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DEPARTMENT OF SUPPLY CHAIN AND INFORMATION SYSTEMS

LOGISTIC INTEGRATION: THE OVERLOOKED FORCE DRIVING THE FUTURE OF THE KRAFT HEINZ MERGER

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A thesis submitted in partial fulfillment of the requirements for baccalaureate degrees in Accounting and Finance with honors in Supply Chain and Information Systems

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ABSTRACT

Over the past three decades, mergers and acquisitions have become an integral component of the economic system. Although the financial crises of 2008 cut M&A activity in half, the past four years have seen volume and value of M&A deals recover to near record highs. Fueled by cheap credit and a need to expand, the economy is appearing to be in the midst of another merger wave. Although the macroeconomic events driving these waves and the individual motives behind each merger are ever changing, the failure rate of mergers has remained fairly constant. Between sixty and eighty percent of all mergers end without achieving the desired economic return. Although much research has been done regarding this topic, success rates have not improved. The issue concerning many of these deals is that they are only analyzed on the financial level, and not at the logistical operating level. The result is that many potential financial synergies and gains are not realized since the logistics networks either cannot be combined or the integration is handled poorly. Through the lens of the Heinz and Kraft merger, this study provides a framework for firms to use in analyzing supply chain synergies prior to a merger while showing that potential financial synergies can be derailed by poor logistical integration.

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Chapter 1

Introduction

On March 25, 2015, Kraft and Heinz, two of the most iconic food brands, announced they would merge. The deal created the third largest food and beverage company in North America and fifth largest in the world. Similar to many deals in the current merger wave, the combination of the two firms was driven by a desire to obtain market expansion and synergistic gains. Market saturation and competition in developed markets are forcing companies to focus both on international growth and domestic economies of scale in order to remain competitive. The merger of Heinz and Kraft would appear to achieve both of these goals. The two companies are iconic brands with many overlapping components in the North American market. At the same time, the 2012 split of Kraft and Mondelēz International has left Kraft heavily concentrated in North America and primed for international expansion. However, many previous mergers that have been just as touted for potential financial gains have ultimately ended in failure.

There has been significant research conducted on why mergers fail at such high rates. Components such as the initial economic valuation, clashing of organizational cultures, and poor management have all been attributed to high failure rates. Although each of these can play a significant role in the success or failure of a merger, one aspect that is not mentioned enough is the role of logistical integration. Despite the enormous financial potential of any given merger, that potential cannot be achieved without the two firms combining their operations. This is especially true in large manufacturing firms where supply chains drive a majority of all costs. There is no common method to analyze potential supply chain synergies prior to a merger. Furthermore, the merits of many deals are determined purely on financials rather than operations. Poor post-merger integration of operations will ultimately lead to a failed merger.

Through looking at the Kraft and Heinz merger, this thesis attempts to show how a deal that is considered to be an enormous financial success could end in failure because of poor postmerger integration. In order to do this, the history of mergers will be examined first to explore the factors driving merger activity and their relation to the consumer packaged food industry. Next, the role of 3G Capital will be examined through an analysis of their past acquisitions, motives, and post-acquisition strategies. Included in this will be the impact that Warrant Buffet and Berkshire Hathaway have in the deal. After this background, the financials of both firms will be examined to determine the reasoning behind the deal. The financial state of Heinz both pre and post acquisition will be compared to Kraft's financials prior to merger to show how the two companies stand to compliment one another from an initial perspective. Many of the metrics explored in this section can be used by other private equity firms or companies considering potential targets to acquire. Next, the two main logistic network designs in the consumer packaged food industry will be examined and related to the current network designs in place at Kraft and Heinz. Using this analysis and prior research on network designs, a framework of questions on how to determine potential supply chain synergies pre-merger is developed. The final step will be to use the information on supply chains and 3G Capital's history to show that despite the strong potential for economic gains, organizational and logistical factors could ultimately lead the merger to fail.

Chapter 2

History and Motives Behind Mergers

This chapter will examine the history of mergers by analyzing research on merger waves and motives. This analysis will then be used to explore the consumer packaged goods industry and the reasons behind the Kraft Heinz merger can be made.

The Beginnings of the Merger

History dates the first merger as far back as 1702, when The East India Company merged with its rival The English Company Trading to form The East Indies forming The United Company of Merchants of England Trading to the East Indies (The Honourable East India Company, 1913). The simple goal of this merger was to help The East India Company maintain its monopoly over the Indian Trade routes that it had controlled from 1600 through 1698. Mergers and acquisitions after this and up through the late 1800s were not a common occurrence. However, beginning in the 1890s, mergers and acquisitions began to occur at a much quicker rate. The main motives behind these mergers were very much the same as what The East India Company had in 1702, to create and maintain monopolies. Since then, the types of mergers and the motives behind them have changed greatly. However, the transactions ultimately have one simple goal: to create value.

Merger Waves

Merger history has typically been divided into six waves based on cyclical patterns and driving forces. The first beginning in the early 1890s was characterized by a focus on firms using horizontal mergers in order to gain monopolistic power (Nguyen, 2013). This wave led to the creation of many of the "principal steel, telephone, oil, mining, railroad, and other giants of the basic manufacturing and transportation industries in the United States, including U.S. Steel and Standard Oil (Lipton, 2006). Ultimately, the Clayton Antitrust Act of 1914 brought this period of activity to an end. In response, the second wave, beginning around 1919 shifted the focus from now illegal monopolies towards oligopolistic structures (Nguyen, 2013). These were achieved through the use of vertical integration and led to further industry consolidation (Lipton, 2006). This wave ultimately ended in the stock market crash of 1929.

The next wave did not emerge until the early 1960s when the concept of conglomeration and diversification first emerged (Lipton, 2006). Enforcement of anti-trust laws and desire to form internal capital markets led firms to aggressively pursue diversification through M&A activity (Nguyen, 2013). The oil crisis of 1973 led to a significant decrease in merger activity and thus the end of this wave. The fourth wave, which began in 1981, was characterized by the emergence of the hostile takeover. The emergence of the corporate raider led to the break up of many conglomerates (Vazirani, 2015). The RJR Nabisco LBO and collapse of the junk bond market in 1989 ended this wave (Lipton, 2006). The fifth wave lasting from 1992 until 2000 is classified as the age of the mega merger. Companies of unprecedented size and global presence were created on the assumption that size matters and to maintain high multiples and stock prices (Lipton, 2006). The bursting of the Millennium Bubble and major scandals such as Enron ended this wave. Finally, the sixth wave beginning around 2003 was led by the rebirth of heavy leverage and the creation of mortgage backed securities (Nguyen, 2013). The wave came to an end with the financial market crash in 2008. Each of these waves were driven by large macroeconomic forces and ended with a significant economic event.

Since the financial crash of 2008, it appears another merger wave has begun. This wave revolves around low interest rates and the desire for growth. Since the financial crisis, the Federal Reserve has kept interest rates near zero percent. This gives both consumers and companies' incentives to spend. By borrowing, companies have a lower weighted average cost of capital, or WACC, than before. This in turn makes acquisitions that were once unattractive due to only a moderate level of return much more attractive. At the same time, these artificially low interest rates have allowed significant recovery and growth in the stock market. Some overvalued companies have been able to take advantage of their appreciated stock and use it to acquire either undervalued or less overvalued companies.

Current Environment and CPG Industry

This merger wave comes at a critical time for many corporations, as growth rates especially in North America and Western Europe appear to be flat. An examination of the financials of the largest corporations in the world reveals that many are growing profit through cost cutting rather than revenue growth. Many large corporations show nearly flat revenue growth. Targeting companies while interest rates are low and acquiring companies' stock prices when their overvalued allows for long-term growth that right now is difficult to find organically. As seen in Figure 1 and Figure 2 below, the time since the Financial Crisis of 2008 has produced some of the largest years for merger and acquisition activity in global history. The activity found in the United States, where growth in many industries has become flat, is also at near historic levels. Furthermore, two of the three largest mergers in North American history have occurred since 2008.

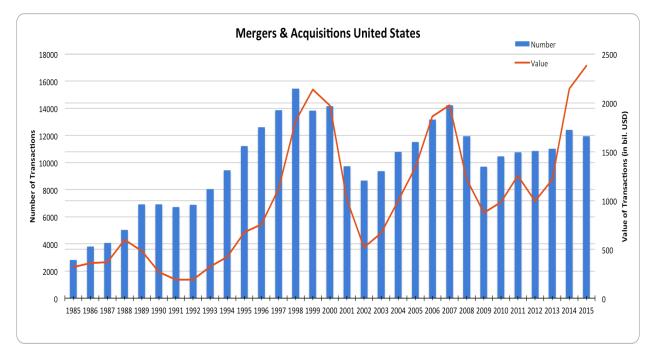


Figure 1 Merger & Acquisition Trends in United States Source: Institute for Mergers, Acquisitions, and Alliances

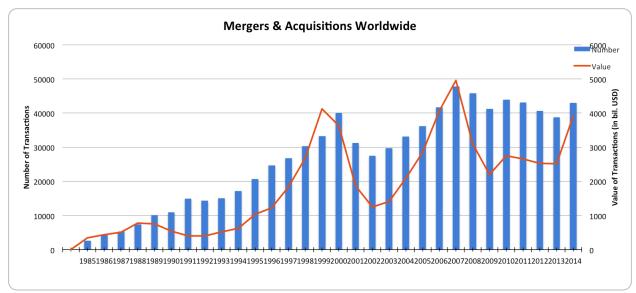


Figure 2 Global Merger & Acquisition Trends Source: Source: Institute for Mergers, Acquisitions, and Alliances

It is interesting to note that time periods associated with merger waves can be seen in both figures. Furthermore, the data supports the conclusion of a new merger wave.

With specific regards to the Consumer Packaged Foods (CPG) industry, the industrywide compound annual growth rate for the last ten years has been less than one percent. (Berfield, 2015). Consumer tastes are ever-changing, especially in North American and Western European markets, where health has become a priority. The increased demand for non-processed and organic options has brought scrutiny upon and eroded the base of operations for many of the largest consumer food companies. This has led to a two-fold approach. One, create healthier options for those in the developed markets. An example of this was Campbell Soup Co. acquiring Bolthouse Farms, a food and beverage company focused on high value-added natural products in 2012. This solves the problem of meeting demand in developed countries but at the same time these options tend not to grow revenue or profit, but rather simply maintain them. As a result, the second part of the approach is to grow operations overseas. This was the main reason for Kraft's acquisition of Cadbury in 2010.

Merger Motives

In addition to merger waves, it is important to examine the individual reasons that mergers may occur. Waves help to explain the overarching macroeconomic objectives of mergers for a given time period, but fail to explain the occurrence or reasoning for each individual merger. Each firm is unique and the reasons for a merger or acquisition may be different even though they occur within the same wave. Although research has been done for the motives of mergers, the research concludes no definitive list. Berkovitch and Narayanan (1993) stated the three main motives for mergers being: synergy, agency, and hubris. Synergy assumes that managers of both acquirers and targets aim to maximize shareholder value and would only engage in takeover activity if both sets of shareholders were to gain. The agency motive is primarily motivated by the self-interest of the acquirer management. Within this motive, Berkovitch and Narayanan include smaller motives such as diversification and free cash flow. Ultimately, the objective of the agency motive is for the acquirer firm to extract value from the target firm. In many cases, the target firm will attempt to obtain part of this value for its own shareholders. This is evident in market transactions when the target firm requires a premium above its current share price. The final hypothesis, hubris, is driven by managers' mistakes and that there are no synergy gains attainable. This hypothesis is used to explain mergers and acquisitions that result in no economic gain. Mukherjee, Kiymaz, and Baker (2004) added diversification, tax considerations, management incentives, purchase of assets below their replacement cost, and breakup value as other motives to the Berkovitch and Narayanan original research.

Mukherjee, Kiymaz, and Baker (2004) additionally conducted a survey, which contacted 721 U.S. firms that participated in M&A activity between 1990 and 2001. Seventy-five CFOs responded to the survey citing six different reasons for acquisitions: 1) take advantage of synergy; 2) diversify; 3) achieve a specific organizational form as part of an ongoing restructuring program; 4) acquire a company below its replacement cost; 5) use excess free cash; 6) reduce tax on the combined company due to tax losses of the acquired company. Synergy was identified as the most common motive, receiving 37.3 percent of the responses. The second highest ranked motive was diversification, chosen by 29.3 percent responses.

Vazirani (2006) established seven merger motives: 1) inefficient management; 2)

synergy; 3) diversification; 4) agency problems; 5) tax considerations; 6) market expansion; 7) purchase of assets below their replacement costs.

The set of motives driving mergers change along with the economic environment. Given the new merger wave, the four most noticeable current motives are: 1) synergy; 2) diversification; 3) market expansion; 4) tax considerations. This is not stating that other motives are irrelevant, but rather that these are simply the four largest.

As supported by the Mukherjee, Kiymaz, and Baker (2004) survey, synergy is referred to as the leading cause of mergers. Sirower (1997) defines synergy as increases in competitiveness and resulting cash flows beyond what the two companies are expected to accomplish independently. Eccles, Lanes, and Wilson (1999) outline the source of synergies as cost savings, revenue enhancements, process involvements, financial engineering, and tax benefits. Currently, examinations of press releases of many large M&A deals cite "synergy savings" as a driving force behind mergers. Savings often are achieved with shedding overlapping functions, assets, ideas, and workforce.

Synergy, unlike other motives, can exist for one of two reasons: growth or survival. When firms combine for growth, the resulting firm is able to achieve economies of scale that the two firms could not achieve separately. Neither firm is struggling within its own constraints, but the combination of the two firms provides additional value. With respects to survival, industry concentration, macroeconomic conditions, changing market and consumer forces, or firm efficiencies can force firms and entire industries to merge or consolidate in order to survive. An example of this was the Yellow/Roadway merger in 2003. The two firms cited synergies as the main reason for the merger. However, this was not for typical growth purposes. The deal only predicted \$45 million in synergies savings over two years in a combined firm with revenues of \$6 billion. Furthermore, the two companies planned to operate separately. The two firms' lack of ability to adapt given their size compared to smaller regional firms and the move away from less than truckload (LTL) carriers led to the two companies into a merger simply to survive (Simonson, 2003).

The importance of diversification can be linked back to the third wave of mergers. A common argument in support of diversification is that lowering the risk of a firm's stock increases its attractiveness to investors and thereby reduces the firm's cost of capital. Diversification may also enhance a firm's flexibility, allow it to use its organization more effectively, reduce the probability of bankruptcy, avoid information problems inherent in an external capital market by way of internal allocation of resources, and increase the difficulty of competitors uncovering proprietary information (Mukherjee, Kiymaz, and Baker, 2004). An interesting example of this took place when Phillip Morris, the largest tobacco company in the United States, acquired Kraft Foods in 1988 and then RJR Nabisco in 2000. The reasons behind the mergers were to help Phillip Morris offset some of the risk and legal battles involved with their tobacco business.

Tax considerations, although previously included with synergies, are becoming an ever more independent and relevant factor with the current surge in tax inversions. The Burger King and Tim Horton's merger in 2014 is a prime example of this. The deal ended in Burger King switching its headquarters to Canada for tax saving purposes.

Market expansion is a by-product of the current economic environment. As previously discussed, organic revenue growth in the United States is tough to achieve in many industries. As a result, if firms wish to expand domestically, they are forced to acquire firms in order to grow market share. For global growth, organic growth is a lengthy process. Firms need place, people,

regulatory approval and other resources to expand in to newer product categories or geographical territories. Acquisition of another firm with complementary product of geographic spread provides all these resources in a much shorter time, enabling faster growth (Vazirani, 2006).

When examining the Kraft Heinz merger in comparison with the research done, two motives become apparent: synergy and market expansion. Within the deal, Kraft and Heinz expect the new company will gain \$1.5 billion annually in synergy savings after two years. This will be achieved by the combining transportation networks, removal of overlapping manufacturing plants, and personnel. The second motive, market expansion, focuses on Kraft's ability to grow its brands internationally. In order to better analyze these motives with relation to the merger, it is important to examine 3G Capital and its role in the merger.

Chapter 3

The Acquirers

This chapter will examine 3G Capital's background, past acquisitions, and methodologies in order to gain a better understanding of the firm and its interest in Kraft Foods. Additionally the chapter will consider the role Warren Buffet has played in 3G Capital's acquisitions.

Background

Founded in 2004 by Brazilian businessmen Jorge Paulo Lemann, Carlos Alberto Sicupira, Marcel Herrmann Telles, and Roberto Thompson Motta, 3G Capital is a multi-billion dollar investment firm that focuses in the acquisition of North American companies. According to its website "3G Capital is a global investment firm focused on long-term value, with a particular emphasis on maximizing the potential of brands and businesses". The company achieves this by targeting iconic American brands that have lost their aggressive edge and immediately focus on cutting cost, changing leadership and culture, and focusing on major growth opportunities (Boston Consulting Group, 2015). Although it was founded in 2004, 3G Capital did not begin making headlines until 2010 when it acquired Burger King. This timing relates directly to the emergence of cheap financing and was only a year after the U.S. stock market bottomed out. Prior to this, the firm focused on concentrated investments in public securities. The company's aggressive style has earned both praise and concern from financial analysts. On one side 3G Capital has shown the ability to quickly increase profit. On the other hand, the firm has not necessarily shown an ability to increase profits through revenue growth, and some analysts point to its aggressive cost cutting as the only reason for increased profits.

Acquisition Process and Past Acquisitions

First, it is important examine is how 3G Capital goes about completing its acquisitions. Jorge Lemann, 3G's principal founding partner, has made leveraged buyouts (LBOs) a typical part of the firm's acquisition structure. The tactic, which involves using a significant amount of debt to acquire a target, first became popular during the fourth merger wave with the emergence of the corporate raider. The basics lead the acquirer to obtain significant financing in order to acquire a target rather than directly using a large part of the firm's own capital or cash. A group of investors will typically take the acquired company private by purchasing all of the outstanding equity of the company (Lichtenberg & Siegel, 1990). This is a method that can also be used to allow smaller companies to acquire larger companies.

In the acquisitions of both Burger King and Heinz, which will be discussed in depth further on, 3G Capital used a significant amount of leverage and brought the companies' private. The merger of Burger King with Tim Hortons was classified as a merger but had aspects of a leveraged buyout, as the deal was funded significantly by a financing package. Considering the increased debt and associated interest payments, LBOs are associated with more risk. Although the original stockholders are usually compensated with cash at a premium, the new debt holders face an increased amount of risk given the leverage (Smith, 1990). 3G Capital uses leveraged buyouts to make large acquisitions with relatively little upfront cash from the firm's perspective. This creates a large risk/reward scenario and explains the company's focus on turning around cash flow and profits. Both are needed to payoff interest and principal in addition to increasing returns.

The interesting situation to the Kraft Heinz deal is that it does not appear to be a leveraged buyout. Rather, 3G Capital and Berkshire Hathaway are both funding \$10 billion in a

special dividend to Kraft shareholders and then using the unlisted Heinz shares to complete the remainder of the deal. This is a step away from the normal acquisition process and shows a potential conflict of ideologies between 3G Capital and Berkshire Hathaway. Still though, the combined company will have the existing debt of Heinz to payoff, making cash flow a priority.

Considering this, it important to examine the firm's past acquisitions. Figure 3 below provides a timeline of 3G Capital mergers and acquisitions:

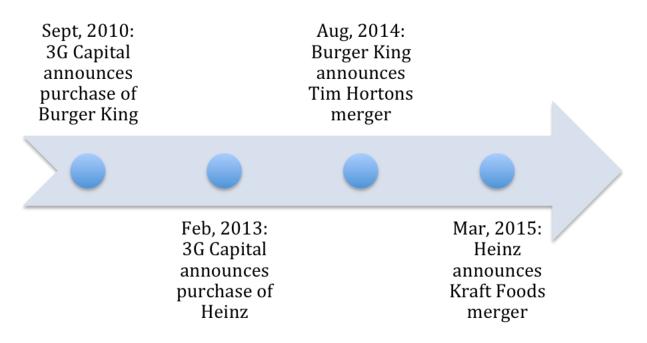


Figure 3: 3G Capital Acquisition Timeline

On September 2, 2010 it was announced that 3G Capital would acquire the struggling fast food chain, Burger King, for \$3.26 billion, a forty six percent premium over the market cap the day prior. Additionally, 3G would take on around \$700 million in debt, bringing the total value of the deal to around \$4 billion. The deal was considered a leveraged buyout as 3G Capital only put up \$1.2 billion with the remaining seventy percent financed by JPMorgan and Barclays. In 2012, 3G sold thirty percent of its stake in Burger King to a special purpose acquisition

corporation (SPAC) run by Pershing Square's Bill Ackman and billionaire Nicolas Berggruen for \$1.4 billion. Later in 2012, the company went public once again and for a while was a top performer on the New York Stock Exchange. At the time of the acquisition, unlike its rival McDonalds, Burger King had failed to rebound after the recession. The company was losing market share attributed to a failed ability to adapt its menu to an ever-changing audience.

On August 26, 2014, it was announced that Burger King would acquire and merge with Canadian based Tim Hortons in a deal valued at around \$11.5 billion. Tim Hortons was the largest donut and coffee chain in Canada. Burger King, and thus 3G Capital, would take a fiftyone percent stake in the new company. The deal came at a time Burger King was experiencing less than stellar result. As in the Burger King acquisition, the deal was heavily financed by debt as \$9.5 billion of \$12.5 billion came from JPMorgan and Wells Fargo. Additionally, Warren Buffet contributed \$3 billion to back the deal in exchange for preferred stock. Although synergies existed, the deal was widely publicized for its tax inversion, as the company chose Canada, where the corporate tax rate was 26.5 percent versus forty percent in the United States, for the new global headquarters.

3G Capital's other acquisition was made public on February 14, 2013, when it announced the investment firm and Warren Buffet's Berkshire Hathaway would acquire H.J. Heinz for \$23.3 billion. Including assumption of debt, the total value of the deal was estimated at \$28 billion. 3G Capital and Berkshire Hathaway would split ownership evenly, each putting in \$4.4 billion in cash. Warren Buffet put in an additional \$8 billion for preferred stocks. Banks would back the rest and Heinz would be taken private. Heinz at the time was experiencing stagnant domestic revenue growth, and relatively flat profits. Unlike other private equity deals centered on quick turnarounds for profit, 3G Capital and Berkshire-Hathaway stated that the deal had a long-term focus.

As in the Kraft Heinz merger, all of these deals represent companies with strong iconic brands, whether globally or regionally, that still have room to expand. Furthermore, at the time of acquisition, each of these companies was experiencing some form of difficulty in regards to growth and profit.

Methodologies After Acquisition

After an acquisition, 3G Capital immediately begins the process of inserting its own management team and culture. First, management will be replaced with people who fit 3G's way of business. The CEO position often goes to a person who is well trusted and has worked at the firm for a period of time. Bernardo Hees, the current CEO of Kraft Heinz and former CEO of Burger King, is a current partner at 3G Capital. Daniel Schwartz, the young CEO of Burger King, began working at 3G Capital in 2005. Outside of the CEO position, the firm chooses young managers that are hungry to learn, get wealthy, and will thrive in aggressive meritocracy. To help achieve this, compensation is directly linked to achieving goals with low base salaries and opportunities for large bonuses (Boston Consulting Group, 2015). In the case of Heinz, eleven of the top twelve executives were let go after the first leadership conference after the acquisition (Roberts, 2015). From this new management team a culture focused on accountability and cost efficiency is instilled (Boston Consulting Group, 2015). Within months of acquiring Heinz, the company announced the layoffs for 600 of the 8000 employees in the company. Included in that figure was 350 of the 1200 employees at the corporate headquarters. Corporate jets were sold and the company's two headquarters buildings were combined into one (Reingold,

2013).

Another major aspect of this culture is zero-based budgeting. Commonly referred to as ZBB, zero-based budgeting began in the late 1970s as an attempt to better link resources to their objectives. The ideology disappeared for some time and then reemerged with 3G Capital. The system has managers begin each year with a base budget of zero. From there, each one must defend every line of spending and justify why it is necessary for the company (Wetherbe & Montanari, 1981). This stands in stark contrast to other types of budgeting that begin each year with the previous years budget as a base. Any costs that are found to be unnecessary or were cut in previous years are removed permanently. With 3G, this places managers as owners of his or her sector, with each having to plan budgets on a monthly basis. This is followed with monthly reconciliations and checks. These processes lead to initial cost cutting targets of ten to twenty percent in the first year and three to five percent each year after (Boston consulting Group, 2015).

Other cultural changes include open workspaces with no individual offices and a competitive environment fostered the "20/70/10" rule first created by GE. This system promotes the top twenty percent of the workforce and fires the bottom ten percent (Boston Consulting Group, 2015).

In order to achieve these cost cutting goals, 3G typically looks for firms that have shown an inability to operate effectively or for firms that show high potential synergies if combined.

The Role of Warren Buffet

One of the underlying components in three of the four acquisitions 3G Capital has pursued is Warren Buffett. The investor has been involved with 3G Capital on its acquisition of Heinz, the merger of Burger King and Tim Hortons, and now the merger of Heinz and Kraft. In the acquisition of Heinz, his company, Berkshire Hathaway, became an equal owner with 3G Capital. Furthermore, Buffett took an additional \$8 billion in preferred stock. The interesting aspect of this is the ideological differences between the two firms. 3G Capital is, at its heart, a private equity firm. Berkshire Hathaway on the other end is a holding company focused on long term investments. The only similarity the two firms would appear to share is an intense focus on identifying value.

Warren Buffet has become synonymous with the term "buy and hold". Buffet has said that he is "quite content to hold any security indefinitely, so long as the prospective return on equity capital of the underlying business is satisfactory, management is competent and honest, and the market does not overvalue the business" (Hagstrom, 1994). This strategy led his company to declare in 1994 that some of its holdings including Coca-Cola, GEICO, and The Washington Post as permanent. Companies such as Wells Fargo, IBM, and American Express have been added to that list in more recent years. Buffet will not sell a stock until he believes the business, not the stock, is not profitable anymore or the company is significantly overvalued (Hagstrom, 1994). Furthermore, due to his stringent belief in return of equity, it is rare for Buffet to be involved in a leveraged buyout where debt will play a major role. When buying a stock or company, Buffet does tedious research. He does not look at stock price, in its typical sense, or many of the typical financial ratios. Rather, he looks at the fundamentals of the company, its future, and its relative valuation to future operations (Hagstrom, 1994). Concerned mainly with capital allocation, he will often buy a company and just let it continue as normal.

3G Capital on the other hand has more closely followed the school of private equity. After an acquisition, private equity firms do not hesitate to replace poorly performing management (Kaplan, 2008). 3G Capital has replaced the CEO and top management with each of its previous acquisitions. Additionally, studies have shown that employment grows at a lower rate in firms that have been bought out by private equity than those that have not (Kaplan, 2008). This follows the consistent layoffs 3G has shown at companies that it acquires. The time frame of private equity acquisitions also tends to be much shorter, around six years (Kaplan, 2008). Overall, private equity deals tend to be focused more on short term turnaround and profit than what Warren Buffet has shown. Although 3G Capital states that it is focused on long term growth, many of its actions reflect that of a short term focused private equity firm.

The Kraft Heinz merger shows pieces of both ideologies. At its core, it is not an LBO and appears to allow for a buy and hold approach with an emphasis on letting the synergies naturally develop. However, since the completion of the merger, ten of the top twelve managers at Kraft have left and the company has announced widespread layoffs similar to that of Heinz, but vastly different to Warren Buffett's normal ideology. How the new firm operates will be largely dependent of which of these two ideologies take hold.

Chapter 4

Financial Ratio Analysis

This chapter will use the analysis from the previous two chapters to examine what led 3G Capital to target Kraft. This approach will use both qualitative and quantitative factors, including ratios, and relations to Heinz to determine what made Kraft a suitable target. The ratios and metrics examined can also be utilized by other private equity firms to determine potential acquisition targets.

Criteria

As concluded by the research in the previous two chapters, 3G Capital targets underperforming regional or global iconic brands with growth potential in cash intensive industries. In the instance of a merger, synergies are in addition to the normal characteristics it desires in an acquisition target.

Some of these characteristics can be classified into financial and non-financial figures. Potential growth, the ability to produce cash, and potential wasteful spending can all be analyzed, at least at a basic level, through the use of various metrics. In the following sections of this chapter the financials of both Kraft and Heinz will be used in relation to the previously mentioned criteria. Data from pre and post acquisition Heinz will be analyzed and compared to pre-acquisition data from Kraft to create an understanding of the potential improvements 3G saw in acquiring Kraft. The metrics used in this section can be used by other private equity firms to determine potential acquisition targets. However, it is important to note, as will be discussed in Chapter Five, financial metrics should only be used as a basic guideline to determine the viability of a potential target, not as the determining factor.

Iconic Brands with Potential to Grow

Kraft and Heinz are two of the most recognizable brand names in American food. In the investor presentation released during the merger announcement, Kraft and Heinz referred to a study showing Kraft had one hundred percent brand awareness in both Canada and the United States. The study also showed that Kraft had above ninety-five percent brand awareness in ten additional countries. However, Kraft is incredibly focused in the North American market especially compared to Heinz, which can be seen in Figure 4.

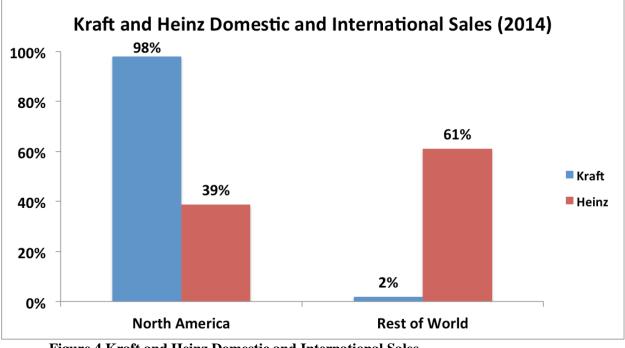
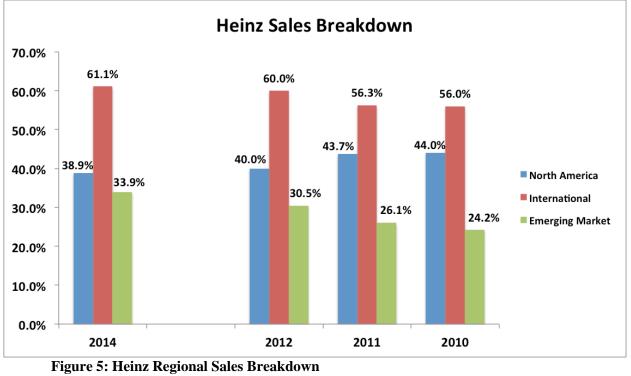


Figure 4 Kraft and Heinz Domestic and International Sales Source: Kraft Heinz Investor Presentation (2015)

Currently ninety-eight percent of Kraft sales are based in North America. However,

according to the study, the brand has over ninety-five percent awareness in nine countries outside of North America. As previously mentioned, one of the main factors 3G Capital looks for is the ability to expand a brand. In 2012, Kraft and Mondelēz International announced a "spin off" which separated the two companies. The split had two major impacts. First, it left Kraft Foods North American concentrated. Second, Mondelēz International took many of the international licensing rights with the split. However, each year, up until 2020, Kraft has the right to reacquire some of those licensing rights. As a result, the combination of heavy North American concentration, the reacquiring of internationally promising licenses, and global brand awareness provide a basis for large global market expansion. The major issue for Kraft was having a logistical network in place to fuel this expansion. Heinz fortunately has this infrastructure in place as can be seen by Figure 5.



Source: Annual 10-K Financial Statements

In 2012, the year that Heinz was acquired by 3G Capital, the company already had sixty

percent of its sales internationally and thirty percent of its sales coming from emerging markets. Furthermore, the company had been in international markets for quite some time. Since the acquisition, this concentration in international sales has only increased. This long standing exposure in international markets allows for Heinz to serve as the perfect expansion tool for Kraft to take its brands to global markets. Overall, when examining the deal, the potential for global expansion of Kraft brands using Heinz's international logistics network and experience is the major driving force behind the merger. Furthermore, in order to improve operational efficiency in the North American market, the two companies have the ability to eliminate any overlapping functions thus streamlining the operations.

Room for Improvement

Although the major driving force behind the Kraft Heinz merger is the potential for international growth and synergy gains, 3G Capital always targets companies that have room for operational improvement. For Heinz and Kraft, the areas for improvement were found in slightly different areas of operation. For Heinz, the company had focused on international expansion and cost cutting in the years prior to its acquisition. The focus on international growth allowed the company to consistently show top line growth as shown in Figure 6.

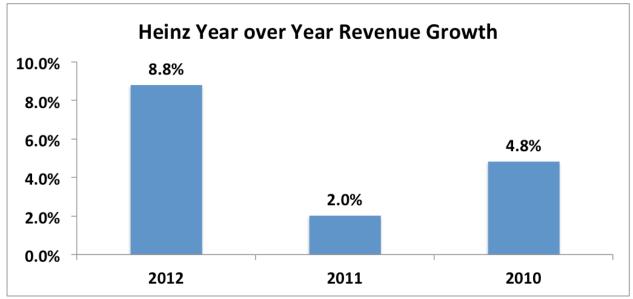


Figure 6: Heinz Year over Year Revenue Growth Pre-Acquisition Source: Annual 10-K Financial Statements

Such top line growth was rare amongst the industry. However, as Figure 7 displays, in 2012, despite strong top line growth of eight percent some operational inefficiencies began to emerge in relation to gross profit and operating income margin.

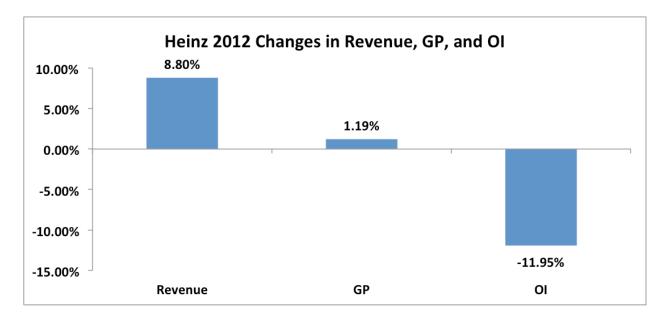


Figure 7: Heinz 2012 Change in Revenue, Gross Profit, and Operating Income Source: Annual 10-K Financial Statements

During the year, gross profit increased at a slower rate than revenues. This shows that cost of goods sold rose at a quicker rate than revenues. Furthermore, operating income actually decreased, thus showing that selling, general, and administrative (SG&A) expenses were increasing at much faster rates than both revenues and cost of goods sold. Combined, these two factors display the excess cost that 3G Capital desires to cut in an acquisition target.

Since the acquisition of Heinz in 2012, 3G Capital has aimed to cut excess spending while streamlining operations. The results of this strategy have been mixed. Sales in 2014 are 6.2 percent lower than sales in 2012. The company contributes this to cutting product lines that sold at decent volumes but did not produce profit at a desired rate. If the company is cutting less profitable product lines, gross profit margin should increase even if sales are decreasing. However, this is not happening. Between 2012 and 2014, Heinz gross profit margin fell from 34.3 percent to 33.2 percent. Although this margin fell, it is still in line with the industry average.

The one area 3G Capital has been successful in is its ability to decrease SG&A expense. SG&A expenses comprised 21.9 percent, 21.5 percent, and 21.3 percent of sales for Heinz in 2012, 2011, and 2010 respectively. This steady decrease in SG&A expenses further shows potential waste at this level of the company. In 2014, the company had lowered this figure to 18.9 percent. The effects of this change are reflected in the operating margin of the financials. In 2012, Heinz had an operating margin of 12.5 percent compared to 14.4 percent in 2014.

For Heinz, it does not appear that international growth played a major factor in the acquisition strategy of 3G Capital. Nonetheless, the company has been able to continually grow global operational efficiency. As Figure 5 showed, Heinz had international and emerging market sales of sixty percent and 30.5 percent in 2012 respectively. In 2014, the company had international sales of 61.1 percent and emerging market sales of 33.9 percent. Both increases are on trend with increases pre-acquisition. However, 3G Capital has significantly increased the portion of EBITDA/operating profits coming from these segments as seen in Figure 8.

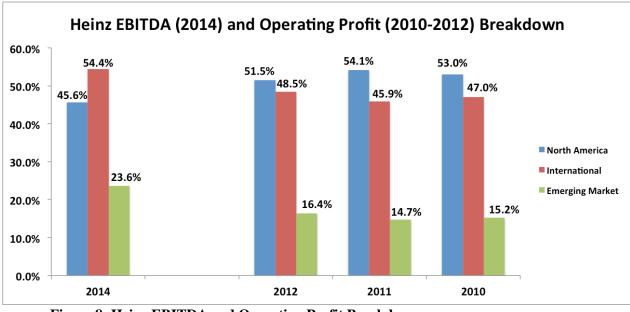
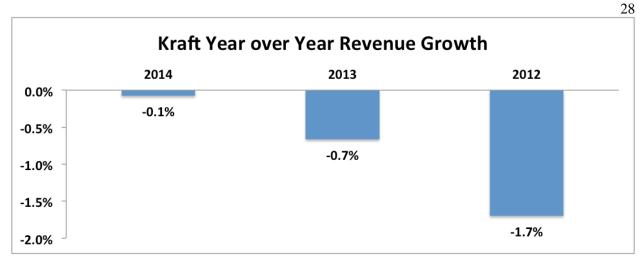


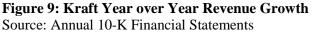
Figure 8: Heinz EBITDA and Operating Profit Breakdown Source: Annual 10-K Financial Statements Prior to the acquisition, although a majority of sales came from international markets, the

majority of operating income came from the North American markets. However, since the acquisition, international markets have become the primary source of EBITDA. Furthermore, prior to the merger, despite increasing sales in emerging markets, the portion of operating profits from these areas was relatively flat, a sign of inefficiency. Since the acquisition, the portion of EBITDA derived from emerging markets has significantly increased.

For Kraft, the potential areas for improvement are different than Heinz, As Figure 4 showed, at the time of the merger, Kraft was heavily concentrated in the North American market. As was stated in Chapter 2, this is a very competitive and saturated market with very minimal growth potential. As a result, although Heinz had been able to consistently grow revenues in the years leading up to its acquisition, Kraft has experienced year over year revenue declines as shown in Figure 9.

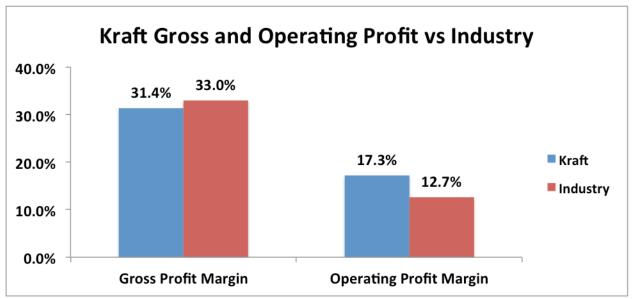
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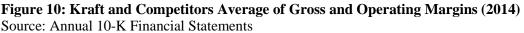




This revenue decline is more directly correlated to the market environment rather than the company's operations. It further shows the need for Kraft to expand internationally.

Considering its lack of revenue growth, Kraft has displayed an ability to keep operational costs fairly streamlined. When comparing Kraft's gross profit and operating profit margins to the average of Hillshire Brands, Campbell's, and General Mills, three of its most comparable competitors in terms of industry, brand recognition and size, Kraft performs fairly well.





As can be seen in Figure 10, Kraft maintains a slightly lower gross margin than its competitors. The company holds a large advantage in operating margin though displaying an ability to keep SG&A costs down. Kraft has remained consistently above the industry average in operating income since 2011. It is important to note that in calculating Kraft's gross profit and operating profit margins, some adjustments were made. Large swings in Kraft's cost of goods sold and SG&A expenses occurred between 2012 and 2014. The reasoning for these swings was a switch to market-to-market accounting for the firms post-employment benefits. In order to look more closely at the operational performance of the company, market based changes in post-employment benefits and unrealized losses and gains on hedges were added or subtracted based on the accounts provided by the company in its annual 10-K report.

Although Kraft is only slightly below its competitors gross profit margin, 2013 and 2014 show some potential for inefficiencies in the cost of goods sold. As Figure 11 shows, in both 2013 and 2014 gross profit margin declined quicker than revenue growth.

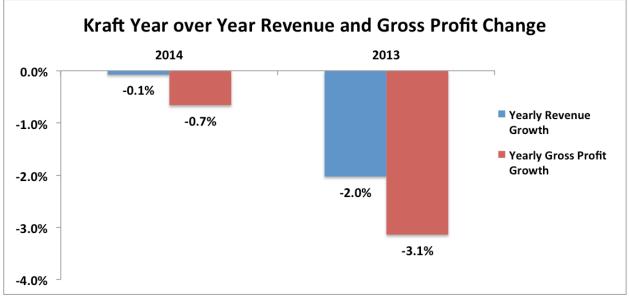


Figure 11: Kraft 2013 and 2014 Year over Year Revenue and Gross Profit Growth Source: Annual 10-K Financial Statements

Compared to Heinz, Kraft shows a strong advantage in operating margins. Heinz improved its operating margin from 12.5 percent in 2012 to 14.4 percent in 2014. This still falls short of Kraft's 17.3 percent operating margin. Furthermore, Kraft has continually increased its operating margin. However, Heinz still maintains a stronger gross profit margin of 33.2 percent compared to Kraft's 31.4 percent.

Overall, Kraft has shown above average capability in keeping SG&A costs down and an average ability to keep cost of goods sold in line with revenue decline.

Cash Intensive Companies

As mentioned in Chapter 3, 3G Capital typically targets companies in cash heavy and stable industries. This is typically necessary considering the increased debt the companies assume when acquired. Cash is needed to pay both interest and principal. However, unlike previous 3G Capital acquisitions and mergers, Kraft and Heinz will assume no additional debt with their merger. As a result, the necessity for free cash does not play as important of a role. Nonetheless, the company will still assume the bloated debt from Heinz as well as the existing debt from Kraft. Therefore, the combined company will still need to produce necessary cash for interest and principal payments above industry norms. Furthermore, with 3G Capital and Berkshire Hathaway still owning a majority of the company, net income figures which can be adapted or misleading may not matter as much as free cash flow available. Increased cash available for distribution ultimately means more cash for 3G Capital and Berkshire Hathaway. Given this, it is important to examine the free cash flows of both Heinz and Kraft. Additionally, the changes in free cash flow pre-acquisition and post-acquisition for Heinz will be analyzed.

The first cash flows to examine are unlevered free cash flows. Free cash flows are typically calculated by subtracting cash used in capital expenditures from cash provided by operating activities. The only potential issue with this metric is that it includes interest expense. Although interest expense typically plays a large role in 3G Capital acquisitions, it does not necessarily allow for investors or analysts to see the true operating ability of the company. A company which is performing well above industry standards may have a lower free cash flow than a company performing below industry standards solely due to interest expense. Therefore, unlevered cash flows add back in interest payments, post-tax, to more directly compare companies abilities to produce cash at an operating level. Figure 12 and Figure 13 show Heinz and Kraft unlevered free cash flows.

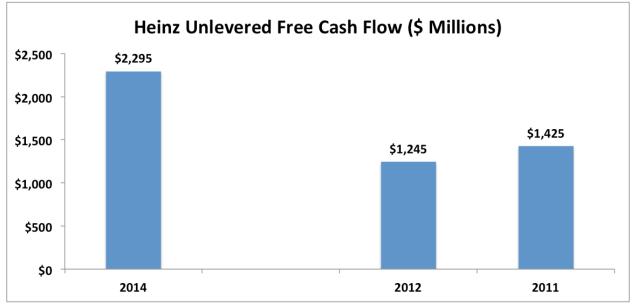


Figure 12: Heinz Unlevered Free Cash Flows Source: Annual 10-K Financial Statements

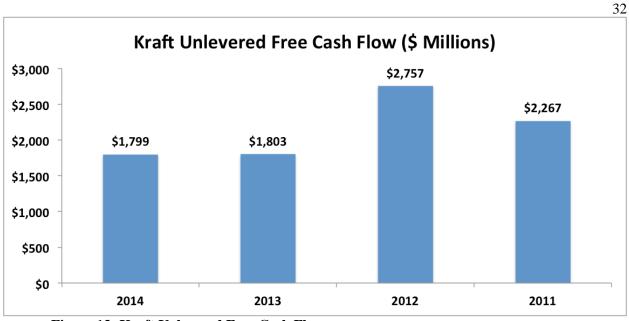
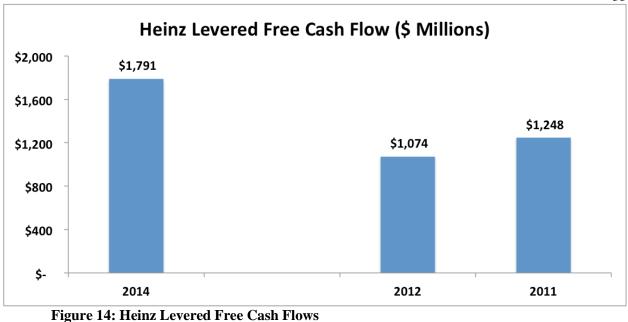


Figure 13: Kraft Unlevered Free Cash Flows Source: Annual 10-K Financial Statements

As can be seen, the combined company will have the ability to pay interest and principal on any debt.

For Kraft, although unlevered free cash flows were lower in 2013 and 2014 compared to 2012 and 2011, the figures still show the company operating at a healthy level. Additionally, debt was not as major of a factor for Kraft as it was for Heinz. In 2014, Kraft's levered free cash flow including debt was \$1.49 billion.

Prior to acquisition, Heinz also demonstrated enough free cash flow to pay any additional debt that may have been assumed. As Figure 12 shows, since the acquisition, 3G Capital has been able to significantly increase unlevered free cash flow. However, since debt increased dramatically as a result of the deal it is also important to examine Heinz's levered cash flows, which includes interest payments.



Source: Annual 10-K Financial Statements

As Figure 14 shows, even when taking interest payments into consideration, Heinz has still been able to increase free cash flow since the acquisition.

Summary

3G Capital acquired Heinz as an opportunity to improve operating performance and take advantage of inefficient international growth. Since the acquisition the company has been able to decrease SG&A expenses, thus increasing operating margin. Additionally, international operations have become more efficient and prevalent as EBITDA/operating income growth has outpaced sales growth both internationally and, more specifically, in emerging markets. The company has also been able to increase overall free cash flow, while keeping capital expenditures constant. This will allow the company to more quickly pay back debt and eventually increase the return to its investors, 3G Capital and Berkshire Hathaway. However, the company has not been able to show an ability to increase sales or cut direct operational costs. Kraft meanwhile showed potential for large scale international growth by using Heinz's existing network and reacquired licenses. The company has displayed an above average ability to minimize SG&A cost and an average ability to control costs at the cost of goods sold level.

From a financial perspective the merger of the two companies should allow Kraft to expand internationally finally allowing it to generate revenue growth. Furthermore, the potential synergies amonst the two companies should allow for operational efficiencies that increase both gross profit and operating profit margins above industry averages.

Overall, the financial metrics behind the merger make sense for both companies. Synergies allow both companies to become more efficient, gaining an advantage compared to the industry while the expansion of Kraft should increase revenues, profits, and cash flow. However, financial metrics should only be used as a first step to determining an acquisition target. Ultimately, the ability of a merger or acquisition to capitalize on financial opportunities relies on the capability of two firms to integrate operations. Many mergers appear as sound opportunities from a financial standpoint but ultimately end in failure. This is often due to a failure to properly integrate post-merger. With two manufacturing companies such as Kraft and Heinz, synergies, expansion, and increased margins will not be possible unless the two logistics networks can be combined. Chapter 5 aims to provide an overview of both companies supply chain networks and a framework firms can use to assess the integration of logistics networks pre and post merger.

Chapter 5

Logistics Network Analysis

In this chapter the importance and impact of network integration in mergers and acquisitions will be discussed. First, the two general forms of supply chain networks and their relation to Heinz and Kraft will be addressed. The chapter will then end with a framework that firms can use to examine potential supply chain synergies both before and after a merger in order to improve financial outcomes.

Logistics Framework

In the merger of two manufacturing firms, the issue of logistical synergies becomes paramount. Manufacturing, warehousing, and transportation comprise a majority of costs for both Heinz and Kraft. In order to reduce costs and exploit economies of scale, merging firms must explore the synergies that exist within combining their logistical networks. These synergies can occur at any of the manufacturing, warehousing, or transportation levels. Although the importance of these synergies has been well documented, the approaches and methodologies needed to realize and take advantage of such individual synergies are not defined. Managers often find it difficult to identify and begin planning synergies prior to a merger. As a result, the true economic value of the merger is more difficult to define. Synergies may be greater than initial predictions, meaning greater value creation. However, synergies could also be underestimated, leading to less value creation than initially predicted. Allowing managers to more accurately predict and analyze synergies prior to a merger creates more clarity in the decision process, especially in the combination of two manufacturing firms.

The creation of a merged supply chain can be compared, at least in basics, to the creation of a new supply chain. Figure 15 provides a framework for the network design process.

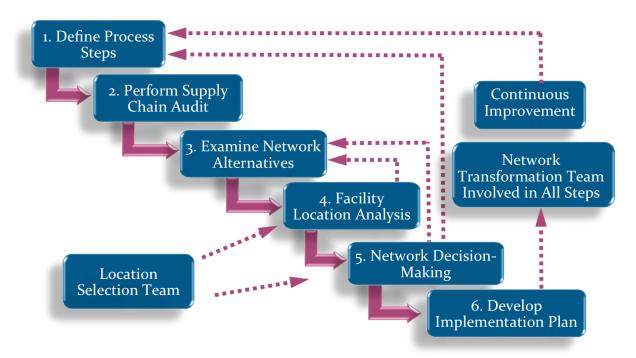


Figure 15: Supply Chain Network Design Process Source: Coyle et. al (2016)

Although this model mainly refers to the creation of a logistics network from the ground up, many relations can be made to two merging firms. Specifically, steps two and three can be used as a base to develop a framework that allows managers to better identify synergies prior to a merger. This framework, which compiles a list of questions for managers to ask, creates a more focused approach as to where synergies or lack of synergy may fall. This model can be used for Kraft and Heinz to determine where synergies will come from. In order to explore this further, the two prevalent logistics models used in the consumer food industry need to be examined.

Distribution Network

The first prevalent model used in the food industry is the distribution network . This model involves a manufacturing firm delivering its goods directly to the customer through its own distribution centers (DCs) and its customers' DCs. The manufactured product will be transported from the manufacturing facility to the firms own distribution center (DC) or warehouse. The product will then be transported from the manufacturing firm's DC or warehouse to the customer DC or directly to the customer store. This model would typically operate with a centralized distribution system.

The network that many large food manufacturers employ, including Kraft, is a centralized distribution system. Also referred to as a hub and spoke system, all deliveries go through a central distribution hub, often strategically located (Minculete & Olar, 2014). The spokes in the network consist of transportation between regional terminals and hubs. The hubs are terminals or, in the case of railway systems, they can be railway nodes. Within the hub, transportation between lines that connects the hub with the terminals of destination. Ideally, the hubs are located as close as possible to the center of the transport demand (Chopra & Meindl, 2004). Distribution centers receive products from many different directions, consolidate them and send them directly to their destination. In general the flow of goods begins with the manufacturer transporting goods from the manufacturing site to a centralized DC. At this location goods can be combined or left separate. From the centralized DC, the goods can flow through another more regional DC or directly to the customer DC. When done correctly, this type of network creates a centralized and integrated logistic system that keeps costs low (Minculete & Olar, 2014). Figure 16 provides a simple illustration of a centralized distribution network.

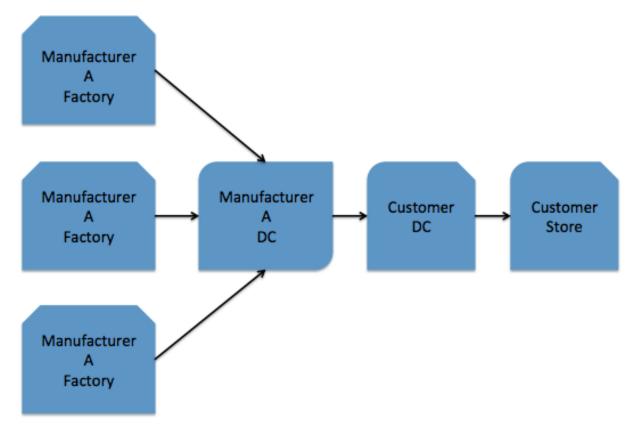


Figure 16: Centralized Distribution System

For large firms, including Kraft, economies of scale results from full truckload shipments at all levels of the distribution network. Full truckloads will be shipped from the manufacturing plant to manufacturer's DC. At the manufacturer's DC, products will be sorted and often placed into mixed pallets and then shipped in full truckloads to the customer DC. The volume, inherent nature of the goods, and customer base are integral factors that allow for the manufacturer to achieve full truckload shipments.

In the instance of Kraft, the firm is large and relatively regionally focused. In its 2014 10-K, the company stated it had thirty-six manufacturing facilities, with thirty-four in the United States and two in Canada. The company also had thirty-six DCs, with thirty-three in the United States and three in Canada. Although the goods vary on requirements including temperature control, the volume of \$18 billion within a small geographic region to a large customer base allows the company a large portion of full truckloads, thus making a centralized distribution network economically advantageous.

Hybrid Network

For firms that do not have the volume, customer base, or have smaller products, full truckloads may not be possible on a consistent basis. As a result, some firms may look to integrate a third party logistics network into their supply chains. Third party logistics networks slightly alter the flow from the centralized distribution network. Firms will transport goods from their manufacturing plants or DCs to a third party logistics provider (3PLs). 3PLs can add value by creating operational efficiencies and/or by sharing resources between customers (Berglund, 1999). Furthermore, outsourcing logistics has proven to be effective in helping firms to achieve a competitive advantage, improve their customer service levels and reduce their overall logistics costs (Boyson, 1999). Ultimately, 3PLs are able to create economies of scale, truckload efficiency, and specialization that individual firms are not able to achieve. As a result, this method can be cost effective for some firms, large or small. It is also possible that firms may not use this method for the entire logistics network, but rather just selected activities, customers, and products. Figure 17 provides a simple illustration of a hybrid system.

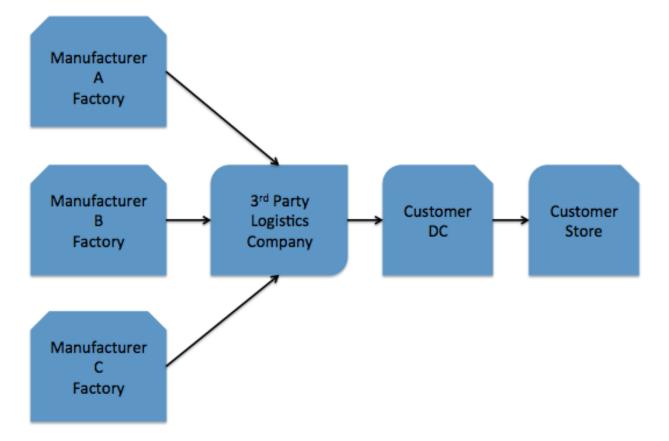


Figure 17: Hybrid Distribution System

For Heinz, which has a slightly smaller footprint in the United States, a widespread customer base, and smaller products compared to Kraft, the use of 3PLs becomes beneficial in some areas. Mixed pallets can be sent from the manufacturing plants of several firms to the 3PL. The 3PL then has the ability to sort and place products into mixed pallets that can then be shipped full truckload to the customer.

Creating an Integrated Framework

With the merger of Kraft and Heinz, the combination of these different networks will need to be analyzed. The steps in relation to Figure 15 are an important aspect in this process. Step #2 involves the completion of a supply chain audit. Such an audit allows managers at both companies to evaluate the firms' supply chains effectively. From this point, potential overlaps and synergies can be discovered and discussed in advance. The breakdown of the supply chain audit process can be found in Figure 18.

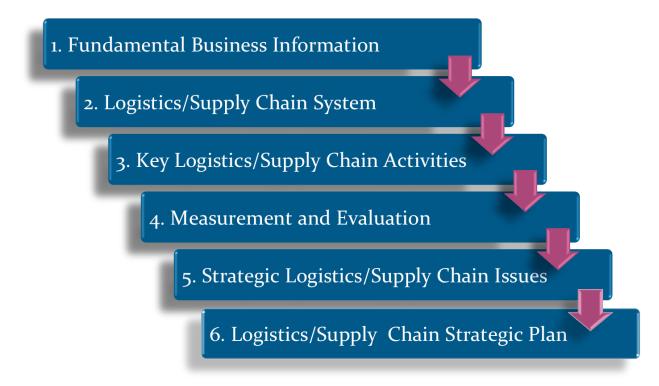


Figure 18: Supply Chain Audit Process Source: Coyle et. al (2016)

Following this process, the firms can examine network alternatives. In the case of Heinz and Kraft, there is minimal product overlap. As a result, for now it will be assumed that manufacturing plants will remain fixed. The two firms will find synergies amongst the warehousing and transportation functions. For example, Heinz products may be added to Kraft shipments, increasing full truckload shipments, and reducing the need for 3PLs.

Using the supply chain audit and examination of network alternatives as a base, a deeper set of questions can be developed to help merging manufacturing companies identify potential synergies, roadblocks to synergies, and also best practices. These questions cover a wide array of logistical challenges and instances of overlapping activities that firms may encounter in order to help guide managers' decisions prior to and after the merger.

- What is the nature of the products? Are the size and/or weight of the products similar?
- 2. What are the demand patterns of the goods? Is demand for the good stable throughout the year or seasonal?
- 3. What customer base does each company have? Do the firms tend to sell wholesale, retail, or a mix of both?
- 4. Do the products need to be temperature controlled? Do the goods need to be kept frozen or prevented from freezing?
- 5. What is the location of the facilities?
- 6. Is there any cross over between carrier bases? Does this occur within modes or between modes?
- 7. Are there opportunities to increase continuous moves and reduce empty miles?
- 8. Are there opportunities to increase load capacity through co-loading?

Chapter 6

The Future and Potential Concerns

In this chapter, the potential future of Kraft will be examined with relation to a successful logistical integration. The chapter will then focus on the potential organizational and logistical challenges that could significantly undermine the merger.

Future Potential

The merger of two firms with the size and scope that Kraft and Heinz possess is a long term process. The combined firm has already announced large layoffs. Since the merger was disclosed, a total of 5,100 employees have been laid off and seven plants have been closed. This represents slightly over ten percent of the total workforce the combined company began with and does not include those previously laid off at Heinz. These strategic moves intend to cut excess waste and increase free cash flow, both motives that fall in line with previous 3G Capital M&A activity. Focus lies on a streamlined firm with no waste, aided by the use of zero based budgeting.

The closing of seven plants is a sign that the two firms are already looking at ways to integrate the two logistical networks. However, this is only the beginning of the process and does not address the true potential of cost savings locked within transportation and warehousing. The critical pieces of the organization going forward will be the continual ability to integrate the two supply chains and expand Kraft and its brand internationally at the same time. Successful integration of the supply chain networks will further streamline operations and decrease cost. Using Heinz current infrastructure to expand internationally will provide growth that the two firms are not able to currently obtain operating individually. If done properly, the merger will produce desired effects and large value creation. However, there are some concerns at both the organizational and logistical level.

Organizational Concerns

Much research has been done on the success and failure of mergers and acquisitions. Homburg and Becerius (2006) state M&A failure rates among organizations between sixty and eighty percent. One factor that causes such low success rates is the failure to properly manage the post integration process (El Hag, 2009). Organizational culture can have a profound impact on the future financial success of the firm. Leadership retention and employee morale are both linked to the probability of success in a merger. This link poses potential problems to the merger of Kraft and Heinz.

Lehn and Zhao (2006) noted high leadership turnover reduces the probability of a successful merger. Immediately following the acquisition of Heinz, 3G Capital fired eleven of the top twelve executives at the company. Since the merger, ten of the top twelve executives at Kraft have left the company. Combined, this represents eighty-eight percent of the top leadership present at both firms prior to M&A. Although 3G Capital is focused on cutting waste and focusing leadership on young individuals focused on success, the staggering turnover is concerning. Poor management may be one of the reasons that a firm financially underperforms. However, the turnover of eighty-eight percent of top leadership leaves large knowledge gaps. The merged entity is now the world's fifth largest food and beverage company and the scope and

intensity surrounding operations is massive. The new leadership's ability to quickly grasp an understanding of the company and its operations will be essential for success. Leaving little overlap and bringing in executives from outside the firms will make this very difficult. Such high turnover rates also have an effect on the perceived culture seen by employees.

Rather than attempting to blend cultures, 3G Capital imposes it own culture onto its newly acquired firms. The turnover of leadership, use of zero based budgeting, and cutting of all unnecessary employee perks are all inherent signs of this new culture. This new culture is often vastly different than what existed at the firms prior to acquisition and often comes with little warning. El Hag (2009) stated the introduction of new elements of culture without sufficient awareness and sensitivity challenges the basic assumptions of the workforce and demands the replacement of long held beliefs with new ones. This is likely to create anxiety, defensiveness, self-protectiveness, and rejection among employees, all characteristics not desired by management.

Another important component of this culture is large rate of turnover, often forced, within the employee levels. Insecurity associated with the loss of jobs tends to produce fear and low morale amongst employees (Davies, 2003). Low employee morale and job dissatisfaction have both been linked to a higher probability of M&A failure (Cartwright, 2007).

The central issue surrounding the lack of awareness regarding the effect on organizational culture and employees is that mergers and acquisitions are often driven by strategy and financial data. Executives are usually focused on the financial aspects of M&A deals but fail to place an emphasis on how employees are affected (Emmanouilides & Giovania, 2006). The culture surrounding 3G Capital is one solely driven by financial motives. A lack of awareness to the organizational impacts this new culture imposes may cause value creation to become value

destruction. 3G Capital must try to ensure a positive organizational culture alongside its desires for a lean and effective financial operation if its wishes to increase its chance of a successful merger

Logistical Concerns

The second potential concern lies at the logistical level. As Chapter 4 and Chapter 5 alluded to, the financial metrics are only the starting point of a merger. The potential financial benefits will only be realized if the two logistics networks can be combined and streamlined. The difficulty in attaining a combined and streamlined network is two-fold. First, logistical integration is often difficult to assess prior to a merger. Chapter 5 addressed this issue by providing a framework for firms to use both pre and post merger. Second, due to both the difficulty in assessing integration and general private equity ideology, firms such as 3G Capital make decisions at the financial rather than operational level. This often leads firms to analyze deals based on maximum potential rather than realistic attainability.

3G Capital has displayed an ability to improve operating profits and cash flow. However, they have not necessarily shown an ability to grow revenue or market share. Since the merger of Anheuser-Busch and AmBev in 2008, the combined entity has seen its market share decline from forty-nine percent to forty-five percent (Boston Consulting Group, 2015). Heinz has experienced a decline in revenue. If revenues remain stagnant or actually decline but operating profits have increased, it creates an important question. Are operating profits increasing due to increases in operational efficiency or simply reducing headcount? Reducing headcount is only a one time

action which will eventually lead to a flattening of economic gains. Increases in operational efficiency however are a continual part of the firm thus providing lasting economic gains.

One of the major metrics used to determine increases in operational efficiency is the cash to cash conversion cycle. The metric adds days receivable outstanding and days inventory outstanding then subtracts days payable outstanding. This provides the net number of days it takes a firm to actually receive the money it generates through operations. Figure 19 shows the cash to cash conversion cycle for Heinz both prior to its acquisition and after.

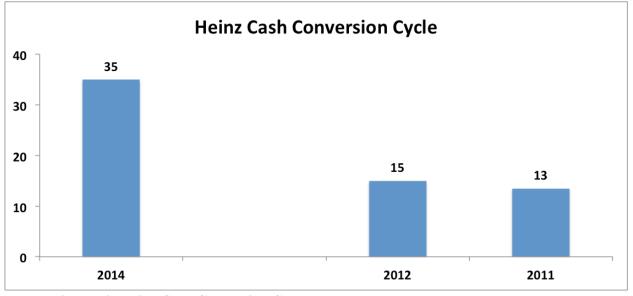


Figure 19: Heinz Cash Conversion Cycle Source: Annual 10-K Financial Statements

Heinz has regressed significantly in its cash conversion cycle since acquisition. A breakdown of the individual components shows that both days receivable outstanding and days inventory outstanding have both significantly increased. This displays a lack of ability to turn over inventory and collect receivables. The company has increased days payable outstanding, showing an increased ability to work with vendors and creditors in extending payment timeframes. However, as a whole the increases in days receivable and inventory outstanding significantly outpaced the increase in days payable outstanding.

This metric would show that 3G Capital has not shown an ability to actually streamline and approve operational efficiency. Rather it appears that many of the increases in operating profits are arising from a one time benefit of cutting headcount and employee perks.

Going forward this gives concern for the ability of Heinz and Kraft to integrate supply chains and realize the potential synergies. One time cost cuts will likely lead operating margins to improve in the short run but not in the long run. 3G Capital will have to show improvement in comparison to its previous ventures if the combined company is to achieve the financial benefits that are desired.

Chapter 7

Conclusion

The merger of Kraft and Heinz comes at a time of increased merger activity. Low credit rates, stagnant growth in developed markets, and potential growth in emerging markets has led the economy into what appears to be a sixth merger wave. Although these factors have created an environment for large M&A volumes, the motives behind deals are not all the same. For 3G Capital, the potential synergies and market expansion that a merger between Kraft and Heinz produces are common motives when compared to past activity.

There are many ways a potential target for a merger or acquisition can be identified. The most common method is through the use of financial metrics. There are many metrics and ratios that can be examined to determine the viability of a merger or acquisition. Chapter 4 identified those that should be examined in relation to the Kraft Heinz merger and other private equity activity driven by market expansion and synergistic opportunities.

However, these financial metrics should only be used as a guide to determine the viability of a merger or acquisition. Ultimately the success or failure of a merger will be determined by the ability to integrate operations. The sole focus on financials is what leads to so many mergers and acquisitions failing. Chapter 5 provided a framework firms can use prior to an acquisition in order to examine the potential combination of networks.

For Kraft and Heinz, financial indicators linked to merger motives and 3G Capital desires in a target support a merger. This is the main reason Wall Street has given the deal such high praise. However, the firms still have to integrate two separate types of logistics networks into one. As Chapter 6 identified, this logistical combination along with a disconnect in organizational culture could pose crucial problems to the successful merger of these two firms.

BIBLIOGRAPHY

- Berfield, S. (2015, August 24). Things Are About to Get Ugly at Kraft. Businessweek, 18-20.
- Berglund, M., P. van Laarhoven, G. Sharman and S. Wendel. "Third-Party Logistics: Is There a Future?" International Journal of Logistics Management, (10:1), 1999, pp. 59-70.
- Berkovitch, E., & Narayanan, M. P. (1993). Motives for takeovers: An empirical investigation. Journal of Financial and Quantitative Analysis, 28(3), 347-362.
- Boston Consulting Group. "3G Capital: Background and Implications for Consumer Industry" May 2015 [PowerPoint slides]
- Cartwright, S., Tytherleigh, M., & Robertson, S. (2007). Are mergers always stressful. European Journal of Work and Organizational Psychology, 16(4), 456-478.
- Chopra, S., Meindl P. (2004) Supply Chain Management. Strategy, Planning and Operations, Bucharest: Meteor Business
- Coyle, J. J., Langley, C. J., Jr., Novack, R. A., & Gibson, B. (2016). *Supply Chain Management: A logistics Perspective* (10th ed.).
- Davies, C. J. (2003). Mergers and acquisitions: The human factor.
- Eccles, Robert G., Kersten L. Lanes, and Thomas C. Wilson, 1999, "Are You Paying Too Much for That Acquisition?" *Harvard Business Review* 77 (No. 4, July/August), 136-146.
- El Hag, F. L. (2009). Impact of organizational culture on success of mergers and acquisitions: An analytical study
- Emmanouilides, X., & Giovanis, N. (2006). The human factor as reason of failure of mergers and acquisitions. Journal of Business and Society, 19(1), 221-234.

- Hagstrom, R. G. (1994). The Warren Buffett way: Investment strategies of the world's greatest investor. New York: John Wiley & Sons.
- Homburg, C., & Bucerius, M. (2006). Is speed of integration really a success factor of mergers and acquisitions. Strategic Management Journal, 27(4), 347-367.
- Kaplan, S. N., & Strömberg, P. (2008). *Leveraged buyouts and private equity*. Cambridge:National Bureau of Economic Research, Inc.
- Lehn, K. M., & Zhao, M. (2006). CEO turnover after acquisitions: Are bad bidders fired. Journal of Finance, 61(4), 1759-1811.
- Lichtenberg, F. R., & Siegel, D. (1990). The Effects of Leveraged Buyouts on Productivity and Related Aspects of Firm Behavior. *Journal of Financial Economics*, 27(1), 165-194.
- Lipton, M. (2006). Merger Waves in the 19th, 20th and 21st Centuries. New York
- Minculete, G., & Olar, P. (2014). New approaches to supply chain management concept. logistics integration of "hub and spoke" model. *Valahian Journal of Economic Studies*, 5(2), 21-32.
- Mukherjee, T. K., Kiymaz, H., & Baker, H. K. (2004). Merger Motives and Target Valuation: A Survey of Evidence from CFOs. *Journal Of Applied Finance*, *14*(2), 7-24.

Nguyen, C. A. (2013). Factors of success and failure in mergers and acquisitions.

- Reingold, J. (2013, October 10). Squeezing Heinz. Retrieved March 9, 2016, from http://fortune.com/2013/10/10/squeezing-heinz/
- Roberts, D. (2015, March 25). Here's what happens when 3G Capital buys your company. Retrieved March 9, 2016, from http://fortune.com/2015/03/25/3g-capital-heinz-kraft-buffett/
- Simonson, K. (2003). 3, 2, 1... what next? *Fleet Owner*, 98(8), 32.

Sirower, Mark L., 1997. The Synergy Trap, New York, Free Press.

Smith, A. (1990). The Effects of Leveraged Buyouts. Business Economics, 25(2), 19-25.

- THE HONOURABLE EAST INDIA COMPANY. (1913). The Journal of Indian Art, 1886-1916, 15(117), 7.
- Vazirani, N. (2015). A Literature Review on Mergers and Acquisitions Waves and Theories. SIES Journal Of Management, 11(1), 3-9.
- Wetherbe, J. C., & Montanari, J. R. (1981). Zero Based Budgeting in the Planning Process. *Strategic Management Journal*, 2(1), 1–14.

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EDUCATION

The Pennsylvania State University, Schreyer Honors College, Smeal College of Business

Master of Accounting | B.S. Accounting | B.S. Finance Minor: International Business Honors: Evan Pugh Scholar Award, Freshman Medal, Beta Gamma Sigma

WORK EXPERIENCE

PricewaterhouseCoopers LLP

Investment Management Assurance Intern

- Completed financial statement tie-outs on end of year statements for 401K plans 0
- 0 Verified correct employee benefit payments by tying corporate database entries to corresponding canceled checks and wire transfers
- Confirmed testing on internal controls related to benefit plans and the completeness of associated financial 0 statements

Verizon Corporation

Finance Leadership Development Intern II

- Performed Post Investment review of the More Everything Plan to determine effectiveness of the pricing move in the 0 wireless market
- Researched current and past revenue trends of Verizon Wireless to determine profitability of More Everything Plan 0
- Examined revenue and profit models for comparison to the business case in order to suggest improvements for future 0 pricing moves
- Presented project findings surrounding risk areas and criteria to Verizon EVP&CFO and other senior executives 0

Verizon Corporation

Finance Leadership Development Intern I

- Evaluated profitability models for large clients to conclude whether or not major pitfalls existed that could severely 0 impact a deal's ability to reach estimates
- Analyzed trends and risk factors of large companies to determine if certain attributes within a deal could indicate 0 future complications
- Created criteria for customer profitability coverage revolving around size and complexity of level of services 0

LEADERSHIP AND RELATED EXPERIENCE

Penn State IFC/Panhellenic Dance Marathon

- Fundraising and Sales Coordinator Finance
- Reconcile revenue accounts with PNC and Associated Student Activities to ensure accurate record keeping 0
- Maintain financial record keeping for all merchandise transactions 0
- Deposit funds collected during fundraising efforts to Associated Student Activities and update related records 0

Penn State IFC/Panhellenic Dance Marathon

Corporate and Matching Checks Captain - Finance

- Recorded all corporate and matching checks donated to THON with a fellow co-Captain 0
- Communicated with other THON volunteers to answer any questions related to corporate or matching checks 0

RELATED ORGANIZATIONS

Sapphire Leadership Program

- Developed a leadership project through creation of Food For Thought that makes a meaningful impact on the \circ community by focusing on longevity and legacy
- Engaged in classes and activities that increased leadership, communication, and team working skills 0

New York, NY

University Park, PA

April 2015 – Present

September 2014 – May 2015

September 2013 – Present

June 2013 – July 2013

Alpharetta, GA

Basking Ridge, NJ

June 2015 – August 2015

June 2014 – July 2014

University Park, PA