment. While there are common insights that information technology investments by public accountancy practices can enhance

firm productivity (Lee and Arentzoff, 1991), how information technology impacts business performance with public accountancy practices with and without technology (Banker et al., 1990), information technology investments on firm performance within various industries such as manufacturing (Barua et al., 1995), banking (Parsons et al., 1993), insurance (Francalanci and Galal, 1998), healthcare (Menon et al., 2000) and retailing (Reardon et al., 1996), improvement in organization structure, workflows and operations (Lucas Jr et al., 1996), Banker et al. (2002) extended such studies to evaluate the impact information technology has on public accountancy practices. Interestingly enough, the study indicates that there is a significant productivity gains subsequent to an information technology investment for public accountancy practices.

Most recently, advancement in artificial intelligence is rapidly changing the way financial institutions operate, with artificial intelligence replacing core functions due to cost savings and operational efficiencies (Dilek et al., 2015). Recent advancements in artificial intelligence have improved significantly, especially in the accounting area, which has shifted its attention from pen and paper to computer and software input. Accounting has a long history of artificial intelligence applications, dating back more than 25 years and concentrated on financial reporting and auditing (Greenman, 2017). Artificial intelligence is now in widespread use throughout the accounting industry, generating trepidation and anxiety among professionals about the long-term relevance of human accountants in corporate plans. According to calculations performed by the University of Oxford in 2015, accountants have a 95 percent chance of losing their jobs to machines that take over the function of data analytics and number crunching (Griffin, 2016). However, according to Greenman (2017), when technology advances, some jobs are lost and others are gained. This implies that as artificial intelligence improves accounting's time-consuming, laborious and tedious traits, it will offer more efficient consulting services. With the advent of computers, accounting systems and operations have gone from paper records to computer-based formats. The invention of computers has enabled artificial intelligence in applying the principles of self-management, self-tuning, self-configuration, self-diagnosis, and self-healing to produce optimal results in accounting activities.

Accounting operations have been positively influenced by improvements in computer technology, software and expert systems, and more recently, artificial intelligence. Improved accuracy and speed, more external and internal reporting, less paper usage, greater flexibility and efficiency, and improved data-based management are a few of the advantages that can be obtained by implementing computer and expert system in accounting (Lim, 2013). Odoh et al. (2018) extended this research and examined how artificial intelligence will influence accounting firm performance in South East Nigeria. The study found that as a result of artificial intelligence's significant role in accounting functions, such usage improves firm performance. As a result, accountants and accounting businesses should continue to improve their artificial intelligence knowledge in order to increase the performance of accounting functions and lower accountancy costs. At present, neither the public accountants nor their clients are utilizing artificial intelligence extensively; however, firms are currently conducting some training on these technologies, but it is not extensive (Bakarich and O'Brien, 2021). Although artificial intelligence shows significant growth potential in the industry, there are some risks that have to be considered such as legal and technology risk (Wu, 2021), ethical, social and economic implications for accounting (Mardini and Alkurdi, 2021).

LITERATURE REVIEW REFLECTION

During the literature review, we explored historical perspectives on merger and acquisition strategies that public accountancy practices have implemented in order to continually evolve, examined relatedness in firm merger and acquisitions and value creation via synergy. We also discussed rational behind merger and acquisitions, specifically the establishment of cost efficiencies, increased scale economies, the development of market niche, access to workforce, and to expand services. We also discussed the behavioral consistency theory, managements ideologies towards mergers and acquisitions and touched upon gender influences. Finally, we discussed various merger and acquisitions growth strategies that establish cost efficiencies, increase scale economies, stakeholder value added, economic profits. Now that we understand this position, we now can explore further, and reflect upon, merger and acquisition action research methodologies that assist with properly measuring strategic advantages. The

literature review also provided insight on the highly competitive structure of the public accountancy industry and how firms begun to consolidate and differentiate in order to gain efficiencies. According to the literature, as a shift has occurred, public accountancy practices should begin to think about how to remain competitive simply beyond populist measures. Such measures are focused upon mergers and acquisitions in order to maximize cost efficiencies, scale economies, stakeholder value added, and economic profits.

As we have illustrated, there are numerous reasons to which a practice may desire to engage within a merger and acquisition – to reduce production costs, to improve financial health and to reduce distribution costs. However, as we have seen, in order to be economically valuable, a target firm would need to have similar related criteria for them to be deemed valuable. This can be achieved through cost-cutting techniques and or revenue cycle enhancements through scope economies. According to the literature, the combined entity value should be greater than the buyer and target acting alone separately. Furthermore, to recognize any sort of scale economies, the consolidated entity must implement processes to ensure the longevity of the synergistic values. We have also seen that the ultimate goal of any merger and acquisition is to create shareholder wealth rather than simply capturing additional value. True value depends upon how well the combined entity can identify manage and execute value creation. Buyers can establish particular path to navigate more successfully through the value creation process by having well defined disciplined and transparent implementations in order to cut operational costs and increase revenues.

Literature also suggests that subsequent to a merger or acquisition strategy implementation, the combined entity experiences negative abnormal returns during the first three years as it differs from market inefficiencies; however, merged public accountancy practices indicated a significant improvement in their asset productivity compared to the industry which led to increased cash flows. Furthermore, the literature noted that the likelihood of creating synergies subsequent to a combination is increased with mergers via scope economies compared to scale economies.

The purpose of this thesis is to highlight the conditions and actions under which post-merger and acquisition strategies could maximize scale economies, stakeholder value added and economic profits for two merged public accountancy practices. In particular, this thesis will analyze a merger and acquisition opportunity and measure its success through utilizing and implementing common approaches to achieve synergy values, through reducing operational costs and increasing revenues, and measure post-merger financial performance and strategic advantages governed by the four adjusted accounting measures of a public accountancy practices economic performance and competitive advantage. This contribution to the literature will not only extend existing theory to the private industry, but will also establish a foundation and understanding of how post-merger and acquisitions impact scale economies, stakeholder value added and economic profit, specifically, for the accounting industry.

CHAPTER 3: MERGER AND ACQUISITION ACTION RESEARCH METHODOLOGY

Public accountancy practices that can establish relatedness amongst the bidding firm and target, can generate additional valuable cash flows compared to other bidders, which can lead to abnormal returns for shareholders (Barney, 1988, Anthony, 2017, Sahu and Agarwal, 2017). As documented, Barney (1988) suggests that public accountancy practices cannot foresee above-normal returns from mergers if other bidding organizations has similar resources that provide similar cash flow values, if so, perfect competition is likely to transpire. Competitive advantage theory continues to extend beyond the acquisition phase to which public accountancy practices can retain competitive advantages when there is a creation of additional economic value, such as scale economies, increased stakeholder value added and economic profit, compared to rivals, to which economic value is defined as the difference between the perceived customer benefits and the cost of producing such products or services. Although these are disingenuously humble characterizations, the manner to which competitive advantages are measured become challenging to overcome, as product or service benefits are governed by the consumer, which are hard to measure, in addition to the determination of total costs in producing a particular product or service (Barney, 1997).

Despite the limitations in measuring a firm's competitive advantage through simple accounting measurements (Watts and Zimmerman, 1978, Watts and Zimmerman, 1990, Healy, 1985, Kalay, 1982), two methodologies have materialized – an evaluation of a firm's competitive advantage through the utilization of simple accounting performance measures and; the evaluation of a firm's competitive advantage through the utilization of adjusted accounting performance measures (Barney, 1997). Although such methodologies may appear rational to utilize, both are predominantly driven by the subject's financial statements, in particular the profit and loss statement and balance sheet, which, for most entities, is readily available and could be utilized accordingly. However, for private organizations, there are instances where financial statements are not properly prepared or fail to exist. This provides numerous challenges in measuring strategic performance based upon adjusted accounting and simple accounting data. As our Participant and the Target are classified as private entities, we may encounter such challenges. If this does

occur, we will need to deviate away from the two methodologies as it may be difficult to obtain specific financial information from a Participant and from the target accordingly. As such, our analysis will dictate and determine what proper methodology should be utilized; however, our first inception would be to act upon the two methodologies suggested in the following sections.

As discussed in the literature review, financial performance of post-merger bidding public accountancy practices are divided (Agrawal et al., 1992, Langetieg, 1978, Asquith, 1983); however, they can provide significant sources of value and opportunity (Sinha et al., 2010, Campa and Hernando, 2006, Cornett et al., 2006, Romero-Martínez et al., 2017, Sinkkonen, 2019, Chuang, 2017). What is less clear, is whether scale economies, stakeholder value added and economic profit can be recognized in a post-merger and acquisition strategy between two public accountancy practices. The purpose of this thesis is to highlight the conditions and actions under which merger and acquisition strategies could lead towards economies of scale, stakeholder value added and economic profits.

Our merger and acquisition action research methodology commences with analyzing an initial evaluation analysis between a Participant and the Target. We understand through the existing literature the rationale behind public accountancy practices evolving from a small locally owned and operated practice, towards a global diversified, niche differentiated public accountancy practices. We understand that a Buyer desires to engage in a merger or acquisition in order to improve financial health (Gupta et al., 2021, Kwilinski et al., 2019), recognize economies of scale (Lubatkin, 1987, Sinkkonen, 2019, Bösecke, 2009), reduce production or distribution costs (Jensen and Ruback, 1983, Rabier, 2017) and increase shareholder value (Haspeslagh and Jemison, 1991). We also understand that true value realized in any acquisition depends upon how well the combined entity identifies, manages and executes on value creation and value capture opportunities. Following a well-defined, disciplined and transparent approach, two most frequenting methods to accomplish this is through cutting operational costs and increasing revenues (Amel et al., 2004, Berger et al., 1999). However, ultimately, to be economically valuable, there needs to be more

value created at the consolidated level, than operating separately (Barney, 1997, Anthony, 2017, Sahu and Agarwal, 2017). The action analysis will commence and proceed with the following processes:

- The identification of a willing Participant who is actively engaging with a merger or acquisition strategy;
- Locate a potential target to acquire through the utilization of, and assistance with, a third-party specialist; however, if the Participant has engaged with a target, that target will be considered for analysis;
- Obtain both the Participant and the Target's financial information in order to commence with the evaluation of synergistic benefits and further utilization of the four adjusted accounting measurements of firm performance;
- Evaluate limitations the four adjusted accounting measurements of firm performance has on the analysis action sequence; and
- Discuss alternative action sequence methodology that could utilized in place of the four adjusted accounting measurements.

IDENTIFICATION OF WILLING PARTICIPANT

Identifying Participants that would consider to be engaged with a thesis action plan in determining whether their existing or proposed mergers and acquisitions plans were strategically and financially valuable, was the main source of the study. Public accountancy practices typically determine whether there are strategic related benefits that could possibly occur subsequent to the consolidation efforts and, if so, an acquisition occurs. However, many lack the further discussion and evaluation on whether the merger and acquisition establish strategic cost savings and positioning; therefore, the ideal Participant will be one that is in their initial sourcing phase.

In order to accomplish this task, we need to source prospective public accountancy practices whom are interested in a merger or acquisition, in particular, on the buyer side. As a managing partner of a national merger and acquisition practice that specializes in the brokering between a buyer and seller for the public accountancy industry, I was able to directly contact potential candidates with ease; however, active participation was much different. Upon inquiry of several prospects, one candidate emerged and was delighted to take part and explore various strategic methodologies in order to determine whether a future acquisition should occur. The Participant has engaged in prior acquisitions and continually is engaged in exploring all possible acquisition opportunities in the market. The Participant's current operations are within a local geographical area and predominately interested in acquisitions within a reasonable distance from their main office; however, a consideration would be made for domestic locations that can be serviced remotely. In prior merger and acquisition analysis, the Participant would perform various strategic relatedness actions; however, there was no further analysis addressing the impact mergers and acquisitions had on economic profit, whether economies of scale and scope occurred, and other strategic measurement information. As such, the Participant would be an ideal candidate to move forward in the analysis action sequence in order to identify whether that particular target acquisition would provide strategic benefits for the Participant. In conjunction with the Participant, I will be engaged with conducting the action analysis in determining whether an acquisition shall occur via supporting literature and reliable accounting measures.

The action sequence analysis process that has been proposed in this thesis will initially be founded upon four adjusted accounting measures of a public accountancy practices economic performance and competitive advantage: return on invested capital (ROIC); economic profit (EP), market valued added (MVA) and Tobin's q and benchmark the performance to the S&P 500; in order to determine whether there is a strategic related acquisition occurring and whether there are additional financial benefits through the consolidated efforts. As stated in previous sections, the use of strategic measurement calculations founded upon the corresponding literature, have been structured around the evaluation and an analysis of public

entities therefore, a deviation may need to be required in order to adapt to the private sector, in particularly our Participant's business operations and industry structure.

Overall, the initial action sequence analysis process would commence by identifying and locating a potential target that fits the needs of the Participant. Once that occurs, it would be essential to obtain both the Participants and Targets profit and loss statement, in addition to the related balance sheet in order to calculate merger effects on firm value and performance. The profit and loss statement for the Participants and the Target will be consolidated and actions will be taken to determine the strategic relatedness benefits that may occur during the consolidated efforts. Subsequent to this action, we will then proceed with calculating the four adjusted accounting measures of a public accountancy practices economic performance and competitive advantage. However, in the event that the balance sheet cannot be obtained or cannot be restructured accordingly, we will deviate away from the proposed sequence of events towards actions that enable us to determine whether the acquisition provides economies of scope, stakeholder value added and economic profit for the Participant. In particular, subsequent to the strategic relatedness benefit actions sequence of events, we will construct pro-forma profit and loss financial statements for the target as a standalone entity, for the Participant as a standalone entity and for the consolidated entity which incorporates all strategic related benefits. We will then calculate the net present value for each and determine whether there are economies of scope or diseconomies of scope are occurring. We will then utilize the net present values to determine whether there is stakeholder value added to the Participant and whether that stakeholder value added generates economic profit or economic loss for the Participant.

In the following sections, we will begin to elaborate further upon the four adjusted accounting measures of a public accountancy practices economic performance and competitive advantage: return on invested capital (ROIC); economic profit (EP), market valued added (MVA) and Tobin's q. We will then extend and discuss alternative action sequence methodology to incorporate if there is a deviation away from the proposed sequence of events, as a result from lack of access to financial statements.

SIMPLE ACCOUNTING MEASURES: DETERMINING FIRM COMPETITIVE ADVANTAGE

The most common approach in measuring a firm's competitive advantage is via the utilization of simple accounting measures, as the data is readily available for public entities (Barney, 1997). Such measurements are strictly governed by financial figures and does not incorporate other external, non-financial measures, which will be discussed further. The simple accounting measurement approach tends to be the focus on earlier strategic management teachings and; therefore, commonly understood as ratio analysis becomes the foundation in performance evaluation. Significant categories of accounting ratios, include liquidity ratios (a firm's ability to meet short-term obligations), profitability ratios (a firm's return on invested capital), leverage ratios (a firm's level of indebtedness) and activity ratios (a firm's level of activity).

Although the use of simple accounting measures to assess a firm's performance is a powerful tool in understanding performance, it is argued that the use of such measurements has several limitations. Within Watts and Zimmerman (1978) and Watts and Zimmerman (1990) discussion on positive accounting, public accountancy practices maintain discretion surrounding the selection of accounting methods utilized, such as revenue recognitions, inventory valuation methods, depreciation calculations, amortization methods and much more. As such, to some degree, accounting measurements reflect firm's interests and partialities. In particular, Watts and Zimmerman (1986) and Healy (1985) argue that under the conditions where compensation is based upon a firm's accounting performance, managers obtain motivation to embrace public accountancy practices that improve current period financials. Others found when a firm's financial performance infringes upon capital market expectations, public accountancy practices are incentive to apply accounting measures that improve current period financials (Kalay, 1982, Press and Weintrop, 1990, Duke and Hunt III, 1990, Bowen et al., 1981). On the contrary, Zmijewski and Hagerman (1981) and Zimmerman (1983) suggest that firm's may have an incentive to report lower current period financials when higher profits may establish antitrust liability, as it would indicate anticompetitive monopolistic performance. Finally, Smith and Norton (1993) noted that firm's maintain an interest in lowering current period financials

if it provides them with negotiation power. Other limitations with the utilization of simple accounting measures corresponds with maintaining short-term bias and valuing intangible assets and their capabilities. Barney (1997) suggests that most simple accounting approaches maintain a built-in short-term bias and long-term investments are considered costs in such years. In addition, there maintains limitations regarding a firm's ability to fully value intangible resources and their capabilities (Barney, 1997, Barney, 1991, Dierickx and Cool, 1989). Although the use of various accounting methods is not illegal, they can impact a firm's reported performance drastically.

Although simple accounting measures to value firm's performance is limited; studies attempted to suggest that the limitations could be irrelevant as such data could be tremendously precise (Fisher and McGowan, 1983, Fisher, 1997, Livingstone and Salamon, 1970, Solomon, 1970, Stauffer, 1971); however, such research concluded that such measurement issues could be significant and most subsequent empirical studies support the conclusion of inaccuracy (Ijiri, 1980, Salamon, 1985). Although research suggests that the use of simple accounting measures may be inaccurate when measuring firm performance, it does not; however, suggest that accounting figures are corrupt and should be overlooked, it simply suggests that due care should be taken when utilizing them as a measure of firm's performance.

As discussed, the use of simple accounting measures to evaluate firm performance maintains limitations; however, scholars have been attempting to utilize the publicized financial data to explore paths to which more accurate measurement method can be used to measure firm performance, all while avoiding the limitations. Simplistically, the adjusted accounting measures of firm performance evenhanded associates a firm's estimated revenues to estimated costs. Estimating costs relies profoundly upon a firm's cost of capital, which is argued to resemble the return of both debt and equity holders receive from investments. Estimating revenues become more challenging as it requires a deep comprehension of accounting and how such accounting impact financial statements.

In Barney (1997) discussion on adjusted accounting measures of firm's economic performance, guided by Thomas et al. (1994), it is suggested that there are four techniques that, if collectively utilized, could provide a vibrant analysis towards a firm's accurate economic performance: return on invested capital (ROIC), economic profit (EP), market stakeholder value added (MVA) and Tobin's q. Computation of ROIC and EP is depended upon three figures to which need to be calculated from a firm's income statement and balance sheet, in addition to the firm's capital performance. These three figures are net operating profit less adjusted taxes (NOPLAT), total capital invested and the firm's weighted average cost of capital (WACC). The computation of these figures will be combined to compute a firm's ROIC and EP, then MVA and Tobin's will be calculated.

TABLE 3: Adjusted Accounting Measurements

| | | |
|---------------------------------|---|------|
| EBIT | = Net Sales – (Cost of Goods Sold + SG&A + Depreciation Expense) | (5) |
| Taxes on EBIT | = Provision for Income Taxes + Tax Shield on Interest Expense – (Taxes on Interest Income + Tax on Non-Operating Profit) | (6) |
| Tax Shield on Interest Expense | = Marginal Tax Rate x Interest Expense | (7) |
| Taxes on Interest Income | = Marginal Tax Rate x Interest Income | (8) |
| Tax on Non-Operating Profit | = Marginal Tax Rate x Non-Operating Profit | (9) |
| Change in Deferred Income Taxes | = Current Year Deferred Income Taxes – Prior Year Deferred Income Taxes | (10) |
| NOPLAT | = EBIT – Taxes on EBIT + Changes in Deferred Income Taxes | (11) |
| Invested Capital | = (Operating Current Assets + Book Value of Fixed Assets + Other Noncurrent Assets) – Noninterest Bearing Current Liabilities | (12) |
| Fixed Asset Book Value | = Total Recorded Cost Value – Total Accumulated Depreciation | (13) |

WEIGHTED AVERAGE COST OF CAPITAL: COST OF DEBT & EQUITY

Weighted average cost of capital is the weighted average of the marginal costs of a firm's capital sources, which consists of both debt and equity (Barney, 1997). Although WACC can be complicated in nature, a streamlined method involves the estimation of a firm's debt and equity costs, then weighting the costs, then summing the balance. Debt costs can vary for a firm; however, the cost of such debt can be determined upon the estimation of the quality of such debt via utilization of Moody's, Standards and Poor's or similar bond rating agency (Barney, 1997). If a firm's debt is rated AA and the cost of an AA-rated debt is say ten percent (10.0%), then ten percent (10.0%) would be a reasonable figure for a firm's pretax cost of debt. If the debt is rated CCC, similar to a high-yield or junk bond) and the cost of a CCC-rated debt is said twenty percent (20%), then it would be rational to utilize such figure for a firm's pretax cost of debt. However, if a firm's debt is not rated, then it would be rational to benchmark to another comparable firm that is rated, in order to estimate the firm's pretax cost of debt. Further, if a firm's interest payments are deducted for tax purposes, then the pretax cost of debt should be adjusted to mirror the benefits of the debt.

There are two common approaches to computing the cost of equity, the utilization of the capital asset pricing model (CAPM) and the arbitrage pricing theory (APT); however, Barney (1997) utilizes the CAPM approach in the estimation of the costs of equity. The after-tax cost of debt and the cost of equity (CAPM) computation is as follows:

$$\text{After Tax Cost of Debt} = (1 - \text{Marginal Tax Rate}) \times \text{Cost of Debt} \quad (14)$$

$$\text{Cost of Equity} = \text{RFR}_t + \beta_j [E(\text{R}_{m,t}) - \text{RFR}_t] \quad (15)$$

whereas, (RFR_t) represents the risk-free rate of return in time (t) , (β_j) represents a public accountancy practice (j) 's systematic risk and $[E(\text{R}_{m,t})]$ represents the expected rate of return on a fully diversified portfolio of securities at time (t) .

Each of the variables noted in equation (15), can be measured directly, except for a firm's systematic risk or β_j . The risk-free rate of return in a time period (RFR_t) represents the interest rate on a government security for that period of time. The measure of the expected market rate of return during a time period [$E(R_{m,t})$], represents the actual rate of return for various stock market indices such as the New York Stock Exchange common stock index or the Standard and Poor's composite index (Barney, 1997). The valuation of β_j can be obtained via corresponding literature or through the estimation via regression analysis.

The cost of each type of capital is required to become weighted based on the percentage of a firm's total capital that proceeds that type. This is accomplished via the following computations:

$$\text{Weighted After Tax Cost of Debt} = \frac{\text{Market Value of Debt}}{\text{Firms Market Value}} \times \text{After Tax Cost of Debt} \quad (16)$$

$$\text{Weighted Cost of Equity} = \frac{\text{Market Value of Equity}}{\text{Firms Market Value}} \times \text{After Tax Cost of Equity} \quad (17)$$

A firm's market value of debt is determined by what has been disclosed on the firm's balance sheet, which includes the long-term and current portion of debt. A firm's market value of equity is computed by multiplying the firm's total outstanding shares by the price per share (taken based on the average price per share over a particular period of time). As such, the WACC is computed as follows:

$$\text{WACC} = (\text{Weighted After Tax Cost of Debt}) + (\text{Weighted Cost of Equity}) \quad (18)$$

COMPUTING: A FIRM'S RETURN ON INVESTED CAPITAL, ECONOMIC PROFIT, MARKET STAKEHOLDER VALUE ADDED & TOBIN'S Q

A firm's ROIC measures the return that invested capital generates for those who provided such capital. Essentially, ROIC equates to a firm's total operating profits divided by the total capital invested in

the firm for a given period of time. If a firm's ROIC is greater-than their WACC, then this would signify that the firm has produced profits surplus of the invested capital, that was mandatory to generate such profits. If recognized, Barney (1997) argues that a firm would be achieving superior performance. However, if a firm's ROIC is less-than their WACC, then the firm would be realizing inferior economic performance.

Whereas ROIC exemplifies a firm's performance in relation to its invested capital, EP computes actual economic value that is generated during a period of time. EP is computed as follows:

$$EP = \text{Invested Capital} \times (\text{ROIC} - \text{WACC}) \quad (19)$$

According to Barney (1997), if a firm is recognizing superior performance, then the difference between ROIC and WACC will be positive. Assume that a firm difference between ROIC and WACC is seven percent (7.0%), then this would indicate that the economic value to which the firm generated would be eight percent (8.0%) times their total invested capital. Essentially, the WACC would be subtracted by ROIC then the difference is multiplied by total invested capital to identify total wealth a firm crafted, exceeding the cost of capital required, in a period of time. On the contrary, if the difference between ROIC and WACC was negative, all while multiplying by total capital, this would indicate how much value was destroyed during a period of time.

Although measuring a firm's performance over an expressed period of time, via the measurements of ROIC and EP, computing a firm's market stakeholder value added characterizes a firm's long-term performance. One particular approach in such measurement would be computing a firm's MVA (Barney, 1997). MVA is a summation of the market value of the firm's equity and debt then reduces its economic book value. MVA computation is as follows:

$$\text{MVA} = (\text{Market Value of Equity} + \text{Market Value of Debt}) - \text{Economic Book Value} \quad (20)$$

A firm's MVA can be conceptualized as its annual economic performance to which correlates with EP figures; however, due to the complex nature of the determination, for firms with a long history of operations, total invested capital since inception tends to be difficult to measure.

Synergistic gains are argued to emerge from establishing economies of scale and economies of scope, industry influence, efficiencies in financial health and the improvement of capital access. Economies of scale and scope in combinations are established through the purging of product, process and service replications (Lewellen, 1971), the share of existing intangible assets (Gertner et al., 1994, Prahalad and Hamel, 2000) and establishing an enhanced administrative effectiveness through better fit of scarce managerial skills (Chandler Jr, 1993). As such, one would recognize an increase in scale and scope economies and improved performance increasing an organization excess value. However, measuring such performance becomes challenging as there are numerous, populist ideologies that could be utilized. However, one arguable method to measure performance and value is via the use of Tobin's q (Wernerfelt and Montgomery, 1988, Lang and Stulz, 1994, Servaes, 1996, Steiner, 1996). In contrast in the comparison of stock return measures and fundamental accounting performance measures, Tobin's q measures the ratio between an organizations total market value and its total asset value:

$$\text{Tobin's } q = \frac{[TA - (BE + MVE)]}{(TA - DA)} \quad (21)$$

whereas (*TA*) equals total assets, (*BE*) equals book value of equity, (*MVE*) equals market value of equity and (*DA*) equals depreciation/amortization.

Theoretically, an organization's market value should be equal to its replacement costs (Tobin, 1969), which would maintain a 1:1 ratio. Therefore, a q greater than 1.0 is an indicator that a firm is generating superior performance; whereas a q less-than 1.0 would indicate that a firm is generating a low level of performance. Tobin's q integrates a measurement of the market value of assets, it reflects stockholders' perception and expected performance (Alhenawi and Krishnaswami, 2015). However,

Dybvig and Warachka (2015) argues that Tobin's q , although a proxy for firm performance, is entrenched with endogeneity, in particular, the inefficiency of underinvestment, which lowers firm performance all while increasing Tobin's q . In addition, Berger and Ofek (1995) found that diversification reduces value as the study examined the actual impact diversification has on firm value by assessing the value of a its segments as if they were operated independently. According to Alhenawi and Krishnaswami (2015), excess value is measured based upon an organizations value assessed comparative to the attributed value of its parts. Therefore, it becomes reflective that the value of a diversified organization be relative to the sum of the value of the different segments of the organization if they were independently operated. As such, this approach not only combines the market value perception but also amends value comparative to the industry. To adjust for this notion, consequently, Berger and Ofek (1995) suggests that excess value should represent the logarithm of the ratio of actual value (AV) to imputed value (IV) of the organization, whereas AV equals market value of equity plus book value of debt; and IV equals median ratio of total capital to total assets.

Interestingly enough, Alhenawi and Krishnaswami (2015) extend existing literature to examine how synergies impact Tobin's q and excess value throughout a five year period subsequent to the merger for US mergers that were completed between 1998 and 2007 collected from the Securities Data Company database of Mergers & Acquisitions (Alhenawi and Krishnaswami, 2015) via the incorporation of Berger and Ofek (1995) study in addition to Tobin's q . Alhenawi and Krishnaswami (2015) noted that such excess value was positive for combinations that were deemed related, while there was a negative relationship for combinations deemed unrelated, for each of the five years subsequent to the combination. In addition, although combination synergies materialize over time, annual alterations in industry influence, economies of scale and scope, in addition to inner capital market movement all underwrite to variations in excess value in unrelated combinations (Alhenawi and Krishnaswami, 2015).

Unfortunately, the computation of ROIC and EP performance measures require the deep understanding and access of a firm's cost of capital, to which can become challenging to, perhaps, overcome. A more convenient approach to characterize a firm's performance, to which circumvents many

of the issues of simple accounting measures, all while evading the computation of a firm's WACC, would be the utilization of Tobin's q. Theoretically, Tobin's q is defined as the relation of a firm's market value to their asset replacement costs (Tobin, 1978, Tobin, 1969, Brainard and Tobin, 1968, Smirlock et al., 1984, Lindenberg and Ross, 1981, Chappell Jr and Cheng, 1984). A q that exceeds one (1) would indicate that a firm would be creating superior performance, whereas a q that is less than one (1) would indicate that a firm is creating lower levels of performance. The numerator of Tobin's q computation, total firm market value, is estimated via data obtained from a firm's income statement and balance sheet (Chung and Pruitt, 1994). Total estimated firm market value computation is as follows:

$$\begin{aligned}
 \text{Firms Market Value} &= \text{Market Value of Common Stock (MVCS)} && (22) \\
 &+ \text{Market Value of Preferred Stock (MVPS)} \\
 &+ \text{Book Value of a Firms Short-Term Debt (BVSTD)} \\
 &+ \text{Book Value of a Firms Long-Term Debt (BVLTD)}
 \end{aligned}$$

whereas, MVCS represents the number of outstanding common shares x price per common share, MVPS represents the number of outstanding preferred stock x ending price per preferred share, BVSTD represents short-term liabilities less short-term assets, and BVLTD represents total long-term debt noted on balance sheet

Although there are several approaches in computing asset replacement values, one simplest method would be to utilize a firm's ending period total asset book value for an estimate and calculate q as:

$$q = \frac{\text{Firms Market Value}}{\text{Book Value of Total Assets}} \quad (23)$$

Equation (23) represents computing firm performance, by Tobin's q, in its simplest form, and although this method appears rational, it has been criticized that a firm's total short-term and long-term debt may be more suitable in the numerator rather-than the book value of a firm's debt (Perfect and Wiles, 1994). Perfect and

Wiles (1994), Hall (1990) and Lindenberg and Ross (1981) argue that there are a variety of methods that have been utilized that provides a much more robust estimates of actual asset replacement costs. Barney (1997) indicated that, in agreement, if firm asses have been in operation for some time, the replacement costs and book value can be vary considerably, thereby swelling q . However, such limitations are moderately counterweighed against the simplicity. Chung and Pruitt (1994) found via regression modeling, comparing the simplified method to sophisticated approaches in the computation of q , that R^2 never dropped below 0.996 and Perfect and Wiles (1994) found R^2 to be 0.93.

LIMITATIONS OF ADJUSTED ACCOUNTING MEASURES OF FIRM PERFORMANCE

While ROIC, EP, MVA and Tobin's q , offer informative material regarding a firm's historical performance, all while evading the weaknesses of simple accounting measures of firm performance, there are, nevertheless, limitations and weaknesses in relation to the computation estimation and availability of β , the misrepresentation of CAPM and the challenge in integrating data regarding the cost of obtaining or developing intangible resources and capabilities (Barney, 1997).

Theoretically, estimating a firm's systematic risk (β_j) should be possible via estimating the statistical regression; however, there could be slight modification to the estimation that could lead to different estimates. According to Barney (1997) Merrill Lynch estimates β_j on monthly capital gains for one individual security and the market as a whole, whereas market returns are estimated via the utilization of Standards and Poor's 500 Index, then the regression model is adjusted in accordance with Blume (1975). Value Line estimates β_j by utilizing weakly capital gains data and the New York Stock Exchange Composite Index as a foundation to determine market returns. Value Line's approach is then also adjusted in accordance with Blume (1975). These differences can easily result in varying computation of β_j and the estimates are statistically different even if the same observed equation is utilized (Statman, 1981). In addition, as the measurement of β_j requires a typically extended data set, both for the individual security

and expected market return rates, and for firm that maintains a brief operational history, it could be challenging if not impossible to estimate β_j (Barney, 1997).

Another limitation of the utilization of adjusted accounting measures to evaluate firm performance would be the speculative rationality of CAPM. Although CAPM is a method to calculate a firm's cost of equity, there is a theoretical concern that the model is inadequate regarding how security returns are produced. Barney (1997) suggests that if CAPM is comprehensive and if there is efficiency in the capital markets, then, pragmatic estimations of a firm's systematic risk, should disclose that the constant variable, should not be statically different from zero; therefore, β_j should be the lone aspect in describing a firm's security performance. However, other scholars theorize the contrary, suggesting that the constant variable is commonly significantly different from zero and there are other factors, besides β_j , that impact a firm's security returns all while attempting to govern β_j (Copeland et al., 1983, Basu, 1977, Banz, 1981, Reinganum, 1981). Such conflicting arguments suggest that CAPM is an incomplete method and, or, there lacks efficient capital markets; however, Roll (1977) concluded that it is reasonably impossible to engage into varying examinations regarding the completeness of CAPM and the efficiency of the capital markets, and therefore, impossible to properly gauge the completeness of CAPM. Ross (2013) suggest utilizing the arbitrage pricing theory to combat the theoretical limitations presented with CAPM approach.

Finally, Barney (1997) discusses another limitation on the use of adjusted accounting measures to evaluate firm performance that pertains to the inability of a firm to integrate data regarding the cost of acquiring or developing intangible resources and capabilities (Grant, 1991). The simplified method in computing q , utilizes the book value of the firm's assets as the foundation of replacement costs. More complex methods in computing q incorporates additional complicated information (Roos and Roos, 1997, Becker and Gerhart, 1996, Coff, 1999, Wood, 2000); however, neither of these methods consider the estimation of a firm's intangible resources and capabilities, as such assets are not incorporated within a firm's balance sheet. Therefore, the exclusion can lead to substantial errors in computing a firm's q value,

particularly when a firm maintains substantial investments in such resources and capabilities, similar to brand recognition, supplier and buyer relationships and employee collaboration.

Despite the limitations discussed, in addition to alternative measures that can be utilized to evaluate firm performance such as the event study method of measurement of firm performance (Fama et al., 1969, Duke and Hunt III, 1990, Brown and Warner, 1980, Brown and Warner, 1985, McWilliams and Siegel, 1997), Sharpe's measure of firm performance (Sharpe, 1966), the Treynor index measure of firm performance (Treynor, 1965) and Jensen's alpha measure of firm performance (Jensen, 1968), collectively with others described, can establish an understanding into a firm's economic situation. Empirically, the utilization of Sharpe (1966), Treynor (1965) and Jensen (1968) were deemed to be highly correlated. Hoskisson et al. (1993) found that the direct correlation between these methods were statistically significant, ranging from 0.84 to 0.90, compared to the correlation between, return on assets and return on equity, two simple accounting measures of performance, which ranged from 0.15 to 0.30. Therefore, the use of such alternative market measures or the four adjusted accounting measures of performance establish more robust information beyond simple accounting measures.

ALTERNATIVE ACTION SEQUENCE METHODOLOGY

It is common for stakeholders to reflect upon mergers and acquisitions as statically important economic value acquisition (Salter and Weinhold, 1979, Anthony, 2017, Harrison et al., 1991, Rabier, 2017). Acquisitions are believed to provided economic value in the short-term, and argued to also to establish important long-term strategic advantages. As such, there has been an enormous amount of literature that describes the bases of strategic relatedness that occurs amongst a bidding and target practice (Salter and Weinhold, 1979, Lubatkin, 1987, Sinkkonen, 2019, Harrison et al., 1991) which leads towards abnormal returns and shareholder wealth for bidding practice shareholders, upon the completion of the merger (Lubatkin, 1987, Singh, 1984, Singh and Montgomery, 1987, Chuang, 2017, Gupta et al., 2021, Robinson and Rhodes-Kropf, 2008). While acquiring an organization that is deemed to be strategically

related may establish economic value, such gains is commonly distributable in abnormal returns for the target firm shareholders, compared to the bidding firm shareholders. Therefore, Barney (1988) suggests that strategic relatedness is not deemed to be an adequate condition for bidding shareholders to recognize abnormal returns. For relatedness alone to generate abnormal returns, specific conditions must occur.

The relatedness hypothesis in financial theory is commonly defined by whether the combined entity's net present value (NPV) of cash flows exceeds the summation of the NPV of the cash flows of same organizations acting independently, then the organizations are deemed related (Copeland et al., 1983). Although there are a variety of conceivable perspectives on relatedness and synergy within mergers (Williamson, 1975, Benston, 1980, Stillman, 1983, Eckbo, 1983, Salter and Weinhold, 1979), relatedness could be reflected by any one, or a combination of such resources, only if the following equation is satisfied:

$$NPV(A + B) > NPV(A) + NPV(B) \quad (24)$$

whereas, $NPV(X)$ represents the discounted net present value of the cash flows produced by organization X (Copeland et al., 1983). Upon the disparity of the equation, a synergistic cash flow is established, if organization A acquires organization B. However, if there is no relatedness between the bidding firm and the target, then the actual value of any of such bidding firm, upon the combination of the target firm, would equate to the summation of the value of such firm as separate entities (Barney, 1997), namely:

$$NPV(A + B) = NPV(A) + NPV(B) \quad (25)$$

whereas, the $NPV(A)$ represents the net present value of Firm A as a stand-alone entity, the $NPV(B)$ represents the net present value of Firm B as a stand-alone entity, and the $NPV(A + B)$ represents the NPV of Firm's A and B as a combined entity.

Combinations between related organizations will incur no impact on shareholder wealth of bidding firm as long as the price paid for the target is equal to the change between the combined target and bidding

organizations NPV and the cash flow NPV on the bidding firm alone. In situations involving acquisitions, it is logical for bidders to pay a target up to what that target adds in value for the bidder or simply:

$$P = NPV(A + B) - NPV(A) \quad (26)$$

whereas, (P) represents the stakeholder value added for the bidding organization by the acquisition and that P only depends upon the actual value a target creates when combined with a bidding firm. As indicated in equation (26), if the bidding organization pays $P + k$; whereas k represents additional price paid beyond the acquisition price, then that organization would acquire an organization that would add P dollars in additional value, for the price of $P + k$ (Barney, 1988). Essentially, if $k = 0$, then the bidding organization paid only for the stakeholder value added cash flows and the overall bidding shareholder wealth is unchanged. However, if $k > 0$, then the acquisition equates to an economic loss for the bidding shareholders, and if $k < 0$, then the acquisition equates to an economic gain, providing the bidding shareholders with a positive abnormal returns (Barney, 1988). As such, Barney (1988) indicates that via specifying the conditions to which a bidding organization would obtain abnormal returns, would be indicated based on the overall price of the acquisition, in particular, if $k < 0$.

It becomes easy to understand that upon the realization of potential economic gains, the target price will quickly increase to where $P =$ target price and equilibrium sets in, causing a bidding war for the target. Moreover, as capital markets are deemed to be efficient and semi-strong, access to capital is achievable and the competition to acquisition increases. As such, the price of acquisition will quickly increase to its value and economic profits and performance will be eliminated. Further, at the equilibrium price, the target's shareholders will only recognize what was capitalized in cash payments and no superior economic performance would be recognized (Barney, 1997).

ORDINARY AND ABNORMAL RETURNS FOR BIDDING PUBLIC ACCOUNTANCY

PRACTICES: TARGET ACQUISITIONS

The relatedness discussion and corresponding equation (24) illustrates the relatedness factor between a bidding and target organization; however, the equation alone is not an adequate condition for such bidding organizations to gain abnormal returns (Lubatkin, 1983, Salter and Weinhold, 1979). The rationale behind this, conceptually speaking, is that if organizational cash flow data was publicly available, if potential bidding organizations can obtain access to such data, if there capital markets are semi-strong to engage in bidding (Fama, 1970), then bidding organizations shareholders, at best, would earn only normal economic returns. Although a strategic related merger would create economic value, the actual value would be allocated to the target shareholders via abnormal returns.

One of the main subjects of merger and acquisition research is to analyze an acquired firm's short-term operational results. In general, bidders' abnormal returns are used to evaluate their post-takeover success. Unfortunately, based on existing research, it appears that no conclusion has been reached on the subject. According to Bradley et al. (1988), Le and Schultz (2007) and Humphery-Jenner and Powell (2011) bidding firms generate significantly superior abnormal returns in the near-term announcement period; however, negative returns to acquirers have been observed in a other studies (Antoniou et al., 2008, Sudarsanam et al., 1996, Walker, 2000), while others indicate no significant short-term or long-term abnormal returns (Andrade et al., 2001). According to Alexandridis et al. (2010) study, the market reaction to acquisition announcements is dependent on the degree of competition in the market for corporate control. When the acquirements market is extremely competitive, bidders are more inclined to pay an overage; when competition is low, they are less likely to do so. According to their study, there is a significantly negative relationship between the degree of competition and the bidding firms' post-acquisition abnormal return. Furthermore, according to Cheng (2017), the existing research on merger and acquisitions is extended by investigating how company governance structure affects market performance of bidding companies, not just around the announcement date, but also after the completion of merger and acquisition transactions.

Cheng (2017) discovered that bidder firms' shareholders have positive abnormal returns of 5 days on average within five days of the announcement date, but these benefits are lost for two years after the transactions are completed.

According to previous research, abnormal returns of acquisition companies are associated with the target market's level of development and competition (Alexandridis et al., 2010), which has guided this study. Ahmed et al. (2020) extended this research and aimed their study to look at short-term market responses to Hong Kong target firm purchases (targets from a mature and highly competitive market) and Mainland China target firm purchases (targets from a developing and less competitive market) in the last five financial years (2012–2016). The major conclusion of this study is that acquiring firms' short-term abnormal returns are largely determined by the locations of their targets. Positive average abnormal returns are earned by acquisition activities that select targets from both the Hong Kong market and the Mainland China market; however bidders for Mainland China targets outperform. In other words, both market acquisitions are seen as value-generating activities, but those that occur between Hong Kong bidders and mainland China targets create more value for investors. A sensible assumption is that the corporate control market in Hong Kong is getting more competitive. Therefore, bidders are more inclined to bid aggressively and pay greater fees in order to acquire firms that have clear takeover targets and significant price increases (Ahmed et al., 2020). Following the equilibrium expectation for highly competitive markets (Hirshleifer et al., 2005), suggests that the asking price will continually increase to its net present value in creating synergies with bidding organizations; whereas $k = 0$ (Barney, 1988). Essentially, if the asking price dips below this level, another bidder would identify the opportunities for abnormal returns and drive the price higher (Hirshleifer et al., 2005, Barney, 1986b). As such, organizations that continue to engage within this situation will not recognize abnormal returns, even if the bidding organization is effective in anticipating relatedness, as the relatedness will be echoed within the overall acquisition price (Barney, 1986b), resulting in abnormal returns to the target's shareholders.

Whether bidding organizations differ in the nature of relatedness for target organizations, perfect competition dynamics are likely to unfold; however, if the market for corporate control becomes imperfectly competitive, Barney (1986b) argues that the bidding organization could be able to establish abnormal returns. One manner to which markets could be imperfect would be when a target organization becomes worth more to one bidder (A) and the other competing bidders are not aware of the additional value. In order for this to occur, it is essential for competing bidders not to be aware of bidder's A advantage as if known, it is likely that replication would occur via acquisition of assets required, obtaining skills which create technical economies or some sort of combination for relatedness. If other bidders acquired abilities to match the valuable combined cash flows as bidder A, whether or not such assets were acquired prior to the bidding process, then there is an increasingly likelihood that the shareholders of the successful bidder would not earn abnormal returns. Essentially, if bidder A would have a greater NPV compared to other competitor bidders' NPV. From the competing bidders' perspective, the acquisition would not be rational if they engaged in an acquisition that exceeds their NPV computation and bidder A would offer slightly more than competitor bids, if known or determined.

Another manner to which markets could be imperfect is if competing bidders do not have the ability to replicate the distinctively valuable combined cash flows of bidder A and its target. In this perspective, corporate control would become imperfect and shareholders of the bidding organization would recognize abnormal returns, and the combined advantages need not to be private. Typically, this would occur when the relatedness amongst the bidder and target curtails from a non-imitable resource controlled by the bidding organization, such as culture, unique history, product/service reputation (Barney, 1986a) and resources that are deemed valuable, rare and imperfectly imitable. If such resources are unique, and when combined with the Target, can generate additional valuable cash flow compared to other bidders, then the shareholders of the unique bidder will recognize abnormal returns via mergers. Interestingly enough, abnormal returns cannot be obtainable for the target as the competitive bidding dynamics would not unfold as the sources of the valuable synergistic cash flow are unique (Barney, 1988).

Finally, Barney (1988) noted that in most modern acquisitions, although massively complex (Jensen and Ruback, 1983), unexpected occurrences may materialize that establish a more valuable synergistic cash flow than anticipated. The price a bidder will pay will only be represented by, at most, the expected value of that target when it is merged with the bidder. If unexpected synergistic cash flows are recognized, this would represent an abnormal return for the bidding shareholders. Barney (1988), work on the reconsidering relatedness hypothesis returns to bidding organizations in mergers and acquisitions has provided several imperative inferences. First, the study sets forth conditions under which organizations could generate below normal, normal, abnormal returns though the successful, or unsuccessful estimation of the target's value and the overall price paid for the target. Interestingly enough, Salter and Weinhold (1979) argue that it is characteristic for bidding organizations to overemphasize target's value by underemphasizing the cost in manipulating synergies with targets, even when markets are imperfect. In order to extend beyond the recognition of normal returns from mergers and acquisitions, it is imperative for organizations to properly evaluate the relatedness between them and the target, all while understanding and valuing the strategic relatedness of competitor bidders. Organizations cannot anticipate above-normal returns from mergers if other bidding organizations value cash flow in a similar manner, if so, perfect competition is likely to transpire. Therefore, to gain abnormal returns from mergers, organizations need to complete such mergers only within imperfectly competitive markets. Examining post-merger and acquisition performance on the maximizing scope economies, stakeholder value added and economic profit, simply beyond announcements towards relatedness and synergistic value provides a better option towards evaluating merger and acquisitions between public accounting firms.

CHAPTER 4: ACTION SEQUENCE OF EVENTS: POST-MERGER AND ACQUISITION ACTION IMPLEMENTATION

MERGER AND ACQUISITION: ACQUISITION ANALYSIS INTRODUCTION

A merger and acquisition analysis were conducted between one accountancy practice (referred herein as the “Participant”, “Buyer”, “Company”) and another accountancy practice (referred herein as the “Seller” or the “Target”) within a related practice consolidation, within a fifty-mile operating radius and comparable annual gross revenues. All financial information in this document is deemed confidential in nature and kept anonymous to protect all parties involved.

The initial merger and acquisition analysis was presented as a source of practicality, as when sourced, difficulties emerged with prospect participants, particularly to full disclosure of historical and present financial information, disclosure of budgeted pro-forma financial statements, researcher inability to properly penetrate the actions and activities pertaining to a merger and acquisition, researchers inability to actively contribute to the merger and acquisition action implementations, difficulty in accessing potential participants, the inconsistency and timing of mergers and acquisitions undertaken by the potential participants, and the inconsistency and timing of each closing conducted by the potential participant. In addition, simply by performing and observing implementation processes made by the participant, subsequent to the acquisition, would not identify whether the acquisition would maximize scale economies, stakeholder value added or economic profit. Only subsequent to the acquisition would such measures be identified. At this point, the stakeholder is bound by the acquisition and may not be able to pivot to maximize such opportunities. Therefore, it would be more beneficial to conduct the analysis during the merger and acquisition due-diligence phase, in order to identify whether the acquisition would maximize scale economies, stakeholder value added and economic profit. In doing so, it would provide an outlook on whether a merger and acquisition should or should not occur.

PARTICIPANT INTRODUCTION

The Participant that elected to participate is a Certified Public Accountancy practice located in southern Texas region of the United States of America. The practice has evolved into a full-service accountancy practice that provides services such as outsourced accounting, business consulting, full-service payroll, tax planning and preparation and audit services. The practice specialized expertise addresses the unique needs of veteran owned businesses, professional service providers, churches, not-for-profits, veterinarians and medical practitioners. At the date of this simulation, there were currently twelve employees, to which one is classified as the Owner, two are classified as Principals, two Client Managers, two Client Service Specialists, one Payroll Administrator, one Payroll Specialist, one Firm Administrator, one Client Administrator Ambassador, and one Client Service Administrator.

The Company supports clients on the formulation and implementation of various strategic methods in assisting with business growth and opportunity. The Company's business consulting services ensure that their clients are successful from the launch of their business venture and continues with that assistance throughout the business life cycle. As there are many aspects of running a successful operation, the Company offers everything from entity selection and initial setup of clients accounting records to accounting software conversion and QuickBooks training. Services extend towards a full-service business consulting including: accounting software conversion and implementation, QuickBooks training and consultation, management and control system review, litigation support, business valuation, strategic planning, entity selection, financial planning, college education funding planning, retirement distribution planning and trustee, executor and administrator services.

Most of the Company's engagements can be done remotely therefore physical location space is budgeted for limited use and employment philosophy is to pay for performance. For each engagement that is completed, the contract employee receives a percentage of the total fee. A review processes is put into place to ensure that the contract labor performs at the highest quality standards governed by the office. On

average, employees are paid twenty-nine percent (29.0%) of the engagement fee but ultimately increases to around thirty-one percent (31.0%) due to fringe benefits, this correlates with the accountancy industry of requiring employees to bill out three times their salary. The review process is performed by salaried employees who budget a particular amount of time for each engagement, which is limited. If contract labor fails to achieve the one-third requirement, utilization evaluations will be performed on whether or not additional engagements can be provided to that contract labor or that contract labor is removed from the organization.

To provide an overview of the Participant domestic strategy, the Participant is looking to engage into a consolidation strategy in order to successfully gain additional clientele. In recent years the Participant has identified that organic growth can be challenging and costly to implement. What has occurred is a slowdown in organic growth and additional pressures being placed on engagement prices and total expenditures. Engagement fees, although the Participants have engaged in a differentiation corporate strategy, have been decreasing due to the intense competition in the global environment; therefore, the Participant has been engaging with a consolidation strategy to combat such pressures

Jensen and Ruback (1983) outlines various reasons why buyers may want to engage in a merger and acquisition strategy and suggests that one rationale would be to reduce production or distribution costs and the other would be to improve financial health. Betton et al. (2009) suggests that mergers are organized to achieve shareholder value via operational efficiencies, industry influence and the reduction of overall risk. However, for it to be economically valuable, both the bidding firm and the target firm would need to meet similar criteria on diversification strategies so the two firms become more valuable collectively than operating separately (Barney, 1997). For all the reasons mentioned, the Participant has acquired firms in recent years and has elected to continue this effort in order to establish growth and generate synergistic relatedness benefits. In particular, there was an acquisition performed in August of 2018, of which was consolidated into the December 31, 2018. There have been several attempts to acquire other public accountancy practices in the region; however, after further analysis, there was a failure to move forward.

Most recently, the Participant has disclosed interest in an acquisition to which a merger would occur between the Participant and a practice located within a thirty-mile radius of their existing operations. This target is a related certified public accountancy practice which performs similar activities; however according to the Participant, the Target also performs differentiated consulting services, miscellaneous engagements and resides within a location that could add substantial value to the Participant. Although the initial interest may not directly lead to an acquisition, there was an interest in determining whether such an acquisition and merger would provide strategic related benefits and other strategic in financial opportunities. As a result, we deemed this to be a perfect situation to explore further. In order to accomplish this, we needed to commence in obtaining specific financial information from both the Participant and the Target.

The initial action sequence process that we needed to engage in was obtaining the profit and loss statement for the twelve-month period ending December 31, 2019, and the balance sheet dated as of December 31, 2019. The profit and loss statements will provide a greater detail examination of the Participants and Target's operating profit and expenditures and enable us to consolidate as a single operating entity. It will also enable us to commence in the action sequence of determining strategic related benefits at the consolidated level. The balance sheets, in particular, will provide us detailed information on operating assets, operating liabilities and owners' equity transactions as of December 31, 2019. Both financial statements will assist in the calculations of the four adjusted accounting measures of a firm's economic performance and competitive advantage.

During the initial collaboration with the Participant, there was a discussion upon various methods to which an acquisition would occur, and how that acquisition would transpire. What was originally conceptualized during the thesis action plan was grounded upon the utilization of the profit and loss statement in addition to the balance sheets. Both would be utilized in calculating the four accounting measures of firm performance and competitive vantage; however, after further discussion with the Participant it was determined that, for acquisitions amongst public accountancy practices, in particular to

smaller acquisitions, the bidding practice only examines the profit and loss statement, and disregards any other financial statements such as balance sheet or statement of owners' equity. The rationale was that, in relation to prior acquisitions the Participant engaged within, the Participants disregarded any assets, liabilities or owners' equity that was recorded on the Target's financial statements, as the Participant would most likely assume only limited amount of assets and liabilities. According to the Participant, the only assets that would be assumed would be ones that are deemed to maintain limited fair market value and fully depreciated. For example, liquid assets resembling operating cash, accounts receivable and marketable securities would be retained by the Target subsequent to the acquisition. In particular, accounts receivable represents past engagement performance that has been billed to clientele.

Upon any acquisition, the bidding firm would not assume such receivables as the buyer did not contribute to the revenue stream. Although there are instances where the Target incorporates accounts receivables within the sale, a buyer may not want to assume such receivables or may not be willing to pay full price for the receivables as many are deemed uncollectible, which need to be written off as bad debt. This theory is the same for work-in-progress (WIP), as this resembles work that has been completed and ready to bill, but have not done so. Contrary to this position, at times, liquid assets such as cash, accounts receivable and WIP may be included, but only to assist with cash infusions for the Buyer. However, this amount is commonly negotiated upon at the close and added to the purchase price.

Assets, similar to plant, property and equipment (PPE), although would be retained by the Participant, typically are outdated, have no fair market value and are fully depreciated. A seller may have recently engaged in purchasing new operating equipment such as computers, furniture, leasehold improvements and other related operating systems which would be documented accordingly, and negotiated with a buyer on its fair market value to incorporate into the acquisition price; however, for most public accountancy practices, it is not common for this to occur and as such disregarded by a potential buyer. Similar to PPE, goodwill and intangible assets, would be retained by the buyer, although these typically do not exist unless there has been a recent acquisition and goodwill has not been fully amortized.

In relation to operating liabilities, the Participant noted that any assumed liabilities would consist of operating leases such as rent or any other business operating lease agreements that the seller was currently bound to. A buyer would not assume any short-term or long-term debt that is payable or other accrued expenditures due. This would need to be paid by the seller subsequent to close and would not be assumed by the buyer; however, there are cases in which a buyer may negotiate and assume liabilities that's such assumptions would be corporative into the acquisition price and/or any goodwill distribution earn-out payments.

As a result of the Participant's insight, we determined that several of the four adjusted accounting measures of firm performance and competitive advantage calculations would not be applicable, as such information is grounded upon the application data from the Participants and Target's balance sheet. During the literature review, we noted that although mergers and acquisitions are deemed economically important corporate strategy, there needs to be careful examination and measurement process in order to determine the success of such combination. We also discussed that it was less clear on whether such strategies create superior financial performance advantages. In particular, how any sort of merger and acquisition corporate strategy directly impacts the economic value of bidding firms within the public accounting industry. It was noted that in various academic papers, a technique in order to measure whether such strategies can create superior financial performance and strategic advantages relate to examining the four adjusted accounting measures of a firm's economic performance a competitive advantage.

According to Barney (1997) strategic advantages can be measured upon four adjusted accounting measures: return on invested capital, economic profit, market stakeholder value added and Tobin's q. The literature argues that when examined collectively, it provides a clear picture of a firm's true economic performance and competitive advantage. However, when discussing the literature with the Participant, and while collaborating with the Participant in understanding how public accountancy practices evaluate acquisitions, it was determined that several of the measurements may not be applicable in our decision-

making. In particular, several of the measurements are structured around information that is readily available through public means and not applicable to privately held companies.

To complicate this matter further, it is common for private companies not to maintain, have accurate or even have access to financial statements that would be available for use. Therefore, if any financial statements are missing, not updated to current status or even erroneously stated, they would be invaluable and inappropriate to utilize for any analysis. Interestingly enough, this was the case for both the Participant and the Target. In both situations, the Participant and the Target did not have accurate nor updated balance sheets to which we could utilize to calculate the for adjusted accounting measures. To overcome this issue, there could be a way to recreate a balance sheet through estimations and specific asset confirmations; however, such a preparation would be subject to scrutiny and may consists of errors, inaccuracies and be subject to use. If there were statements that could be utilized, one could engage within an audit of the financial statements to which limited assurance could be provided. However, an audit is extremely time-consuming, labor-intensive and cost ineffective for both parties and deemed unnecessary in order to properly examine the benefits of an acquisition. As the Participant indicated, as the only items of interest is the profit and loss statement and the balance sheets were not readily available, we decided to deviate away from calculating the for just accounting measures of a firm's economic performance and competitive advantage towards alternative action sequences that would enable us to determine whether the acquisition with five economies of scope, stakeholder value added and economic profit for the Participants through the use of discounted cash flow methodology, a common valuation model utilized in industries.

According to Betton et al. (2009), mergers are formulated to improve shareholder value, strategic augmentations, industry influences, operating efficiencies, and to reduce overall risk via diversification. Any upsurges in equity value are attributed to sources of material economic synergistic advantages (Healy et al., 1992). Therefore, to determine whether the merger and acquisition leads towards increased shareholder value and operational efficiencies, it becomes important that we begin to analyze each company profit and loss statement to identify synergistic benefits that could be realize subsequent to the merger.

According to the Participant, when examining whether an acquisition should occur, reliable, or simply a good idea, there are three major areas that are of concern. The first item relates to total revenues. During any evaluation, a buyer would like to inquire about the historical health of the Target's gross revenues, in particular, whether such revenues are stabilized, increasing or decreasing. Stabilization of revenues would indicate that the seller maintained existing clientele throughout a period of time or may have lost clientele, but was able to regenerate such losses through organic growth. If revenues increased historically, this would indicate to a buyer that there may be opportunity for continued organic growth in that geographical area and/or indicate that existing services performed are in higher demand. If historical revenues decreased overtime this may indicate an oversaturation of competition, may indicate that such services are in less demand, or simply a loss of clientele has occurred due to a lack of various operational activities.

A buyer would also examine the quality of revenues generated, or simply what types of engagement services are being rendered and evaluate the average price charge for each engagement. In particular, a buyer would like to understand whether there is engagement similarity in regards to services and pricing. If the buyer's pricing structure is higher, it may indicate that the seller is either servicing less valuable clientele or not charging enough for their services or they are operating within a geographical area to which prices are conducive to that region. If the latter has occurred, it may be challenging for the buyer, subsequent to an acquisition, to increase engagement prices as there may be some attrition. If the buyer's pricing structure is lower, it may provide an opportunity for the buyer to learn and capitalize on the seller's operational strategy; however, it may also suggest additional challenges if prices are raised for their personal clientele to match the seller's clientele.

Whether the Target's prices are higher or lower compared to the buyer's, the buyer may consider the acquisition for diversification purposes. Further a buyer would examine the types of tax preparation and assurance services that are being performed and whether that structure is similar to their own. It could be more valuable for a buyer to maintain and perform more complex and differentiated services and returns than it would be for more homogeneous activities. For example, if the percentage of a firm's total revenue

is consumed by less quality engaged services, then a buyer may not want to pursue that acquisition as it would require an organization to be structured around such homogeneous activities. However, if the percentage of total revenues is consumed by higher quality engaged services, then it may be more appealing for a buyer as such services tend to be more differentiated in complex, and as a result higher engagement price. On the contrary, buyers would also consider the diversification of practice risks in the analysis so acquiring a practice that may not be relatable, could still be considered valuable if overall operating risk can be reduced or provides a competitive advantage other-than financial. As a result, by examining the quality of revenues for a target becomes imperative in determining whether an acquisition is relatable and achievable.

The second area to which the Participant, or buyers, would like to examine relates to employee costs. For a typical CPA firm, it is industry standard that employees should bill out three times their annualized salary. For example, if a staff employee annualized salary is \$50,000, then they are expected to bill out \$150,000.00. For a senior manager, who may make \$90,000, then they are expected to bill-out \$270,000.00. This does not include any additional fringe benefits such as bonus structure or health insurance costs or payroll taxes that are generated by the staffing. Such expenditures would not be formally discussed with the employee, but stakeholders would incorporate such additional costs into the total scenario. If employees bill-out more than three times their annualized salary then, at times, bonuses are provided based upon corporate policy. If employees bill-out less than three times their annualized salary, then further evaluation is conducted by stakeholders in determining whether or not that employee is retained. Some public accountancy practices may retain such employees as their corporate strategy is through acquisitions, and understanding that there may be additional work that is consumed during the acquisition which could be allocated to the underutilized employees.

When a buyer examines a potential acquisition, they also want to know how many employees are on staff, what titles do they maintain, what is their job function, and what is their annualized total costs. This is a valuable information, as the buyer would simply take the total employee cost then multiply that

factor by three, which would provide a general indication of what that CPA firm should be generating in revenues. If this calculated total is greater than total revenues documented on the profit loss statement, this would indicate that they are overstaffed and not being utilized at their full potential. For example, if a public accountancy firm is generating \$500,000.00 in annualized revenue, the expectation would be for that target to employ a maximum two to three professionals, one or two tax preparers, and the owner who would review returns simultaneously. Any additional personnel would be detrimental on the profit and loss statement as the organization would be required to incur additional and unnecessary salary expenditures. However, on the contrary, the Participant noted that if a target is overstaffed it may provide a benefit as it would allow the Participant to perform future acquisitions and increase utilization rates accordingly. Collectively, industry standards suggest at least one-third of total gross revenues are allocated to salary expense. By examining employee expenditures and determining whether or not a target is under or over staffed this could have a dramatic impact on the profit loss statement in regards to salary expense, payroll expense, and other fringe benefits.

The third area to which the Participant, or buyers would like to examine relates to rent expense. Most public accountancy practices lease office space and may have satellite offices in the general vicinity. Such locations are provided to employees so that a centralized location can be established. Each office location may have several offices provided to management while cubicles are provided for non-management personnel. Most public accountancy practices have some sort of centralized location while others, have streamlined the office space need. For example, the big four public accountancy practices, although a centralized location has been established, do not provide personalized space for their working professionals. They are required to reserve spaces in advance when deemed necessary resulting in lower rent costs and reduced space.

Although office locations are deemed necessary for client retention, operating these offices are capital-intensive and alternative measures could be taken. As our society has evolved, we become more dependent upon virtual operations as systems and software are easily obtainable via cloud-based computing.

Preparers may not need to be in the office in order to prepare a return successfully. Auditors, for example, may not need to be in the office, and commonly work on engagements remotely at the clientele office. Interestingly enough, the Participant's operations have been structured to resemble a virtual organization, although centralized locations have been established. Tax preparation is performed remotely and offices are only utilized if needed as a result of meeting clientele or other business professionals. As such costs are capital-intensive it is not uncommon for public accountancy practices to incur lease expense the range of \$50,000.00 annually. For larger public accountancy practices, this expense could reach \$100,000.00 or more. Therefore, by examining the Target's rent expense and lease obligations pertaining to the rent becomes extremely important in determining whether an acquisition should occur.

If the Targets lease obligation recently commenced and spans over several years, it may not be practical for a buyer to acquire the target as their strategy is to generate synergistic cost savings, especially if both public accountancy practices are within a geographical area. However, this may not be attainable, if a practice exceeds an area to which is desired as a satellite office, or a full operating office may be required. This also pertains to Target's that own a building to which they operate from and may require the buyer to continue to reside in. However, if the target may be flexible on terms and conditions of rent occupancy and, as such, becomes important to a buyer as it may provide an opportunity for reduced rent, or an option to purchase the building to which they could generate minimum rent expense. Although this may be a logical path to pursue, many public accountancy practices may not be capitalized or structured to acquire a building especially if they are virtually operating.

As we have indicated, total revenues, employee expense and rent expense are important for the Participant to detail examine, but they will also examine other profit and loss statement accounts haphazardly to see if there are any synergistic relatedness that could be combined. This would include any duplications in computer programs, tax software, computer support, any savings on health insurance costs or insurance expense, any savings on advertising and promotion expenditures and finally any savings that would occur in normal operating activities. Collectively, such accounts may not directly impact financially

or synergistically the profit and loss statement, it does however provide a better framework to extract out additional synergistic benefits. According to the Participant the major impacts that decide on whether an acquisition should occur in addition to whether synergistic relatedness activities exist, pertain solely in relation to total revenues, employee expenditures, and rental expense. These three activities become the most important and conclusive determination on potential cost saving benefits.

When a target has been sourced out and identified as a potential acquisition, the initial steps are to commence in discussing the target's overall operations and revenue generating cycles. In particular, one would initialize an introductory meeting with the target discussing generalized operational procedures, historical revenue trends, general expenditures throughout the year and other various details. This is done to gain familiarity in regards to the target's operating procedures. It is also imperative that the Participant gathers specific information surrounding employee costs. As mentioned in detail above, this provides the Participant with a general overview, and expectation, of what the target's total operating performance should be and whether the acquisition is logical. If during the initial meeting the Participant has identified a potential opportunity acquisition, and if that target acquisition can generate synergistic benefits, then the Participant and the Target move forward with further discussions and or additional face-to-face meetings in order to gather more detailed information regarding both companies' operations. If upon further analysis the Participant decides to move forward with the acquisition, a letter of intent is drafted which outlines specific detailed information precisely related to offer purchase price, timing of closing, non-compete arrangements, retention periods, and other general statements. This letter of intent is simply an intent and not a formal offer as with in the letter there are specific due diligence requirements noted.

Once the letter of intent is executed, the due diligence process commences and detailed documentation as provided by the Target. This process allows the Participant to evaluate operational and financial information in order to conduct a consolidated synergistic combined entity profit loss statement, which is an exercise to identify specific areas savings can occur and identify whether or not the acquisition makes strategic sense. If deemed justifiable and opportunistic, the Participant would engage with the Target

and acquire the practice. Although the Participant identifies and calculates strategic relatedness upon a final consolidation level, there is no further calculation or analysis surrounding whether there are economies or diseconomies of scope occurring, if stakeholder value added shareholder wealth and whether there are abnormal returns for the Participant. This information can be extremely relevant on determining whether an acquisition can occur, how much to acquire the Target for, if there is any additional shareholder wealth generated, and whether or not abnormal returns exist, all of which are provided a detail calculation which could be extremely useful during an acquisition. As we will see in the further discussions, such detailed analysis was conducted in collaboration with the Participant. What will be illustrated and examined in this thesis are the areas that could be improved during the analysis and consolidated phases.

CHAPTER 5: CALCULATION: MAXIMIZING POST-MERGER AND ACQUISITION
PERFORMANCE ON A FIRMS' SCOPE ECONOMIES, STAKEHOLDER VALUE ADDED AND
ECONOMIC PROFIT

Haspeslagh and Jemison (1991) suggested that the ultimate goal in any merger or acquisition is to create shareholder value rather than simply capture that value. True value can be realized in any acquisition but it depends upon how well the combined entity can identify, manage and execute value creation and value capture opportunities. The Participant can establish specific ways to identify the value creation processes simply by following a well-defined disciplined and transparent approach in tracking synergistic benefits. A common approach to achieving this, according to Amel et al. (2004), is by cutting costs and increasing revenues. Therefore, in order to commence with creating shareholder value via synergistic benefits is to analyze the profit and loss statement (or, "income statement") at the consolidated level. As such, we obtained the income statement for the Participant and the Target for the twelve-month period ending December 31, 2019. Once obtained, we inputted the data into Microsoft Excel and created a side-by-side comparison for both companies for the period under review. We then performed a simple combined calculation in order to establish a final consolidated twelve-month period ending December 31, 2019 income statement. As we now have a consolidated profit and loss statement, our next action sequence was to evaluate each account individually in order to determine whether there were strategic related benefits that could be recognized at the consolidated level. Below, is a detailed discussion on the action sequences that occurred in order to determine strategic related benefits.

Upon the initial stages of the detailed analysis in the analysis acquisition of the Target, and typically subsequent to an executed letter of intent, the Participant would initiate various due diligence actions in order to determine if there are strategic relatedness benefits that could occur. This would also allow the Participant to construct an estimated consolidated combined financial statement. In order to accomplish this, the Participant would be required to obtain the Target's profit and loss statement accordingly, then have detailed discussions with the Target in regards to operating expenditures to identify strategic

relatedness between the two companies. Then the Target would perform the actual calculations and finalize a potential consolidated profit and loss statement. This is what occurred during our analysis acquisition procedures, which is discussed in detail in the following sections.

Our initiated sequence of action events had us acquire the Target's profit and loss statement and document the activity in Microsoft Excel as this already incorporated the Participants profit loss statement. The next sequence of events required us to analyze and compare income and expenses individually to determine whether there would be any strategic relatedness eliminations or additions that were need to be incorporated into the final consolidated numbers. Subsequent to the analysis, we noted that there were more strategic additions then there were eliminations which resulted in a reduction of total net income at the consolidated level. In the following sections, we will elaborate further step-by-step what was conducted and are overall sequence of events that were taken.

During our discussion, we began to collaborate upon the similarities and differences between the Participant and the Target's operating practice. The Participant maintains a traditional full-service public accountancy practice whereas the Target, although has similar operations, also engages in differentiated management consulting services to which the Participant does not engage in. The Target's total revenues are predominantly driven by such management consulting services and therefore, we deemed both public accountancy practices to be unrelated. As such we expected during our strategic relatedness benefits analysis, there would be areas to which we would not be able to recognize a full strategic benefit upon the combination of both companies. In particular, we deemed a total income to be unchanged at the consolidated level as it was deemed that subsequent to the consolidation, the Participant and the Target overall operations would not gain any strategic related benefits, and crossover operation synergies would not be recognized only on the revenue cycle. The effect of this not occurring would have substantial impacts on the final consolidated net income figures as we needed to incorporate several high dollar value additions, particularly related to goodwill distribution payments. There was also a concern that there would not be enough strategic related to eliminations offset the goodwill payments that would be required to be added.

Typically, in any consolidated combination there would be strategic relatedness operating benefits from the revenue cycles to offset any additional additions that would be required to be recognized. As we will see in more detail below, our expectation came through realization, which negatively impact the consolidated net income.

Collectively examining the consolidated financial statements, we collaborated upon what items that could be deemed adjusted, both eliminations and additions to the consolidated entity in order to determine any synergistic benefits. The first item in question related to advertising and promotion. As of December 31, 2018, total advertising and promotional expenditures incurred by the Participant and the Target were \$685.00 and \$23,214.00, respectively. The combined entity noted total advertising and promotion expenditures of \$23,899 and it was believed that through the consolidation efforts, \$11,000.00 could be saved as both companies incurred similar advertising strategies. Both companies engaged in similar advertising and promotion activities, to which now, as a consolidated entity, need not occur. An estimated savings of \$11,000.00 was determined to be saved during these efforts; therefore, the Final consolidated advertising promotion was estimated to be \$12,899.00.

The second item that we examined related to goodwill payments. As of December 31, 2018, total amortized goodwill payments incurred by the Participant and the Target were \$113,106.00 and \$0, respectively. Goodwill is required to be amortized over fifteen years or over the life of what was capitalized. In this case two things have occurred, first the Participant had acquired, in August 2018, a related practice which they were paying \$113,106.00 annually over a four year earn out period. Second, for this analysis activity, the Participant structured an agreement to which the Participant would pay the Target 1.25x total revenues over a five-year period. The Target's total revenues at December 31, 2018 were \$1,250,000.00, therefore, the acquisition price was noted at \$1,562,500.00 or annualized payment of \$312,500.00; however, the Participant added another six percent (6.0%) premium bonus on top of the analyzed payments to adjust the payments to \$331,250.00 over five years. We determined that each year goodwill payments would need to be amortized out of the balance sheet, which would consist of the first acquisition for a total

of \$113,106.00 then for the analysis acquisition totaling \$331,250.00. As a result, the consolidated goodwill payment annualized expense would be noted at \$444,356.00.

The third item that was collectively examined related to automobile expenses. As of December 31, 2018, total automobile expenditures incurred by the Participant and the Target were \$18,249.00 and \$18,859.00, respectively. This expenditure primarily relates to owner personal use and therefore through the consolidation we determined that roughly around \$18,000.00 would be saved primarily as a reduction of the Target's expenditure. Therefore, the final consolidated automobile expenditure would be \$19,108.00, or similar to what was incurred by the Participant during 2018.

The fourth item in consideration related to computer programs. As of December 31, 2018, total computer program expenditures incurred by the Participant and the Target were \$62,533.00 and \$73,206.00, respectively. It is common for public accountancy practices to either purchase or lease tax preparation, audit engagement preparation, and bookkeeping preparation software. Although there are types of software that can be acquired, many public accountancy practices utilize similar software. For example, bookkeeping engagements are typically performed through QuickBooks software and tax engagements are prepared through software such as Lacerte, Intuit ProSeries, Drake and UltraTax CS. This is no different between that Participant in Target software needs. The Participant and the Target utilize similar bookkeeping and tax preparation software and therefore duplication of license is not required. The Participant suggested that a reduction of total computer program expenditures should be noted at \$35,000.00; therefore, total consolidated computer program expenses were noted at \$100,739.00.

The fifth item that was examined related to computer support expenditures. As of December 31, 2018, total computer support expenditures incurred by the Participant and the Target were \$0 and \$30,112.00, respectively. A reduction in the support for the computer programs appears logical as we reduced the computer programs expenditure by \$35,000.00. Therefore, collectively the Participant and I

determined that overall savings of \$10,000.00 what incur for computer support. As a result, the total consolidated computer support expenditure was noted at \$20,112.00.

The sixth item that was examined related to total contributions. As of December 31, 2018, total contributions by the Participant and the Target were \$600.00 and \$8,991.00, respectively. Contribution expenditure relates to contributions made to nonprofits to support activities that aren't necessarily directly related to the operational side of the business. Although contributions were determined to continue, we collectively determined that roughly around \$4,591.00 would be saved and an overall total contribution consolidated entity would be \$5,000.00.

The seventh item that was examined related to health insurance expense. As of December 31, 2018, total health insurance expense for the parent and Target were \$0 and \$22,230.00, respectively. Insurance expense for any organization is related to either owner or employee related health insurance. The parent company does not provide health insurance for their contract employees and therefore recognized no expense during 2018, however, the Target firm noted a \$22,000.00 related health insurance expense for the same period. During collaboration with the Participant, it was noted that through the consolidation efforts additional health insurance expense would be recognized under contract employees as they decided to provide that to properly reflect such changes. Therefore, health insurance expense with increased by \$54,000.00 and an overall total consolidated entity would be \$76,230.00.

The eighth item that was examined related to legal expenses. As of December 31, 2018, total legal expenses for the Participant and the Target company or \$0 dollars and \$14,771.00, respectively. Legal expense for public accountancy practices typically relate to any type of defense and or operational legal needs that are required in order to operate. These are subjective and typically are not roll forward in any type of consolidation and order disposition of the business. During this fiscal year as the Target company recognized an expenditure, during collaboration we reversed their expenditure so that the consolidated entity would note a zero balance.

The ninth item that was examined relates to office and postage expenses. As of December 31, 2018, total office and postage expense for the parent and Target were \$19,618.00 and \$18,141.00 respectively. During operations public accountancy practices may have to mail tax returns to the government and or mail returns and other supporting documentation related to engagement processes to clientele as the efforts are going to be consolidated it was determined that at a consolidated entity level there would be an increase of postage and office expenditures of \$10,000.00 simply related to the mailing of letters and other supporting documentation to existing clientele. As in prior acquisitions, the Participant submitted several mailing distributions to existing clientele notifying them of the acquisition and additional material of the buyer. As the Participant would be acquiring the Target entity this would have to occur again so therefore an increase in the budgeted amount of \$10,000.00 would result in a consolidated Final balance of \$47,759.00.

The tenth item that was examined relates to repairs and maintenance expense. As of December 31, 2018, total repairs and maintenance expense for the Participant and the Target were \$7,641.00 and \$47,494.00 respectively. Repair and maintenance expense directly relate to any type of non-capitalized improvements pertaining to equipment building leasehold or any other type of non-capitalized improvements to assets. During 2018 we noticed that the Target incurred a substantial number of repairs and maintenance due to directly write-off and expensing items related to capital improvements. Conversation with Participant repairs and maintenance expense should, for a CPA firm, be stable around \$7,000.00 and therefore an adjustment would be required. As a result, we determined that a \$40,000.00 adjustment would be needed to offset the Targets capital write-offs. Total consolidated adjusted balance was noted to be \$15,135.00.

Finally, the eleventh item that was examined relate to telephone expense. As of December 31, 2018, total telephone expense for they Participant and the Target company was \$10,904.00 and \$25,382.00 respectively. Telephone expenses are directly related to any operational internal communication via land line or cell phone expenditures. Such's expenditures sometimes are reimbursed to contract labor or salary

employees, but predominantly this pertains to office location and owner's direct expenses. In collaboration with the Participant, we determined that there could be a \$10,000.00 savings on the Targets side for duplicate expenditures so therefore an adjustment was made. As two offices being operational there still needs to be a telephone expenditure noted however the current expenditure incurred by the Target was deemed to be quite substantial. As a result of this adjustment, we determined that the consolidated final balance would be \$26,286.00.

We noted that, there were no adjustments made to total rent expense and employee and payroll tax expenditures at a consolidated level. This was discussed in detail and the Participant disclosed that, subsequent to the acquisition, both offices would continue to operate independently as the Participant desired to maintain an operating presence at the Target geographical location. As both locations would be operating independently, the existing personnel will continue to be employed and therefore no further strategic relatedness adjustments would be required in relation to salary expense and payroll tax expense. Typically, amongst acquisitions between public accountancy practices, one of the most important factors that contribute to significant synergistic relatedness benefits pertains to both rent expense and salary expense. If both locations remain constant and there is no reduction in employee size then this would directly impact the overall relatedness analysis and also limit, possibly, the maximization of economies of scope and stakeholder value added to which we will be elaborating upon in further sections. However, a reduction in rent expense could still be recognized if a reduction in space occurs through promoting cloud based organizational structure.

After looking at all the adjustments and the consolidation synergistic value determinations, we found something interesting. According to Langetieg (1978), Asquith (1983), Magenheina and Mueller (1988) and findings guided by Jensen and Ruback (1983), subsequent to a merger acquisition, companies experience negative abnormal returns during the first three years subsequent to close. This is caused by a difference of market inefficiencies and alterations in stock prices. Here during our analysis, we noticed that there were more additions than eliminations, which was expected, but what was not expected was the large

negative impact on the consolidated profit and loss statement, the abnormal return. Our rationale and theoretical positioning were that during any type of consolidation efforts we can generate more eliminations than additions so that there he could be more synergistic value being created. A summation of the consolidated income statement with strategic relatedness contributions are noted in Table 4 as follows:

TABLE 4: Calculating Synergistic Value Between Participant and the Target (in \$)

| | Participant | Target | Combined | Strategic Relatedness | | Final |
|--------------|--------------|--------------|--------------|-----------------------|------------|--------------|
| | | | | Eliminations | Additions | Consolidated |
| Gross Profit | 1,019,937.00 | 1,250,000.00 | 2,269,937.00 | | | 2,269,937.00 |
| Total | 836,975.00 | 868,080.00 | 1,705,055.00 | (143,362.00) | 395,250.00 | 1,956,943.00 |
| Expenses | | | | | | |
| Net Income | 182,962.00 | 381,920.00 | 564,882.00 | (143,362.00) | 395,250.00 | 312,994.00 |

What we found was that total additions were \$395,250.00, compared to total eliminations of \$143,362.00. Looking at this more closely, the driving factor of the abnormal return, pertained to the increase in total goodwill distribution payments, to which were required to be added as the annual payments made to the Target. As depicted in the analysis, the portion of goodwill distribution payments for the Participant totaled \$331,250.00, which would terminate after five years resulting in additional cash flows. We also noted there were no additions made to total income upon the consolidation efforts. Typically, when companies consolidate, beyond the factors of reducing expenditures, there also is an effort to increase income due to the shared activities that are occurring. Shared activities go beyond simply economies of scale and begin to enter into providing additional services that either the Target or the Participant could provide. Further collaboration indicated, although the Target firm is considered to be a related party, as they both engage with similar activities, the Target firm generates most of their revenues via other consulting services that the Participant does not directly engage in. As a result, the acquisition is deemed an unrelated acquisition and it was determined that no addition would be noted for total income. This raised

us several concerns as now we would have to ensure that we would be able to generate enough eliminations or synergistic relatedness activities to offset this issue.

The final step that we collaborated and engaged on was the final consolidation of both the Participant and the Target profit loss statement that directly incorporate all the strategic relatedness eliminations and additions that were presented. We found that at the consolidated level, total income was noted at \$2,269,937.00 which was simply an addition of the old firm and the Target income with no strategic relatedness adjustments. We also found that total expenditures increased at the consolidated level from \$1,705,055.00 to \$1,956,943.00, this was primarily due to the goodwill payments that were being made to the Target entity as discussed before. Finally, we noticed that at the final consolidated level, total net income decreased from \$564,882.00 to \$312,994.00 or 44.6%.

The decrease in net income was of concern as it was suggested that upon consolidation, the strategic relatedness benefits would not exceed the additions; therefore, the literature suggests that each operating entity should just operate independently as depicted by (Barney, 1997, Anthony, 2017, Sahu and Agarwal, 2017). However, we needed to look at this more closely to determine whether or not there was stakeholder value added to the Buyer, if there were economies of scope or diseconomies of scope occurring and whether there were any abnormal returns that the Buyer could recognize. Essentially, what was causing the decrease in net income and could it be overcome through the upcoming years. What we found was that the main causation of the decrease in net income was due to the goodwill annual distribution payments made to the Seller, which then directly impacted scale economies as a diseconomy of scope. We went back to the profit loss statement, examine each line individually in more detail in order to determine if there're any strategic relatedness elimination that could be added to offset such goodwill payments, but upon further investigation there was nothing that we could logically make adjustments for. There was one area to which we collaborated further on and that was total income. As stated, before the Participant and the Target firm, although engage within similar activities, the Target firm generates most of their revenue upon differentiated consulting services that the Participant can't necessarily compete with. So, although there

could be some additional synergistic benefits recognized, the benefits would not overcome the annual goodwill distribution payments.

DETERMINING NET PRESENT VALUE (NPV) ACTION SEQUENCE ASSUMPTIONS

Commencing in calculating the impact such acquisition will have on maximizing economies of scope, diseconomies of scope, shareholder wealth and calculating abnormal returns for bidding firms, we need to commence in calculating the net present value of future cash flows for both the Participant company acting independently, the Target company acting independently, and finally the adjusted consolidated entity operating together, which would also include all the synergistic that have been created. Net present value is a common valuation technique used by professionals alike in order to determine what the present value is over a period of time for an organization. Simply put, one would forecast income and expenses over a predetermined period of years, typically five to ten, then use a discounted cash flow method to discount the future cash flows back to present value. This process is one of several industry standards to value acquisitions; however, the discounted cash flow method does come with some issues.

Although the discounted cash flow method is highly respected in the industry, there are several challenges in order to accomplish this successfully, as it becomes difficult to forecast out both revenue and expenditures accurately. It also becomes challenging to determine what discount rate to utilize to discount a future cash flow. These challenges are all due to the inability to properly establish an operating outlook of one's organization financially as many things occurred each year which could offset anyone particular account. For example, if all things remained stable one would expect total income to increase according to past trends, but as competition increases strategic theory suggests that price competition increases and; therefore, one would expect total income to increase at a decreasing rate if not remained stable overtime. Unless an event occurs that shifts the demand function, there will be a continued effort in competition until the market becomes saturated.

In our situation we could logically state that no additional differentiation between services existed as tax preparation, audit preparation and other management consulting services were deemed homogeneous. It becomes challenging for one to differentiate their product enough, in order to increase one’s willingness to pay. Therefore, an estimated growth rate becomes challenging to determine without some sort of statistical measures. This theoretical perspective also directly relates to expenses as if things remain consistent year after year and no competition enters and the demand function remains stable, then when ecologically state that their expenditures could be calculated based on the percentage of gross profit that they consume. However, there is competition and expenditures do increase overtime due to several economic and management factors towards operational effectiveness.

Although there are issues with the use of the net present value technique, the continued use could allow us to establish a solid foundation to stand upon. To accomplish this, the first factor that was examined pertained to assigning annualized growth rates for the industry. The following growth rates were applied:

TABLE 5: Annualized Growth Trends

| 2021 | 2022 | 2023 | 2024 | 2025* |
|------|------|------|------|-------|
| 2.7% | 2.9% | 2.8% | 2.8% | 2.8% |

- Estimation based on data collected and annualized average rates over prior two years.

According to MarketLine (2020), it was noted that future growth rates for the public accountancy market was expected to expand 2.7% in 2021, 2.9% in 2022, 2.8% in 2023 and 2.8% in 2024. For the year 2025, no further data was disclosed, therefore, we utilized the most recent average two-year growth rate, which was noted at 2.8%. Although utilizing a standard growth rate may appear logical, in reality, we would need to understand the total market space that has been captured by the Participant and how that market share is correlated with the annualized growth rates. What was deemed logical was that if the industry economic functions remain constant, and there are no new entrants, then we could assume that our portion of the expanded market would directly relate to the estimated growth rates.

Another factor that would be required to calculate would be total expenses forecasted for the remaining five-year period. This is much more difficult to calculate as subjectivity emerges; however, by simplifying the process and calculating total expenditures based upon a percentage of consumption, we could eventually forecast out gross profit accordingly, based upon growth annualized growth rates, then allocate expenditures based on predetermined consumption. After further examination of this it appeared that this would be the only logical path to take as future events are unknown and that we could logically determine what our future expenses would be based on prior events. Any non-reoccurring operating expenditures were removed and any future items that were deemed to occur were added. Next required us to determine the NPV of the future cash flows for the Participant as a stand-alone entity, the Target as a stand-alone entity and the consolidated entity which includes the synergistic relatedness determinations.

CALCULATING THE WEIGHTED AVERAGE COST OF CAPITAL (WACC)

The net present value calculation requires an interest rate in order to discount the cash flows back to the present. Within the calculation, there are several items that we were required to assume as the financial information provided by the Participant and the Target were limited due to data access ability, the understanding that only the profit and loss statement would be evaluated and the private nature of the business. As such, our foundation in determining WACC solely is grounded upon industry averages and not the capital structure of the Participant and the Target. In doing so we were able to obtain a logical WACC that was utilized in order to discount future cash flows.

During our collaborative efforts in determining the cost of debt for the Participant, the Participant disclosed that the firm maintained limited short- or long-term debt, and such debt was not recorded on the balance sheet. As such, a deviation was required to properly calculate the after-tax cost of debt in conjunction to industry standards, as if the Participant had recorded debt. In order to accomplish, we utilized industry assumptions for the public accountancy industry and noted that the industry assumption was that public accountancy practices maintained a cost of debt of 4.6% on average (Damodaran, 2019b).

To calculate the weighted average cost of capital, the marginal tax rate needed to be determined. As the Participant was organized as a limited liability company, income and taxes due flowed-through to the Participants individual level. This becomes more challenging as additional assumptions become extremely vague and change year to year. In order to stabilize this assumption, we determined that, if the entity was not a limited liability company but rather a corporation or a S Corporation then it would be reasonable to utilize a marginal tax rate of 27.0% (Damodaran, 2019b). Due to these assumptions, we determined that the after-tax cost of debt was 3.3%.

Although there are two common approaches to computing the cost of equity, capital asset pricing model (CAPM) and the arbitrage pricing theory (APT), Barney (1997) suggests utilizing the CAPM approach in the estimation of the costs of equity. The CAPM computation is as follows:

$$\text{Cost of Equity} = RFR_t + \beta_j[E(R_{m,t}) - RFR_t] \quad (15)$$

Calculating the risk-free rate of return in a time period (RFR_t) for five years, an average of the annual return was determined from data obtained from MacroTrends (2019a). The five-year annual treasury rate for years ending December 31, 2014, 2015, 2016, 2017, and 2018, were averaged to obtain an annual averaged five-year treasury rate of 2.02444%. The measure of the expected annualized market rate of return during a time period [$E(R_{m,t})$], for the Standard and Poor's composite index was obtained from MacroTrends (2019b) S&P 500 Historical Annual Returns report. The data that extracted averaged the annual returns for the fiscal year ending December 31, 2014, 2015, 2016, 2017, and 2018. The data indicated that there is an average of 6.676% in the annualized S&P 500 returns for the past five years.

As we now have the risk-free rate and the market premium rate determined, the next action was to calculate the beta coefficient for the Participant. The beta coefficient is a measure of volatility or systematic risk pertaining to an individual stock in comparison to the unsystematic risk of the entire market. Obtaining the beta coefficient for public companies is readily available; however, for private companies, this becomes

much more challenging. This is largely due to the fact that beta coefficients strictly measure the volatility or systematic risk of a particular entity compared to the entire market, based upon a specified company's capital structure, in this case our Participant. If at any time the entity fails to maintain debt or a capital structure and or is not publicly traded, then calculating a beta coefficient is problematic.

Simply by utilizing an industry beta coefficient to determine cost of debt, specifically for the Participant, is not appropriate. What needs to occur is a process of converting that industry beta coefficient to the specific capital structure of our Participant and the Target. In order to accomplish this, we obtained the beta coefficient from a publicly listed company within the business and consumer service industry, unlevered the beta, then levered the beta again using the Participants capital structure. As mentioned before, utilizing a beta coefficient for a comparable public company only indicates the risk associated with in that group of the related companies. Such betas are calculated individually based on their current capital structure then combined to obtain an average beta for that group. As we can see, simply by utilizing that average beta coefficient is not an appropriate indicator of an entity specific beta. To properly calculate a beta for a private company, utilizing public betas is a good foundation to start upon; however, we need to perform specific steps in order to calculate a beta coefficient that is structured around the Participants capital structure. In order to accomplish this task, the beta coefficient for a publicly traded accountancy business was not available; however, we did extract a beta coefficient for similar businesses within a particular industry. We made an assumption that the public accountancy market would reside within the business and consumer service industry and as such, the beta coefficient was extracted from Damodaran (2019a) Betas by Sector (US), and for the business and consumer service industry. The extracted beta coefficient was noted at 1.22 based upon the marginal tax rate of 27.0%. Our next step was to utilize this beta coefficient and unlever the beta so that we can utilize that unlevered beta in proportion to our Participant's capital structure. This unlevered beta was also published by Damodaran (2019a) and noted to be 0.97. We did not consider cash-adjusting the beta coefficient as it was determined that most public accountancy practices do not maintain surplus of cash that is not directly invested accordingly.

Calculating the beta coefficient for the Participant based upon specific parameters required judgmental actions based upon specific data points that needed to be assumed in order to calculate a beta coefficient more appropriately. It was noted that our analysis was based on December 31, 2018 and therefore this needed to be considered within the industry data. By utilizing the long-term treasury bond rate of 2.02% and our risk premium rate of 6.68% we can calculate the cost of debt and cost of capital for the Business and Consumer Service Industry specifically. As noted above, we are going to be utilizing this industry as we determined directly pertains to the accountancy industry. Based on the calculations performed, which is an updatable worksheet generated by Damodaran (2019b), and maintaining all the assumptions that the author presented, the industries cost of equity was 10.15% and the industries after-tax cost of debt was 2.85%.

As we now have industry data, we can now forward in identifying and calculating the levered beta for the Participant. However, what was discovered, was that the Participant does not maintain updated and current balance sheets that could accurately disclose their total debt and total equity was as of December 31 2018. In replacement, we obtained industry specific data in accordance to the accountancy market and noted that total debt internal equity was \$226,211.40 and \$120,000.00, respectively, on average. After talking to the Participant regarding this, the Participant noted that they do not have any recorded debt but do have unrecorded long-term liabilities in relation to the August 2018 acquisition and recorded as goodwill which is amortized over the earn-out period. In further discussion with the Participant, we could not accurately identify other short-term debt similar to accounts payable accrued expenses and short-term liabilities. As a result, in order to determine the risk factor for the Participants practice we decided to utilize the industry averages for total debt and total equity. We calculated the debt-to-equity ratio to be 1.89, the percent of debt in the capital structure to be 0.653, and the percent of equity and capital structure to be 0.347. Again, this does not directly represent the percentage of capital an equity in the Participant's capital structure, but it does provide a general framework that would be utilized and expected for other public accountancy practices on average. Applying both the industry data and the analysis Participant's data, we

noted that the beta coefficient for the Participant would be 2.281. For a publicly traded company, if a stock had a Beta of 1.0, it would indicate that the price activity is strongly correlated with the market. On the other hand, if a stock has a beta less than 1.0, it would indicate that security is theoretically less volatile than the market. For the Participant, having an estimated beta of 2.281, this will illustrate a significant and strong correlation with the market.

Having calculated the beta coefficient for the Participant at 2.281, and extracting the risk-free rate and market rate to be 2.02% and 6.68%, respectively, via utilizing the Capital Asset Pricing Model (CAPM) approach we determined that the cost of equity for the Participant was 12.63%. The next step now is to calculate the weighted average cost of capital for the Participant through the use of industry related Data.

As we now have calculated the after-tax cost of debt to be 3.33% and the cost of equity to be 12.6%, we now can move forward in calculating the weighted average cost capital for the Participant. In order to weigh the after-tax cost of debt and the cost of equity, the cost of each type of capital is required to become weighted based on the percentage of a firm's total capital that proceeds that type. This is accomplished via the following computations:

$$\text{After Tax Cost of Debt} = (1 - \text{Marginal Tax Rate}) \times \text{Cost of Debt} \quad (14)$$

$$\text{Cost of Equity} = \text{RFR}_t + \beta_j [E(\text{R}_{m,t}) - \text{RFR}_t] \quad (15)$$

A firm's market value of debt is determined by what has been disclosed on the firm's balance sheet, which includes the long-term and current portion of debt. A firm's market value of equity is computed by multiplying the firm's total outstanding shares by the price per share (taken based on the average price per share over a particular period of time). As such, the WACC is computed as follows:

$$\text{WACC} = (\text{Weighted After Tax Cost of Debt}) + (\text{Weighted Cost of Equity}) \quad (18)$$

As we examine the calculation further, it is noted that WACC is founded upon several factors that may not be applicable to the Participant. As described in previous sections, the Participant does not maintain any, or has recorded, short- or long-term debt, the Participant's is a tax flow-through entity and does not issue out any public securities. First, determining the weighted after-tax cost of debt, the market value of debt is divided by the firm's market value. As the Participant does not maintain any debt or is unable to properly and accurately disclose such debt, the numerator is valued at zero. The denominator represents the public accountancy practices market value which becomes extremely subjective for private companies. If the entity is a publicly traded entity, market value is calculated simply by multiplying the current market price of a company stock by the number of shares outstanding. However, there are some limitations as the market could be illiquid, the volatility impacts on industry sectors and there could be an anime control placed by current shareholders. For private companies, there are various methods to evaluations including establishing EBITA multiples and discounted cash flow methods; however, in the public accounting industry it is common, and acceptable, to value public accountancy practices at 1x of gross sales revenue. Therefore, the Participant market value can be calculated with ease, but that does not solve, nor provide us, with an accurate weighted average tax cost of debt calculation.

Second, in order to determine the weighted cost of equity, our numerator needs to represent the market value of equity and the denominator needs to represent the public accountancy practices market value. We know what the Participants market value is, what we do not know is the Participants market value of equity as the entity does not issue outstanding shares. The weighted cost of equity, based on the Participant's financial statements, will not give us an accurate depiction. As a result, we determined to utilize the public accountancy market industry data which suggests that, as a whole, the average market value of the debt each firm maintains is \$226,211.00 and the market value of equity is \$120,000.00. This suggests that on average a public accountancy firm should maintain approximately \$226,211.00 in short-term and long-term debt, and average total equity of \$120,000.00.

Incorporating the industry averages for the market value of debt and the market value of equity we were able to calculate the weighted average after-tax cost of debt and the weighted average after-tax cost of equity to be 2.18% and 4.38%, respectively. The calculated weighted average cost of capital was noted to be 6.55% which was utilized for the discount rate to determine the net present value of the Participant, the Target, and the consolidated entity future cash flows. Although the Target would have a separate beta factor and capital structure, during our actions, we were not provided nor were we able to properly construct the Target balance sheet accordingly. We determined that due to the similarity of the overall operating functions of both the Participant in the Target, and the risk factors for the industry as a whole, the beta coefficients were deemed to be similar and the use of the industries market value debt and equity was rational. Therefore, we incorporated the weighted average cost of capital of 6.55% throughout both the Participant, the Target, and combined entity. If we were able to maintain access to the Target's balance sheet, we would be able to accurately calculate the weighted average cost of capital the Discount future cash flows in order to determine the impact it had on value creation.

CALCULATION OF NET PRESENT VALUE: PARTICIPANT (STAND-ALONE), TARGET (STAND-ALONE) AND CONSOLIDATED ENTITY

In the previous actions, we collaborated upon the determination of strategic relatedness between the combined companies. We also discussed initial expectations and subsequent concerns on value creation as there were more additions than eliminations made during the strategic relatedness implementation. As a result, an unexpected decrease in net income at the consolidated level occurred, which was driven by goodwill distribution payments made to the Target. We also estimated an annual growth rate as an industry as a whole, and not based upon the Participant's general geographical location and demand, however the Participants deemed the estimated growth rate was a logical depiction a future potential. We then calculated the weighted average cost of capital based upon industry averages as both the Participant and the Target did not maintain accurate and logical balance sheet statements, and cannot be re-created without significant

judgment. As such we noted that the weighted average cost of capital that we would be utilizing to discount future cash flows was 6.55%.

The next action that would be undertaken would be creating a pro forma cash flow from operations for the Participant as a standalone entity, for the Target as a standalone entity, and at the consolidated level. In doing this action we would be able to identify whether or not there was strategic relatedness in the consolidation beyond our expected results, and to quantify what the difference. In order to achieve this, we determined that any forecasting beyond five years would be illogical as future expectations beyond this point would be subjective and judgmental. Therefore, we forecasted income and expenditures over a five-year period calculated the net cash flow from operations for each period, removed out any non-cash operating activities from net cash flow from operations, then calculated you just to cash flows from operations. The adjusted cash flow from operations represents all cash operating activities that are forecasted over the next five-year period. Then by utilizing the weighted average cost of capital, we discounted each year's cash flow to the present value. This was performed for the Participant as a standalone entity, for the Target as a standalone entity, and for the combined consolidated entity. The preceding section the overall action will be elaborated further upon.

The first step in calculating the adjusted cash flow from operations, we needed to forecast total income for the next five years via the utilization of the following growth trends as noted in Table 5:

TABLE 5: Annualized Growth Trends

| 2021 | 2022 | 2023 | 2024 | 2025* |
|------|------|------|------|-------|
| 2.7% | 2.9% | 2.8% | 2.8% | 2.8% |

- Estimation based on data collected and annualized average rates over prior two years.

The next action steps that were taken was to calculate and forecast expenses over a five-year period. As noted in the prior sections, although there were challenges and potentially bias estimations do to

economic and strategic concerns, we proceeded to continue building the pro forma expenditures over a five-year period based on December 31, 2018 expenditures as a percentage of gross revenues. Our expectation, all else being equal, and no increase or decrease in strategic positioning and no changes in the economic condition, we determined this to be a logical step and calculated each expenditure based on the adjusted gross revenues estimated in the prior years. As a result, we were able to calculate net cash flow from operations, which includes no tax expense, for the Participant as a standalone entity, and for the consolidated entity.

Each pro forma income statements disclosed non-cash operating activities that need to be added back as they currently reduce net cash flow from operations. As the financial statements that we were utilizing were deemed a blend of cash and non-cash transactions, we need to omit all non-cash expenses on the income statement. Non-cash activities included amortization of goodwill payments, bad debt expense, and depreciation expense. Collaborating on this further, although goodwill payments are categorized as an expense item on the profit and loss statement, the Financial Accounting Standards Board: Accounting Standards Update No. 2014-02, Intangibles – Goodwill and Other (Topic 350), allows private companies to elect to amortize goodwill on a straight-line basis over ten years or less if the company demonstrates that another useful life is more appropriate (Board, 2014). In this case, the amortization of goodwill was amortized over the useful life of the proposed asset purchase agreement of five years (the earn out period). Although goodwill amortization is considered a non-cash transaction, we deemed it to be cash as our objective was to restructure the income statement into a cash flow statement in order to provide us with a more robust depiction of cash outlay, all by removing non-cash transactions. This is a common approach with smaller companies as income statements are directly correlated with, and emulate a cash flow statement. Simply by identifying and removing all non-cash transactions and either adding or deleting cash outlays, the user can logically utilize the income statement as a cash flow statement, assuming that all gross revenues were collected, and in the Participants case, most were.

Conceptualizing the reporting of goodwill distribution payments in a cash flow perspective, we understood that, due to the duration of the earn-out period of five years and the total acquisition purchase price at \$1,562,500.00, annualized distribution payments of \$312,500.00 would surpass any synergistic relatedness savings that would be recognized at the consolidated level. As a result, one would logically expect to have skewed results pertaining to scope economies, stakeholder value added and economic profit. Therefore, to obtain an accurate depiction of an acquisition subsequent to the annualized distribution payments, we elected to add back such payments in our analysis in order to obtain cash flows from operations. Not doing so would immediately suggest negative results that may suggest an acquisition should not occur. Based upon this action performed, we adjusted the cash flows from operations for non-cash activity as well as the distribution payments.

Cash flow from operations for the five-year period were then discounted to present value based on the weighted average cost of capital. As a result, the net present value of the Target as a standalone entity was \$1,658,014.67, the net present value of the participate as a standalone entity was \$1,265,088.26 and the net present value as a combined entity was \$3,257,482.47. Interestingly enough, this data provides interesting results on whether are the acquisition provides a valuable cooperating strategic benefit. Literature suggests that the relatedness hypothesis in financial theory is commonly defined by whether the combined entity's net present value of cash flows exceeds the summation of the net present value of the cash flows of same companies acting independently, then the companies are deemed to be related (Copeland et al., 1983). Although there are a plenty of conceivable perspectives on relatedness and synergy within mergers (Williamson, 1975, Benston, 1980, Stillman, 1983, Eckbo, 1983, Salter and Weinhold, 1979, Sinkkonen, 2019, Anthony, 2017, Sahu and Agarwal, 2017), relatedness could be reflected by any one, or a combination of such resources, only if the following equation is satisfied:

$$NPV(A + B) > NPV(A) + NPV(B) \quad (24)$$

whereas, NPV(X) represents the discounted net present value of the cash flows produced by organization X (Copeland et al., 1983). Upon the disparity of the equation, a synergistic cash flow is established, if organization A acquires organization B. However, if there is no relatedness between the bidding firm and the Target, then the actual value of any of such bidding firm, upon the combination of the Target firm, would equate to the summation of the value of such firm as separate companies (Barney, 1997), namely:

$$NPV(A + B) = NPV(A) + NPV(B) \quad (25)$$

whereas, the $NPV(A)$ represents the net present value of Firm A as a stand-alone entity, the $NPV(B)$ represents the net present value of Firm B as a stand-alone entity, and the $NPV(A + B)$ represents the NPV of Firm's A and B as a combined entity. In relation to the Participant, the Target and consolidated entity, we noted the following:

TABLE 6: Calculating Valuable Cooperating Corporate Strategy – Combined vs. Separate
 $NPV(A + B) > NPV(A) + NPV(B)$

| | | |
|--|----|--------------|
| NPV(A): Target | \$ | 1,658,014.67 |
| NPV(B): Buyer | | 1,265,088.26 |
| NPV(A) + NPV(B) | | 2,923,102.94 |
| NPV(A+B): Combined Entity | | 3,257,482.47 |
| Economies of Scope / (Diseconomies of Scope) | \$ | 334,379.53 |

As illustrated in Table 6, the net present value of the combined entity is greater-than the net present value of the Participant and the Target as a combined entity. Therefore, if one simply adds the net present value of the Target to the net present value of the Participant then the total net present value would equal \$2,923,102.94. As we can see the net present value of the combined entity is \$3,257,482.47, or a difference of \$334,379.53, which would have suggested that there are economies of scope occurring and that there is strategic relatedness between the two companies. According to Barney (1997) the net present value of the

combined entity should be greater-than the summation between the net present value of the Target and the net present value of the Participant. Reflecting upon this further, on a consolidated level, we theoretically did not expect such a result as we noted in the earlier strategic relatedness determinations in the profit and loss statement that they were more additions than eliminations. As noted earlier during the strategic relatedness analysis, total eliminations were deemed to be \$143,362.00, whereas total additions were \$395,250.00, primarily driven by goodwill distribution payments totaling \$331,250.00; however, during our net present value analysis, we added back goodwill distribution payments as they are deemed to be short-term in nature, a sunk cost that altered true results. Overall, this analysis suggests that there are economies in scope occurring as the net present value of the combined entity is greater-than the summation between the net present value of the Participant as a standalone entity, and, there are gains in operational and financial efficiencies (Betton et al., 2009, Anthony, 2017, Sahu and Agarwal, 2017). Furthermore, Barney (1997) and Porter (1985) suggests that no consolidation should occur as the strategic benefits do not outweigh the discounted cash flow valuation; however in this situation, that is not the case. In order to appreciate the full economic value in any strategic similarity existing between the bidding and the target firm, the newly merged companies must be organized appropriately. In turn, to recognize any economies of scale, both the bidding and target firm must examine, coordinate and implement processes in the new combined firm that are sensitive to such economies of scale (Lubatkin, 1987, Sinkkonen, 2019), if not, each entity as a standalone would be more valuable operating independently then if they were consolidated into one.

Prior to the analysis, we determined that the acquisition would be ideal, make strategic sense and that value would be created based on combining resources and operating procedures, interestingly enough the data supported this claim. This action sequence becomes extremely valuable when determining whether an acquisition makes strategic sense, as it becomes imperative that enough strategic relatedness occurs so that economies of scope are recognized. When we examined the results further; however, we found that although, on a discounted cash flow perspective, we added back the goodwill distribution payments, all

non-cash activity and adjusted for strategic relatedness effects, in order to, perhaps, maximize economies of scope, we could further adjust for other related benefits. In particular, reflecting upon our overall relatedness actions, there was no adjustments made to synergistic benefits related to gross revenues, rent expense and salary expense. This directly illustrates that by ignoring or not adjusting for such categories, although economies of scope would occur, the consolidation would not maximize scope economies accordingly.

Interestingly enough, in collaboration with the Participant pertaining to concluded results, the Participant noted that such an acquisition, would still be logical and beneficial as the Target could gain favorable conditions to which be leveraged from in order to maintain and gain advantages. The first would be favorable geographical location. The Target is strategically located surrounding area towards the Participant is eager to compete within. Opening up a satellite office and or attempting to compete geographically in this location was deemed to be capital-intensive and perhaps more time-consuming. The second advantage pertains to learning curve cost disadvantages and overall know-how. Currently the Participant, although deemed to be strategically related to the Target, does not maintain the new knowledge, skills, and information that it would need to maintain in order to compete with the differentiated services provided by the Target. The Participant would also lack the learning curve cost advantages that the Target maintains over such differentiated services. Via an acquisition, the Participant would gain the know-how common knowledge, skills and information instantaneously all while obtaining favorable geographic location and reduce the learning curve cost disadvantages. Although Barney (1997) suggests that it is essential for the bidding and target firm to maintain similar diversification strategies so that both public accountancy practices become more valuable collectively, than operating independently, it is also argued that bidding public accountancy practices might want to engage any merger or acquisition strategy to reduce production or distribution costs or improve financial motivations (Jensen and Ruback, 1983). For the Participant, the acquisition would be geared towards financial motivations in order to gain market power in unserved markets. Gaining such efficiencies in market share would provide the Participant with additional

nonfinancial measures that could be leveraged upon in order and recognize more impactful strategic relatedness operating benefits.

Having a deeper understanding of the Participants acquisition strategy and that the results of the analysis indicate economies of scope, the acquisition would impact any strategic motivation. In the proceeding sections we now need to understand whether this acquisition provides stakeholder value added wealth, whether there is economic profit or economic loss distributed to the Participant and what the maximum acquisition price that should be offered, all founded upon the net present value calculations.

CALCULATING STAKEHOLDER VALUE ADDED FOR THE PARTICIPANT

As discussed earlier, the ultimate goal of any merger or acquisition is to create shareholder value and ultimately, the true value realized in any acquisition depends upon how well the combined entity identifies, manages and executes on value creation and value capture opportunities (Haspeslagh and Jemison, 1991). Determining that there were economies of scope occurring in the consolidation efforts, and that an acquisition of the Target was still deemed to be strategically beneficial to the Participant, we wanted to understand whether or not any stakeholder value added was established and what additional price could be paid beyond the acquisition price, even if a consolidation occurred. This is simply formed by calculating the stakeholder value added for the Participant through considering the change between the net present value of the combined entity and the net value of the Participants as a standalone entity. According to the literature, combinations between related companies will incur no impact on shareholder wealth of bidding firm as long as the price paid for the Target is equal to the change between the combined Target and bidding companies NPV and the cash flow NPV on the bidding firm alone. In situations involving acquisitions, it is logical for bidders to pay a target up to what that target adds in value for the bidder or simply:

$$P = NPV(A + B) - NPV(A) \tag{26}$$

whereas, (P) represents the stakeholder value added for the bidding organization by the acquisition and that P only depends upon the actual value a target creates when combined with a bidding firm. As indicated in equation (33), if the bidding organization pays $P + k$; whereas k represents additional price paid beyond the acquisition price, then that organization would acquire an organization that would add P dollars in additional value, for the price of $P + k$ (Barney, 1988). Essentially, if $k = 0$, then the bidding organization paid only for the stakeholder value added cash flows and the overall bidding shareholder wealth is unchanged. However, if $k > 0$, then the acquisition equates to an economic loss for the bidding shareholders, and if $k < 0$, then the acquisition equates to an economic gain, providing the bidding shareholders with a positive abnormal returns (Barney, 1988). As such, Barney (1988) indicates that via specifying the conditions to which a bidding organization would obtain abnormal returns, would be indicated based on the overall price of the acquisition, in particular, if $k < 0$. In relation to the combined entity and the Participant, we noted the following:

TABLE 7: Calculating Stakeholder value added for the Bidding Firm - Stakeholder Wealth

$$P = NPV(A + B) - NPV(A)$$

| | |
|--------------------------------|------------------------|
| $NPV(A + B)$: Combined Entity | \$ 3,257,482.47 |
| $NPV(B)$: Participant | (1,265,088.26) |
| $P =$ Stakeholder value added | <u>\$ 1,992,394.21</u> |

As illustrated in Table 7, we noted that the net present value of the combined entity was \$3,257,482.47 and the net present value for the Participant was \$1,265,088.26, suggesting that total stakeholder value added to the Participant upon the consolidation an acquisition of the Target would be \$1,992,394.21. This would suggest that upon acquisition and, only if all the synergistic relatedness benefits occurred, then the Participant would add an additional \$1,992,394.21 in stakeholder value added. Although the calculations suggest that stakeholder value added would be recognized upon the acquisition of the Target, the result was expected and not surprising. Conceptually, upon any acquisition, as long as the

Target maintained positive net income and related adjusted cash flow from operations, based upon the discount factor, there will be a positive relationship in the present value of future cash flows. In other words, as long as the Target was generating cash flows then a buyer could rationally expect stakeholder value added upon the consolidation. The only time there would be no stakeholder value added would be if the combined entity generated significant amounts of strategic on relatedness, which cost a substantial decrease in the net present values. However, for the case of the Participant, and based upon the calculation noted, there would be stakeholder value added upon the consolidation and acquisition of the Target.

If stakeholder value added was gained by the Participant upon the acquisition, and based on the synergistic relatedness expectations, then the total stakeholder value added would also suggest what the maximum amount that the Participant would pay above the asking price. Essentially the Participant would not pay more than the net present value of the combined entity, as economic profit would erode. In other words, the maximum amount paid would represent the stakeholder value added plus the acquisition price. In discussion with the Participant, it was noted that the Participant was willing to pay 1.25x of gross revenues for the Target. As such, the Target’s total adjusted sales were approximately \$1,250,000.00, and total asking price and acquisition price would be \$1,562,500.00. Calculating abnormal returns for the Participant are as follows:

TABLE 8: Calculating Abnormal Returns for Bidding Firm

| | |
|------------------------------------|-----------------|
| <i>P</i> = Stakeholder value added | \$ 1,992,394.21 |
| Acquisition Price | (1,562,500.00) |
| Economic Profit / (Economic Loss) | \$ 429,894.21 |

As illustrated in Table 8, we noted that total stakeholder value added at the consolidated level was \$1,992,394.21 and the total proposed acquisition price was \$1,562,500.00, suggesting that the acquisition at the stated price would generate economic profit, abnormal returns, of \$429,894.21. Overall, this appears beneficial for the Participant, but we need to understand details on whether the acquisition price is rational.

In order to accomplish this, Barney (1997) suggest that, the bidding firm should not pay a target more than the net present value of the combined entity. We noted the following maximum acquisition price as follows:

TABLE 9: Maximum Acquisition Price - Suggested

| | |
|---|------------------------|
| <i>NPV(A + B):</i> Combined | \$ 3,257,482.47 |
| <i>P</i> = Stakeholder value added | (1,992,394.21) |
| Maximum Acquisition Price - Suggested | <u>1,265,088.26</u> |
| Proposed Acquisition Price | 1,562,500.00 |
| Accretion/(Erosion) of Stakeholder Wealth | <u>\$ (297,411.74)</u> |

As illustrated in Table 9, when the total net present value at the combined level is \$3,257,482.47 and stakeholder value added totals \$1,992,394.21, then the maximum acquisition price suggested is \$1,265,088.26. Literature suggests that the Participant should only be willing to pay a target up to the total value that target adds, or \$1,265,088.26; therefore, if the Participant acquisition price is \$1,562,500.00 and the maximum suggested acquisition price is \$1,265,088.26, then, theoretically, the Participant would not be maximizing economic profit. At this acquisition price, the Participant would be eroding financial returns and limiting economic profit that could be generated. In detail, we noted that economic profit for the Participant, at the original acquisition price, was \$429,894.21; however, if the acquisition price was adjusted to reflect \$1,265,088.26, then the Participant would recognize an increase in economic profit of \$727,305.94, or an increase of \$297,411.74.

Reflection upon the sequence of events, if the Participant acquired the Target at the proposed acquisition price, the Participant would essentially have overpaid for the acquisition. Overpayment is simply defined on the net present value of the combined entity and the total stakeholder value added to the Participant upon the acquisition. This analysis action also illustrates how a bidding firm may erode the opportunity to maximize economic profit for stakeholders, simply by not engaging within specific strategic

calculations that enables the user to be well-informed. In addition, the action illustration provides the bidding firm a deeper understanding strategic relatedness benefits can directly impact stakeholder value added an economic profit accordingly. In our situation, as long as there were enough strategic relatedness benefits generated, then that would produce an increase in stakeholder value added in economic profit for the Participant. Therefore, a higher acquisition price be more logical and acceptable; however, due to the circumstances and differentiation between the Participant and the Target, we are limited on how much value can be added an economic profit to be generated. As such there's a threshold in the maximum acquisition Price

SPECIFIC ACTION LEARNING MOMENTS: PARTICIPANT DISCUSSION ON ACTION

The participant desired to acquire another public accountancy practice in order to gain cost efficiencies, expand operations, and penetrate into new markets. Collectively, we entered into this merger and acquisition analysis with an anticipation that through acquiring another public accountancy practice within the local area, the acquisition would establish additional economies of scale to the Participants existing operations, increase stakeholder value added and expand economic profits. Our analysis illustrated that, as long as there were enough strategic related benefits generated, economies of scope, stakeholder value added and economic profit would be created, even due to the absence of sufficient synergistic benefits related to rent and salary expenditures and the overall revenue cycle. In addition, assuming that at the consolidated level, there were no synergistic benefits created, we determined that shareholder wealth and abnormal returns would be recognized; however, there would be a lack of economies of scope. Referring back to the analysis, the absence of addressing rent, salary and the revenue cycle, collectively, negatively impacted the hope of maximizing economies of scale or scope through this specific merger and acquisition.

The results that were identified during the analysis shed light to interesting learning points that became valuable in the current and future merger and acquisition proposals for practitioners. Essentially, in order to maximize post-merger performance that would maximize scale economies, stakeholder value

added and economic profit, one would need to directly reduce operational costs in rent and salary expenditures. In regards to revenue synergies, although both companies could establish some synergistic benefits, and could additionally help establish greater economies of scale, economic value, and economic profit, it was not deemed urgent or essential as it was for addressing rent and salary expenses. Neglecting the latter two, it would be challenging to establish any sort of economies of scale or scope through the acquisition if there was no physical consolidation in locations, although establishing some offshore operations could mitigate the issue. Although within this study, we did not directly address offshore benefits or limitations in the literature review, scholars suggest that outsourcing enhances international competitiveness, reduction of costs, the expansion of relationship, service customers more effectively and free up scarce resources (Di Gregorio et al., 2009, Tate et al., 2009, Maskell et al., 2007, Daley, 2008).

Therefore, we concluded that in order to proceed appropriately, and to maximize scope economies, stakeholder value added and economic profit, it would be logical not to move forward with the acquisition of the Target. We needed to identify an additional target to which we could deem relatable enough to consolidate operationally within the Participants existing operating platform, so that additional synergistic values of rent and salary expenditures could be recognized. This merger and acquisition analysis between the Participant and the Target have illustrated that simply acquiring another public accountancy practice without specifically establishing synergistic benefits in rent and salary expenses, the merger and acquisition would not establish economies of scope and scale. However, if the merger and acquisition did, theoretically, move forward, then the Participant would still continue to earn scope and scale economies, stakeholder value added and economic profit; however, these would not be maximized accordingly.

During the merger and acquisition action sequence analysis, there were several moments in which required a step back moment to reflect upon what was actually occurring in the analysis to what the supporting literature suggested. In the preceding sections such specific action learning moments will be described in detail in addition to how we needed to edit in order to move forward in determining whether an acquisition should occur.

THE FOUR ADJUSTED ACCOUNTING MEASURES: A REVISED PROCESS

Upon the initial steps of obtaining financial information from both the Participant in the Target, originally the literature suggests that in order to determine strategic relatedness and competitive positioning over rivals, the use of the four adjusted accounting measures of a firm's economic performance and competitive advantage, needed to be examined. Barney (1997) argues that when taken these four adjusted accounting measures together, it provides a clear picture of a firm's true economic performance and competitive advantage. During the initial collaboration with the Participant, there was a discussion upon various methods to which an acquisition would occur, and how that acquisition would transpire. What was originally conceptualized during the thesis action plan was grounded upon the utilization of the profit and loss statement in addition to the balance sheets; however, after further discussion with the Participant it was determined that, for acquisitions amongst public accountancy practices, in particular to smaller acquisitions, the bidding practice only examines the profit and loss statement, and disregards any other financial statements such as balance sheet or statement of owners' equity. The reasoning behind this position is that a fitting firm would not be assuming any liabilities from the target strictly pertains to the clientele list, which is deemed to be in intangible asset, which is not recorded within the balance sheet. In addition, any tangible assets target may be in possession of are deemed to be fully depreciated and have no fair market value. This specifically deals with plant property and equipment; however, with any receivables or work-in-progress, the target tends to retain those accounts as work has already been performed and due to the target.

As a result of this discussion, we re-examined the position of Barney (1997) towards strategic advantages which can be measured upon four adjusted accounting measures: return on invested capital, economic profit, return on invested capital, economic profit, market stakeholder value added and Tobin's q . After reevaluating the literature, we deemed that the lack of supporting financial information would not allow us to calculate the majority of such accounting measures, therefore, our initial thought on Barney (1997) suggestions was flawed, as the study appears to be more relatable to public companies rather than private companies. As such, we needed to pivot towards an alternative method in order to determine

whether the merger and acquisition would be strategically beneficial. This alternative method is depicted as the Alternative Action Sequence Methodology.

MERGER AND ACQUISITION: FIRM RELATEDNESS

The scope of a merger and acquisition provides a firm to take advantage of competitive opportunities or to defuse competitive pressures, to which the merger and acquisition will enable a firm to diminish their costs and, or, improve their revenues, leading towards an economically valuable position. However, the merger and acquisition depends upon whether the combination is strategically related or unrelated, as the latter is argued will not establish superior economic performance for the bidding and target firms (Barney, 1997, Alhenawi and Krishnaswami, 2015, Sinkkonen, 2019). In order for any strategic corporate diversification to be economically valuable, the combined companies must recognize some economy of scope within operations and the firm must become more efficient in managing such economies of scope via hierarchical types of governance (Williamson, 1975).

Although the academic literature suggests that related firms can establish more strategic relatedness benefits compared to unrelated firms (Barney, 1997, Alhenawi and Krishnaswami, 2015, Chuang, 2017, Rabier, 2017), during our implementation process, we also noted that even though two public accountancy practices may be related, it still may not provide strategic related benefits, unless particular expenditures and operational costs are mitigated. In particular, it would be essential for the consolidated entity to recognize increased strategic relatedness gains than additions. For example, at the consolidated level, there are two main areas that need to be focused upon, rent expense and salary expense collectively. What we observed was that even though adjustments were made to both of these categories based on perceived benefits, there was still a distribution that needed to be made to the target for the actual acquisition over a period of years. In a cash flow perspective, such distributions would reduce the amount of cash on hand. As such, in the first several years until the full earn out was paid to the target, there would be a drawdown of cash and a reduction in cash flow margins. Therefore, it was essential that the target

produce enough cash flow and there were enough strategic relatedness benefits generated at the consolidated level, to offset the earn out payment made.

Although there are divided issues surrounding post-merger performance of bidding firms (Agrawal et al., 1992, Langetieg, 1978, Asquith, 1983, Mandelker, 1974, Malatesta, 1983), studies by Sinha et al. (2010), Campa and Hernando (2006), Cornett et al. (2006) and Romero-Martínez et al. (2017) suggest merger and acquisitions can maintain significant source of value and opportunity. In the merger and acquisition analysis that we performed, we also concluded that there were divided issues on whether to proceed further with the acquisition. Although our analysis illustrated that subsequent to the acquisition, economies of scale, economic profit and shareholder wealth would occur, maximization of these categories would not be achievable without addressing particular profit and loss accounts. Although cost cutting techniques do directly impact financial performance, it is temporary, and unless enough synergistic benefits can be recognized, in particular to our situation, in relation to rent expense and salary expense, a full maximized gain would not be earned.

COMPETITIVE POSITIONING: TECHNOLOGY COST ADVANTAGES

Public accountancy practices that produce similar products or services, within an industry, could create cost differences if there is access to low-cost production factors which are utilized by a firm in conducting business activities. Such inputs would include lower cost labor, capital, land and raw material. A firm that can establish lower cost production access, within one or more business activities, will most likely recognize lower economic costs compared to its rivals (Barney, 1997). Public accountancy practices may obtain cost advantages via the utilization of different technologies in managing their businesses. Although it has been suggested that larger public accountancy practices may maintain technological cost advantages, which enable them to achieve economies of scale, public accountancy practices that deploy technology-based cost advantages that do not depend on scale economies can also be achieved. The conception of technology can be broadened to incorporate, not just the technological hardware, but also any

process that are utilized in this method, or commonly known as technological software, such as the quality of relationships between labor and management, a public accountancy practices organizational culture and the quality of managerial controls (Barney, 1997, Ouchi, 1981, Pascale and Athos, 1981, Peter and Waterman, 1982, Womack et al., 1990) and artificial intelligence (Odoh et al., 2018, Dilek et al., 2015, Lim, 2013), all to which can directly impact a public accountancy practices economic costs via synergy benefits and relatedness (Barney, 1991, Rabier, 2017, Bösecke, 2009, Gupta et al., 2021). As illustrated in the literature review, information technology investments made by public accountancy practices can enhance firm productivity (Lee and Arentzoff, 1991), and has directly improved firm performance in various industries such as manufacturing (Barua et al., 1995), banking (Parsons et al., 1993), insurance (Francalanci and Galal, 1998), healthcare (Menon et al., 2000) and retailing (Reardon et al., 1996). It has also improved organizational structure, workflows and operations (Lucas Jr et al., 1996).

Technology now allows remote working conditions and quicker engagement preparation. For example, several public accountancy practices allow remote working opportunities through the use of technology. Taking this a step further, such technology could allow remote working conditions in other competitive countries, which would directly reduce operational expenditures accordingly (Di Gregorio et al., 2009, Tate et al., 2009, Maskell et al., 2007, Daley, 2008). Several public accountancy practices that were engaged with utilized third-party staffing agencies, based in the United States, but employed staff in Asia. The staffing agencies would act as a U.S. base staffing agency, and provide a practice with direct hires based upon specific firm needs. Essentially the accounting practice would direct hire offshore employees, who will be operating in their home country, for tax preparation and other various assurance services procedures.

Reflecting upon this further, if public accountancy practices implemented such technology, it may provide them with cost efficiencies that are unmatched in the fragmented industry. Public accountancy practices that implemented either a partial or fully emersion overseas operations can gain substantial increase in cash flow margins and had the ability to go acquire other public accountancy practices that

others may reject or overlook, due to the fact that it may be perceived as a poor acquisition. This strategy is extremely important for public accountancy practices to consider as their existing operations are drawing down cash flow which results in them not being able to compete on price and have advantages over the rivals (Porter, 1980).

COMPETITIVE POSITIONING: OPERATIONAL COST ADVANTAGES

The value of any merger and acquisition strategy is contingent upon the market context to which such strategies are deployed. Economies of scope are deemed valuable if the worth of the combined firm to which a firm operates is greater than the overall worth of such firm operating independently (Barney, 1997). Generally, economies of scope occur due to cost savings and, or, revenue enrichments that a firm incurs as a result from the various business segments in which they operate. Commonly, this can occur when multiple business segments utilize a common input, while the cost of the input becomes incorporated within the firm's production or service volume. Essentially, if a firm has established some sort of valuable, rare and costly to replicate resources and capabilities and desires to utilize such resources and capabilities in establishing economies of scope, then such actions should be implemented within the firm boundaries (Williamson, 1975). In doing so, it allows a firm to maintain its scope-based advantage proprietary and a capture more of the economic profits that are established. However, if another firm also maintains such valuable, rare and costly to replicate resource to establish economy of scope, but the cost to acquire or develop such resources are high, a corporate diversification strategy and the utilization of hierarchical governance to recognize such potential could be too much to overcome (Barney, 1997), therefore, an intermediate governance structure would be favored in order to realize the economies of scope. At times, economies of scope could imitate connections between business operations to which a firm materializes. Such operational economies of scope characteristically reside within a firm's shared activities and their corresponding core competencies.

Firms can maintain cost advantages in a variety of ways over competitors even when competing firms sell homogeneous products or services. For public accountancy practices, cost advantages can be retained by improvements or adoption of technological platforms as discussed, related to the restructuring of operational procedures. As we can see, academic literature suggests that economies of scope can occur if related companies can establish some sort of strategic relatedness benefit. During our action sequence event, we noted that although two companies may be deemed related, that does not necessarily mean that economy of scope can be maximized. For example, if two public accountancy practices, which were deemed related, merged, simply because they are related, they also must have strategic related value that can be recognized in order to maximize economies of scope. In our example, there were two main areas that needed to be reflected upon, rent expenses and salary expenses. Cost advantages in salary expenses were previously discussed; however, a further analysis on rent we need to be analyzed.

What we found was simply by reducing salary expenditures, even if all other expenditures were deemed a strategic related benefit, and due to the fact that rent was deemed a majority expenditure, without simply addressing rent expense, we could not maximize economies of scope. Therefore, the only logical way to reduce rent expense, was to create an organization that was virtual in nature or consolidating locations accordingly. This would not be applicable if the bidding firm acquired a target and required a stand-alone location or satellite office; however, the bidding firm would need to recognize to minimize such expenditures so maximization can occur. Maximization can occur through the use of a virtual organization which would allow the combined entity to scale-down office locations and established a virtual environment to which engagement preparation can be performed throughout the world. This would only occur if the appropriate software and organizational structure was implemented. What we also noted is that at the consolidated level, if a public accountancy practice has the ability to scale down their office location to a shared office suite, this would also allow a practice to reduce rent overhead tremendously. Although such positioning is deemed a temporary competitive advantage, rivals who failed to address or adapt to others

would have a competitive disadvantage. What we also found was that in doing so, cash flow margins increase substantially even though annual distributions or being made to the seller.

Academic literature suggests that economies of scope would occur if related parties gained enough efficiencies. Although this is accurate, in our situation, if rent expense and salary expense, in particular or not properly addressed and the operational structure was not in line with what a highly competitive structure should look like, then there would be diseconomies of scale and cost disadvantages.

CHAPTER 6: CONCLUSION

This study has attempted to clarify thinking surrounding mergers and acquisitions between two public accountancy practices, specifically, how strategic related benefits could impact scale economies, stakeholder value added and economic profit. While merger and acquisition literature are predominantly founded upon publicly traded companies, little is known on its impact for the public accountancy industry, specifically how mergers and acquisitions impact scale economies, stakeholder value added and economic profit. The lack of literature did not hinder our ability to move forward on the study, in reality, we were able to use the literature as a foundation in leveraging our understanding and exploration of other measurement methods. The findings obtained during the study shed light on important learning points that will be useful in future merger and acquisition proposals for practitioners and researchers. In essence, in order to maximize post-merger performance on a firms' scope economies, stakeholder value added and economic profit, operational costs in rent and salary expenditures must be reduced directly.

Throughout history, public accountancy practices have engaged in numerous mergers and acquisitions to gain strategic advantages in the industry. We have seen the evolution of smaller and highly competitive public accountancy practices merge and evolve towards larger differentiated companies. This allows public accountancy practices to evolve towards differentiation and cost advantages so that price competition becomes less of a strain. Although public accountancy practices operate in the accountancy industry, they also compete within a specific business lifecycle and competitive environment. Understanding where a practice is positioned, how a merger and acquisition can impact scale economies, stakeholder value added and economic profit, will allow a practice to understand the competitive environment and which acquisitions needed to be perused in order to expand and compete with rivals.

Prior to the study, there was a general understanding that a merger and acquisition between two public accountancy practices would directly improve scale economies, stakeholder value added and economic profit, as long as the Buyer was able to achieve synergistic cost efficiencies. This would be

achieved through cost savings generated at the consolidated level, amongst the related party's common operating structure. Academic literature supported this understanding suggesting that mergers and acquisition would provide a firm to take advantages of competitive opportunities or to defuse competitive pressures through the diminishing operating costs and enhancement of engagement offerings, simply as each would be strategically related. Essentially, it was understood that a merger and acquisition would be economically valuable, as the consolidated companies would recognize some scope economies, stakeholder value added and economic profit.

Although the study found that a merger and acquisition between two public accountancy practices would generate scale economies, stakeholder value added and economic profit, it failed to maximize each independently. Simply conceptualizing parties as relatable in an operational perspective, does not necessarily indicate that there will be enough strategic related benefits captured at the consolidated level, to gain cost efficiencies, to maximize scale economies, stakeholder value added and economic profit; therefore, a more appropriate acquisition should be sourced. In order to maximize post-merger and acquisition performance in maximizing scope economies, stakeholder value added and economic profit, synergistic cost efficiencies would need to be recognized, specifically related to rent and salary expenditures, unless there were ample synergistic additions added to gross revenues that could offset the lack of cost savings. Simply by acquiring and operating a Target as a separate standalone entity, would not be enough to maximize cost efficiencies and scale economies, stakeholder value added and economic profit. Therefore, if a merger and acquisition occurred between two public accountancy practices that operated as stand-alone companies, it would be done for alternative strategic opportunities such as market and niche penetration, access to additional resources, or increase market share, to name a few.

The study also provided insight surrounding alternative cost efficiency strategies, in a continued effort to engage in merger and acquisition strategy. If the Participant proceeded with a merger and acquisition strategy and desired to operate the Target as a stand-alone entity, the practice could maximize cost efficiencies in rent and salary expenditures simply by engaging with a third party offshore staffing

agency, where staff could be retained to directly work for the Participant. This new operating structure, would create significant cost advantages, as the Participant would have the ability to retain quality staff members at a fraction of the industry cost. Although a fairly new concept for public accountancy practices, this operating structure is currently being deployed by numerous public accountancy practices across the U.S., specifically the Big Four accountancy firms, who utilize and maintaining operations in cost-effective countries. If implemented, public accountancy practices would recognize substantial cost savings and increase cash flow margins, compared to rivals that simply cut salary expenses through reductions of staff and salary.

Additional knowledge gained through the study, provided a richness of additional information regarding mergers and acquisitions between two public accountancy practices. In particular, understanding that simply by acquiring a target that is deemed relatable, may not directly maximize scale economies, stakeholder value added and economic profits. In addition, operating a target as a stand-alone entity, while recognizing scale economies, would not be recommended, unless alternative cost efficiencies were captured in rent and salary expenditures, or another strategic initiative were gained. Further, opportunity rests in a merger and acquisition consolidation growth strategy, in which a practice acquires and consolidates operations into a single operating entity, to gain cost efficiencies and maximize scale economies, stakeholder value added and economic profit. This type of corporate strategy becomes appealing when companies reside and compete in a highly competitive market, experience price competition and offerings are homogeneous in nature. Therefore, the study illustrated that although a practice could recognize scale economies, stakeholder value added and economic profit through a related acquisition, maximizing each would not occur unless other strategic related cost efficiencies could be recognized. Finally, measuring several merger and acquisition opportunities collectively and its impact on the consolidated financial statements would allow a practice to identify the best alternative in maximizing scale economies, stakeholder value added and economic profit.

Although this merger and acquisition study provided additional knowledge for public accountancy practices, there were limitations incurred. For example, limitations surrounding access to information was prevalent, specifically related to the income statement and balance sheets for both the Participant and the Target. The lack of, and misinformation of, financial information directly impacted the initial methodology in measuring strategic advantages. As such, an alternative methodology was required to be adopted that focused upon specific measures. In another example, there were limitations due to the lack of literature specifically addressing mergers and acquisitions in the public accountancy industry. While merger and acquisition literature are predominantly founded upon publicly traded companies, little was known on its impact on the public accountancy industry, specifically how mergers and acquisitions impact scale economies, stakeholder value added and economic profit. However, although limited literature existed, it did provide a framework to leverage upon to make rational conclusions in the analysis.

Recommendations for future research in mergers and acquisitions between two public accountancy practices could explore several distinctive studies that could provide additional knowledge on post-merger and acquisition performance in maximizing scale economies, stakeholder value and economic profit. However, the researcher would face limitations and uncertainty, particularly to the shifting economic conditions, competitive dynamics and operating structures. Future research could investigate a merger and acquisition between two public accountancy practices that are owned and operated within different geographical locations. For example, public accountancy practices that desire to penetrate a competing alternate geographical market, for strategic purposes, may explore a merger or acquisition in that location. Although each party may not be relatable, they still could maintain basic fundamental engagement functions that could possibly be leveraged upon to gain synergistic cost efficiencies. Having an understanding of this could broaden a public accountancy practice prospective on merger and acquisition targets throughout alternative markets.

Another study could leverage from and explore merger and acquisitions between two public accountancy practices that primarily focus upon achieving synergistic cost efficiencies. This future

research would contrast benefits and challenges with most recent advances in technological advancements, specifically related to artificial intelligence, the establishment of an offshore workforce and its impact on practice operating cash flow. Then, utilizing this information, a merger and acquisition analysis could be conducted on a target, measuring its impact on post-merger performance on maximizing scale economies, stakeholder value added and economic profit. Further, this future research could draw comparisons to this study to indicate which organizational structure maximizes value.

Finally, future research could explore whether this merger and acquisition study is applicable to other relatable industry structures. This would contribute to and extend the existing literature to privately owned companies, in particular, ones that operate within a highly competitive markets that could be consolidated, in order to achieve and maximize scale economies, stakeholder value added, and economic profit.

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