Value creation through operating improvements in portfolio companies: the case of 3G Capital

By

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ABSTRACT

This thesis is an attempt to show how a group of three Brazilian businessmen were able to create a private equity firm (3G Capital) that has outperformed its competitors.

We will first describe the evolution of the LBO industry, and explain why LBO firms are now forced to design new structures to support their portfolio companies in order to generate alphas that will boost their returns. 3G Capital will serve as an example proving that mastering operational engineering generates higher returns than top quartile competitors.

We will then analyze the performance of three companies owned by the Brazilian trio, show that these companies have been able to outperform their peers since they were acquired and point out the key operational drivers that led to this performance.

Eventually, based on the analysis of the portfolio companies, we will try to define the specificities of the 3G Playbook and study how it allowed its companies to consistently reach their goals.

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Introduction

When Jorge Lemann acquired the Brazilian beer manufacturer Brahma in 1989 for $50M through his investment bank Garantia (founded in 1971), no one could imagine that a few decades later, this Harvard graduate and his two accomplices, Carlos Sicupira and Marcel Telles, would become the undisputed kings of beer, merging AB Inbev (the industry leader) with SABMiller (its runner-up) in a $102bn deal. This trio that Forbes ranked in 2015 respectively as the first, third and fourth wealthiest individuals in Brazil, met at Garantia in the 1970s and built a common ambition there: expand their model, based on meritocracy and productivity targets, to larger international firms and prove how successful it could be. After taking control of smaller companies such as Lojas Americanas or Brahma (that merged in 1999 with Antarctica to create Ambev), they decided to acquire Belgium’s Interbrew in 2004 in a complex equity transaction that granted them a controlling stake and several board seats. This led to the creation of InBev, a leader in the beer industry at that time, with sales of EUR9.5bn and a presence in 140 countries. The same year, the three entrepreneurs decided to create 3G Capital, a fund aimed at taking controlling stakes in American companies with offices in New York and Rio. But it is in 2008 that the media-shy trio really became famous in the United States and in the rest of the world.

Indeed, in July 2008, after a long and stressful fight that involved many politicians including presidential candidate Barack Obama, Anheuser-Busch announced that they had reached an agreement to be sold to InBev for $52bn, putting control of the nation’s largest beer maker and true icon of the American culture into the hands of Brazilian businessmen. This transaction that occurred in the middle of the worst financial crisis since the Great Depression, at a time when the credit market was apathetic, was carried by Lemann who finally achieved one of its goals: take over one of the most famous brands in the world (Budweiser) and get the opportunity to implement his model on a larger scale. Later comforted by this success, the trio kept looking at established American brands and acquired Burger King in 2010, Heinz in 2013 (with the cooperation of Warren Buffet), The Kraft Foods Group and Tim Hortons in 2015 and implemented every time the same “Playbook” to turn those investments into large profits.
Nevertheless, although these deals were undeniably successful financially, 3G and its founders were harshly criticized by many experts and journalists, who viewed them as simple cost cutters, only focusing on short-term returns, laying off thousands of workers to improve their margins, and incapable of designing long-term growth strategies and developing businesses.

However, one may wonder: were those criticisms well-founded?

First, shouldn’t we be saying, on the contrary, that this model, this “Playbook”, which convinced Warren Buffett to invest alongside the 3G founders while leaving them to run the daily operations, seems to be simply delivering better results than the strategies of other LBO players? In his 2015 annual letter to his shareholders, Warren Buffet spent 10% of his word count defending his new partners’ management strategy and supported their “efforts to trim fat” when it was necessary. Moreover, he also asserted that he was willing to enhance his ties with 3G, should they need financial backing for future deals.

Second, isn’t it true that those Brazilian investors that have been with Brahma (now AB InBev) for 27 years, with Burger King for 6 years (they just acquired Tim Hortons and therefore won’t exit at least before a few years), and are currently looking for a target to increase the size of Kraft Heinz, actually seem to be even more long-term oriented than the rest of the LBO firms, while still being able to outperform their competitors using their specific Playbook?

The goal of this paper is to describe and understand the 3G strategy, and show how it allowed the firm to outperform its peers in an LBO industry that is more competitive than a few decades ago, and where returns are always more uncertain and constantly declining. To do so, we will analyze the evolution of the LBO industry and its recent trends in order to understand the specific positioning of 3G. We will then take a closer look at the performance of three portfolio companies before and after they were acquired by 3G and compare it to peer sets so that we can assess the value added by the investor. And finally we will use this analysis to draw conclusions on the 3G culture and the way they implement their Playbook.

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1 http://www.wsj.com/articles/warren-buffett-gets-heat-over-3g-ties-1430697719
I. Overview of the LBO industry

a) Brief history of the PE industry

The term Private Equity includes all sorts of risk capital provided to businesses, from startups to major publicly-traded companies, in exchange for equity stakes. It has been considered as a separate asset class for only a couple of decades and is very recent relative to other existing asset classes. Firms usually raise capital from institutional investors and some wealthy individuals that is gathered in funds that are closed-end investment structures organized as limited partnerships. In most cases, the life of a fund is around ten years, and the private equity firm has a fixed number of years to invest the capital committed by investors. This partnership model has been dominant since the early days of the industry, but some firms have developed their own structures. 3G Capital or Berkshire Hathaway that we will analyze later are examples of such alternative models.

Although some famous transactions, such as the acquisition of Carnegie Steel by J.P. Morgan for $480M, occurred at the beginning of the twentieth century, it is in the 1980s that private equity really started to carve out a place for itself in the finance world for several reasons. First, it is in the 1980s that PE firms were allowed to access cheap and abundant debt with the emergence of the high-yield bond market, leading to the boom of Leveraged Buyouts. A Leveraged Buyout (LBO) is an acquisition of a company or a stake of a company using a significant amount of outside debt financing collateralized by the target’s own assets. The acquisition is then structured in a way that the target’s cash flows and proceeds from some asset disposals are used to repay the debt. Since the sponsor only has to provide a small part of the financing, an LBO boosts the return on investment and has therefore been, since that period, one of the tools used by Private Equity firms to deliver strong returns to their investors. In this paper, we will mostly be dealing with LBO firms, and will sometimes refer to LBO by using the term Private Equity. The second reason for the boom of the industry to occur at that time was the favorable regulatory environment of the 1980s. Congress’s decision to withdraw the limitation on the minimal number of clients needed to avoid registering under the Investment Advisors Act facilitated the creation of Private Equity partnerships. Without such registration constraint, it became much easier to raise capital and start an LBO fund.
Finally, the Incentive Stock Option Law of 1981 that deferred the tax liability to the moment when the stocks were sold and not only vested encouraged the broader use of such options to incentivize managers.

As a result, according to Lichtenberg and Siegel (1990) who studied the effect of LBOs on the productivity of portfolio companies, the share value of LBO transactions over the total M&A deal value went from almost 0% to 27% between the 1970s and 1986, mainly driven by the diffusion of junk bond financing. For Kaplan and Stein (1993), the value of the LBO market went from $1bn in 1980 to $60bn in 1988, just before the first slowdown of the market.

b) Discussions about the relative performance of LBO firms

In fact, although the LBO market has been countercyclical (Kaplan and Stein, 1993) and faced a few crises right after the 1990s, in 2001-2002 and a few years after 2008, it still has experienced a strong growth since its early days, outperforming overall the stock market and therefore attracting even more interest from institutional and retail investors. Indeed, Harris, Jenkinson and Kaplan (2013) showed that the LBO market was exceeding the S&P 500, the Nasdaq, and the Russell 2000 by over 20% over a fund’s life, corresponding to a 3% annual outperformance net of fees. To get to this conclusion, they analyzed the performance of 1,400 U.S. funds, using data from Burgiss that included cash-flow information and came from 200 institutional investors representing over $1 trillion in committed capital (more extensive than previous databases used on this subject). Reinforcing this observation, Axelson, Sorensen, and Stromberg (2014), gathered data from a large fund-of-fund that invested in 250 buyout funds involved in 2075 deals up to 2008 and found an average performance of 9.2% relative to the market (-1.4% for the period 1994-2000, and +17.6% for the period 2001-2007). According to their study, the alpha for the period (the excess performance) was 8.3-8.6%, while the beta was around 2.2-2.4 (the part of the returns that just “rides the market”) gross of fees. Both those studies seem to assert that Private Equity as an asset class provides better return than public markets.

Nevertheless, before these two papers were published, Kaplan and Schoar (2005) had reached a somewhat different conclusion. Based on data collected by Venture Economics (voluntary reporting) on the individual performance of 746 funds (78% Venture Capital, 22% LBO)
covering the period 1980-2001, they found that the performance of LBO funds net of fees was actually below the S&P (although we have to notice that the returns are not risk-adjusted due to the lack of information on true market values). They computed Public Market Equivalent (PME) calculations that compare the returns of a similar investment in a LBO firm and in the public market, for the 169 LBO funds and got a result of 0.97 (a PME above 1.0 means that LBO firms outperformed the S&P, below 1.0 means they underperformed). However, the same analysis also showed a considerable heterogeneity among LBO firms in terms of IRR. The funds at the 25th percentile have a Cash Flow IRR of 5% while the funds at the 75th percentile have a 22% Cash Flow IRR. The paper concluded with the suggestion that this heterogeneity in the returns, and the fact that some mature funds were able to deliver persistent results might be explained by particular GP skills. Gadiesh and MacArthur (2008)\(^2\) from Bain & Company even assert that between 1969 and 2006, top quartile PE firms have earned IRRs of 36%, more than 10% higher than the S&P 500 top quartile, suggesting that top firms are able to consistently outperform the market and their peers thanks to a set of particular skills.

From this, we most importantly learn that data sources used by scholars on the subject of value creation in private equity differ, mainly due to the secrecy that surrounds the returns of LBO firms, explaining why it is actually difficult to make a definitive assessment of the outcome. One point that seems to be clear and shared by the several papers though, is the ability of top firms to consistently generate superior returns. The 2014 Bain & Company Global Private Equity Report shows for instance that top quartile funds have a 65% likelihood to perform above average with the next fund. On the contrary, for bottom quartile funds, 61% of the time, the successor will perform below average.

\(^2\) https://hbr.org/2008/03/lessons-from-private-equity-an
To look further into that issue and try to understand why top funds are able to consistently outperform their peers, let’s analyze the various sources of value creation in LBO transactions and try to explain why GP’s ability to master these sources are becoming more important with time.

c) Sources of Value Creation

According to Kaplan and Stromberg (2008), LBO firms can use three kinds of value capturing levers after acquiring a company: financial, governance, and operational engineering.

i. Financial engineering

Financial engineering describes all the possible drivers of value creation at the financial level. In our view, the most important aspect of financial engineering is the pressure put on management that is likely to reduce debt agency costs. Indeed, according to Jensen (1986), managers, especially in firms with large free cash flows, may be tempted to limit the payout to shareholders in order to grow the business, sometimes beyond the necessary size. Although it might not always be in the interest of the company or the shareholders, managers act this way to maximize their individual utility and influence. By adding large amounts of debt to the
target's balance sheet, greatly increasing the Debt/Equity Ratio, one ensures that the managers will be forced to return cash flows to shareholders. In this case, debt acts as a substitute for dividends.

Besides adding leverage, financial engineering also allows to profit from larger tax savings thanks to the deductibility of interest. Jenkinson and Stucke (2010) valued the tax savings of the 100 largest LBO transactions between 2003 and 2008 at $50bn, 50% of the premiums paid on those deals.

Finally, according to Ivashina and Kovner (2010), private equity firms are granted favorable financing thanks to their relationship with the banking industry, benefitting to their portfolio companies. They first explain this phenomenon by the repeated interactions between banks and funds that allow them to build relationships of trust (banks gather information such as the robustness of the due diligence process of the LBO firm). Moreover, they also find that the cost of debt is lowered by banks, trying to sell other fee-based products, such as advisory fees (according to DealLogic, LBO firms paid around $5bn in advisory fees to investment banks in 2006. The result of that is “a 17 basis point reduction in spread (5% decrease from the mean spread)” according to their calculations.

Consequently, for those three reasons, value can be created in LBO transactions through financial engineering.

ii. Governance Engineering

The concept of governance engineering involves the ability for investors to control the boards and therefore the management of their portfolio companies. For Cornelli and Karakas (2010), the corporate governance model of portfolio companies is superior to the rest of the companies due to the fact that shareholders, who take over the control of the day-to-day operations and the board, have the maximization of the firm value as their only and ultimate goal. The alignment of interest between the managers, the boards and the shareholders is, in those cases, much stronger than in comparable public companies. In their paper, they were able to illustrate the fact that PE sponsor involvement generated higher value, and that deals where the CEO was changed and where investors had a large presence on the board had a higher operating performance.
iii. Operational Engineering

Substantial literature has been published on this topic. For Kaplan and Stromberg (2008), operational engineering has emerged more recently as a concern for PE investors. Indeed, although Kaplan (1989) already identified LBOs as a driver for operating improvements more than two decades ago, it seems like the focus on creating financial value through operational involvement of PE sponsors has been increased more recently. This doesn’t mean that leverage and governance engineering are not needed (we will see later that they remain an important factor of value creation), but it seems that competencies have shifted from just governance and financial engineering to a mix that includes operations, resulting in more involvements from sponsors that can take different forms.

Our goal here is not to go into a comprehensive analysis of general drivers of value creation through operational changes, but rather to understand why the focus has been made on those changes, and how PE firms intend on applying them. We will later take the case of 3G Capital portfolio companies to illustrate it and get more into the details.

Acharya and Kehoe (2008) even go further and assert that the difference in the returns comes from the ability to generate an alpha, and that mature and larger PE houses are able to generate this alpha and outperform their peers, echoing the results of Gadiesh and MacArthur about top quartile firms’ outperformance. What made the ability to generate such alpha so important and explain the gap between top performers and average PE firms?

d) Fiercer competition and oversupply of capital

In our view, the boom of the LBO market has had many consequences, including a spectacular increase in the number of LBO firms created and capital raised, leading to a fiercer competition. Based on Preqin data, the number of buyout firms has gone from less than 10 in the early 1980s to 950 in 2013.
Besides, according to Thomson One, the amount raised by buyout firms went from $5bn in 1990, to $55bn in 2003 and reached $270bn in 2013, which corresponds to a 19% CAGR over the total period and a 17% CAGR for the 2003-2013 period.

This increased competition has two main effects: a shortage of good targets, and a decreased impact of leverage over total returns.
Indeed, as the 2015 Bain Private Equity Report suggests, too much capital is now in the hands of an increasing number of firms that are competing for a small number of really attractive assets. As a result, it has almost become impossible to close proprietary deals, forcing PE firms to compete in auctions, driving the prices and multiples up and mechanically compressing the future returns. In 2015, according to S&P Capital IQ, buyout firms were paying more than 10x the EBITDA vs. 7x in 1996 and 6x in 2001.

Evolution of EBITDA Multiple in LBO transactions since 1986

![Graph showing evolution of EBITDA multiple](source: S&P Capital IQ)

Thus, it is no surprise that long-term returns have suffered from this price increase. Below is a graph illustrating the deterioration of a ten-year pooled IRR as the industry matured, although LBO firms still outperformed the S&P 500.
Long-term buyout fund returns heavily dropped since 1998


Second consequence: despite the need to keep leveraging deals, leverage isn’t sufficient anymore, and its contribution to the total value creation is decreasing.

According to the EY report, additional leverage accounted for 23.6% of the equity multiple for the period 2005-2007, 21.9% for 2008-2009, and 13.0% for 2010-2013, versus 24.2%, 22.4% and 20.5% for strategic and operational improvement. Unlike in the early days of the industry, it seems that the increased competition has made it almost impossible to simply “ride the market”, benefitting from financial and governance changes. Due to the lesser
quality of the acquired assets and to the increased prices (that are not about to go down if we look at the abundant dry powder in the hands of the GPs), investors absolutely need to generate additional alpha if they want to outperform their peers and can’t rely anymore on the passive market beta. According to Bain’s 2016 report, it has become a well-known fact that an increased active portfolio management is the only way to add the value that investors are looking for and are willing to reward.

Top PE firms had already anticipated those value creation requirements to keep up with the returns they used to deliver to their LPs and therefore started thinking about models to support operational improvements in their portfolio companies to keep generating alphas. Indeed, bringing more operational expertise has been a challenge for some years. What have been the models PE firms created to support their portfolio companies?

e) Rise of new value creation models and the search for consistency

In its 2016 Private Equity Report, Bain & Company defines four archetypal value-creation programs: the “general activist” model, the “maestro” model, the “adviser-led” model and the “functional-playbook” model.

i. “General activist”

The “general activist” model consists in gathering a cross-functional operating team, working independently from the sourcing team and highly involved with the management of portfolio companies to list and prioritize initiatives and help them applying them. The focus is often put on early interventions to maximize the impact on the performance. These teams are most of the time organized as in-house consultancies with employees, usually former management consultants, who are fully dedicated to work across the several industries the PE firms is involved in.

Bain Capital, KKR with Capstone (technically not a subsidiary, but the firm has KKR as its sole client) or Texas Pacific Group (TPG) are examples of funds using such model.
ii. "Maestro"

The "Maestro" model varies from the "general activist" in the sense that it doesn’t require to have an in-house operating team. It better suits smaller firms who gather teams from 1 to 3 people around a Senior Advisor who play a supporting role with the management of portfolio companies. Besides, they can also rely on a network of external experts in order to build together a strategy plan. Management remains accountable for most of the implementation and the outcomes.

Harvest Partners has for instance decided to apply such a strategy consisting in pointing out early strategic decisions right after the acquisition and letting the management team implement them.

iii. "Adviser-led"

Contrary to the two previous models, adviser-led value creators rely on a broad network of experts and don’t own any internal resources. This way, external experts can intervene punctually on very specific, precise and technical subjects, and therefore be more efficient.

EQT Partners, who counts more than 250 “industrial” advisors, or CVC Capital Partners, with more than 50 advisors, can be considered as examples of this particular model.

iv. "Functional-Playbook"

Some firms, such as 3G Capital or Vista Equity Partners, have decided to adopt a systematic approach that consists in cherry picking a very small number of targets to acquire, appointing experts that will dedicate 100% of their time to the company and implementing a set of functional measures where the fund has some expertise (it can be cost related, or dealing with distribution or supply chain etc...).

Furthermore, in its 2016 report, besides emphasizing the different models used to support the value creation process in portfolio companies, Bain also stresses the absolute necessity to build a consistent and repeatable model. Indeed, building a supporting structure turns out to be sometimes inefficient without consistency and clearly defined processes, which, in our
view, are probably the most differentiating factors between established and top PE firms and average performers. According to a Bain survey conducted among 40 major PE firms, most firms are currently reinforcing their value-creation structures, however, half of them confess not having a defined and clear model to create value. Instead, those firms mainly act in response to problems rather than as forward thinkers, and end up fighting to save broken deals while their competitors generate higher returns thanks to their operational planned successes.

Although the majority of firms built value-creation structures, only half of them apply a defined model

Note: Respondents are operating partners at US PE firms
Source: Bain & Company, Global Private Equity Report 2016, survey n=34

Nevertheless, claiming to have a well-defined plan is not enough. It has to be implemented systematically. In the 2015 report, according to another survey conducted by Bain & Company among a network of 400 partners, only 5% of the firms apply their value-creation model all the time, with every single portfolio company they acquire. This is due to several reasons such as deal fatigue, lack of alignment or insufficient planning and prevents the PE firm to unlock all the value from the businesses.
Only 5% of the PE firms apply systematically their value-creation plan

Note: PE OPEN members are full-time operating partners of major PE funds with assets under management exceeding $500 million

Finally, to sum up, beyond the debate on the average performance of the LBO market compared to the S&P 500, we notice above all the heterogeneity in the returns between top and bottom performers. Our understanding of this situation was that the exponential growth of capital raised and the number of buyout firms has increased the competition and made it crucial to generate additional returns through alpha. We saw that top firms anticipated this need, and developed models allowing them to support their portfolio companies by providing operational expertise (which came in different shapes) generating this alpha.

To understand this absolute necessity to add operational expertise and measure the impact it can have on the returns, we wanted to focus on a concrete example of a successful strategy. 3G, which was famous for its systematic playbook, its alternative structure and its impressive track record, seemed to be the perfect candidate for such analysis. Indeed, although 3G doesn’t report any IRR, we tried to find a proxy that would prove the firm was able to generate higher returns than other top quartile LBO firms, thereby confirming that operational engineering and alpha creation are the main drivers of outperformance in the current LBO market. Our method consisted in looking at the net worth of Lemann, Telles and Sicupira, reported by Forbes in 2009 and 2015. Assuming that a very significant part of their net worth
consisted of shares of 3G Capital and the companies in which they invested (according to *Dream Big*, a book about the life of the three businessmen written by Cristiane Correa in 2014.), the variation in their fortune could be a good proxy for the returns of 3G over that period. According to Forbes, Lemann’s fortune was estimated at $31.2bn in 2015, Sicupira’s at $12.8bn and Telles’s at $14.6bn. In 2009, Forbes reported $5.3bn, $2.1bn and $2.4bn respectively. As a result, we find that their net worth increased at a 34.3%, 35.1% and 35.1% CAGR respectively (the fact that those numbers are really close to each other reinforces our assumption that their fortune mainly depends on their only common venture: 3G Capital). Over the same period, according to PitchBook data, top LBO performers had an overall 27.9% annual performance, while upper-mid funds (2nd quartile) had a 10.6% annual performance.

**IRR of buyout firms since 2010**

\[ \text{Source: PitchBook. Own Estimate} \]

Hence, with an approximate 35% annual performance, 3G is one of the very top performers of the industry since 2009. Our goal is now to show how this was driven by the operational expertise the firm brought to its portfolio companies.

3. “As most of their personal assets consisted of shares in the companies they invested”, *Dream Big*
f) Introduction to 3G Capital

Let's take a step back to look at the history of the trio and understand the reason why they created 3G Capital.

As stated in the introduction, Jorge Lemann, Marcel Telles and Carlos Alberto Sicupira met at Garantia, an unknown Rio-based broker dealer acquired by Lemann in 1971 and turned into an investment bank in 1976. In 1982, Garantia made its first attempt in the buyout world by acquiring a controlling stake in Lojas Americanas, a Brazilian retailer. Sicupira was appointed CEO and left Garantia. A few years later, in 1989, the company acquired Brahma, a Brazilian brewer, with the ambition to revitalize it. It was the turn of Telles to leave Garantia and run the daily operations of a portfolio company.

Convinced that the future of private equity in Latin America was bright, and boosted by the good performances of Lojas Americanas and Brahma, the trio decided to create in 1993 GP Investimentos, a private equity firm focused on Latin America and raised $500M in 1994. At that point, they had almost left the investment banking world to focus on Private Equity (Garantia was sold to Crédit Suisse in 1998 for $675M).

3G started in 2004 as a way for the trio to diversify its holdings by trading in liquid markets and investing in fund-of-funds. A few years later, the firm, led by Alexandre Behring, a former of GP Investimentos, decided to focus on larger Private Investments in Public Equities (PIPEs) and reduced the frequency of investments. Like GP Investimentos, the company was organized as a partnership and funds were raised from wealthy individuals close to the trio. This allowed the company to have a competitive advantage versus its competitors. Indeed, while most LBO firms have a deadline for investing the capital they raised, and therefore may sometimes rush into deals they wouldn’t have done otherwise, this structure grants 3G the possibility to avoid being pressured by deadlines. Deals are made because the company sees an opportunity (and will easily raise funds accordingly among the pool of very wealthy individuals eager to invest alongside the three businessmen) and not because of a legally binding clause in their agreement with the LPs.

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Besides, during their time together as bankers and later investors and managers, the three Brazilians have had several main influences that shaped the way they did business. The first and most important was, according to *Dream Big*, Goldman Sachs. Lemann was indeed very impressed by their meritocratic culture, the intensity of the employee trainings and the need to constantly offer people career development opportunities to keep them motivated and wanted to reproduce that in all of his ventures. The second influence was Wal Mart. After acquiring Lojas Americanas, the trio wanted a model to copy. They met Sam Walton, Walmart’s founder, in 1982 at Bentonville, and, as *Dream Big* describes it, were stunned by the company. They saw there what patience and perseverance could generate, and learned that employee motivation could be a very powerful tool. Finally, their last influence was Jack Welch, the famous CEO of General Electric. Although they never met him, they used GE’s annual reports as a guideline on the way to manage employees, using for instance the 20-70-10 rule (top 20% should be rewarded, average 70% retained, and bottom 10% laid off). The sentence that would best illustrate this mix of influences was from Lemann in one its very rare interviews (this one was to the magazine Fortune) “I wouldn’t call it a Brazilian management style. It has been amalgamated by a bunch of Brazilians, but we have copied most of the things we know from the U.S., quite frankly.”

These three models profoundly influenced them, and the impact they had can still be felt in the way they run their businesses nowadays. They have never tried to revolutionize the way to do business, but worked on gathering all the best demonstrated practices into a single model that they systematically apply to all their ventures (the companies they created but also the companies they later acquired). This is why 3G’s model can be categorized as a “Function-Playbook” one, based on the Bain breakdown.

Aware of this investment philosophy and those cultural influences, let’s now analyze in detail the relative performance of AB InBev (before and after the InBev Anheuser-Busch merger in 2008), Burger King (before and after the 2010 acquisition) and Kraft Heinz (before and after Heinz was taken private in 2013) compared to sets of peers we will define. This way, we will be able to capture the value really added by 3G that allowed them to outperform their LBO peers and illustrate how the Playbook can be effective.

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II. Focus on three portfolio companies

As mentioned, our goal is to capture the outperformance of portfolio companies, understand what operational changes and decisions led to this performance, and finally gather all these information in the last part of the paper to define the 3G “Playbook”.

The process here will be simple: present the company and the deals in which 3G was involved, create a set of relevant peers, select one or two metrics and use them to measure the global performance of portfolio companies relative to their peers, and analyze in detail the operational changes that took place.

a) AB InBev

i. Company Presentation

The group AB InBev as we know it today, is the summary of a long process of external acquisitions and compiles three main histories: Interbrew, Anheuser-Busch and Brahma. Interbrew’s history goes back to 1366 when Brouwerij (brewery) Artois from Leuven was founded. The name was adopted centuries later, in 1988, when Artois and Piedboef, the two largest breweries in Belgium, merged. Anheuser-Busch was founded in 1852 in St. Louis by Eberhard Anheuser. The company introduced Budweiser in 1876, and became the largest brewer in America in 1957. Finally, Brahma, the last component of the current AB InBev culture, was founded in Brazil in 1888. The company launched in 1934 its first bestseller, the new bottled draft Brahma Chopp, and was ever since a leader of the beer business in Latin America.

The common history between the beer industry and our Brazilian entrepreneurs started in 1989, when Banco Garantia (owned by Jorge Lemann, Carlos Sicupira and Marcel Telles) acquired Brahma for $50M and decided to revive this stagnating company by changing its management and processes. Marcel Telles was appointed CEO and started implementing a bold development plan that included standardizing and optimizing the production process, and gaining market shares in Latin America through aggressive ad campaigns. After ten successful years, Brahma acquired its main competitor, Companhia Antartica Paulista, in 1999, creating AmBev, one of the fastest growing companies in the beer industry (number 5 worldwide in terms of sales at that time).
2004: the InBev transaction

Undisputed leader of the Latin American market (65% market share in Brazil, 77% in Argentina, 99% in Uruguay), AmBev was ready to expand its footprint globally in 2004. After a few weeks of negotiations, AmBev and Interbrew announced they had reached a merger agreement that would create the number one brewing company in the world, with sales of EUR9.5bn and a presence in 140 countries.

Deal details:
- The new company was headquartered in Belgium, although AmBev was still to be run from Sao Paulo and continued to exist as a separate entity.
- Deal was expected to generate EUR280M of annual synergies
- Solid combined financial structure with a Net Debt/EBITDA ratio of 1.4x
- Share Swap:
  - Lemann, Sicupira and Telles sold their shares in Braco (an entity that owned by 52% of Brahma) in exchange for 25% of Interbrew
  - Labatt, a Canadian brewery, was incorporated by AmBev
- Board composition:
  - 4 members of Braco
  - 4 members of Interbrew
  - 6 independent Directors
- John Brock, the American CEO of Interbrew, would become the CEO of InBev, proving the ascendancy of the Belgians in this deal

Nevertheless, although it was first assumed that Interbrew had “acquired” AmBev, as it was told by Cristiane Correa in Dream Big, it was in reality the Brazilian team that engaged the discussion and took control of the company after a few years. Indeed, Dream Big describes how the AmBev high-performance culture started prevailing at InBev. Gradually, former employees of the Brazilian firm filled top executive positions, while the three businessmen kept increasing their stake in InBev. Ultimately, Carlos Brito, a friend of the trio who took the

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6 http://www.beveragedaily.com/Manufacturers/Interbrew-buys-AmBev-and-becomes-world-number-one
lead of AmBev in 2003, was appointed CEO in December 2005, ending the period of indecision at InBev.

2008: “Detroning the King: the Hostile takeover”

After successfully merging AmBev with Interbrew (profits increased by 150% between 2005 and 2007, from EUR0.9bn to EUR2.2bn according to Cristiane Correa), Carlos Brito and the Brazilian trio decided to go to the next level and acquire a symbol of the American culture: Anheuser-Busch. After a long and stressful fight that involved many bankers, lawyers and politicians, InBev finally acquired Anheuser-Busch and started to implement major changes right aways.

This deal is the one we are going to consider as the turning point in our data analysis to capture the value added by 3G Capital.

Deal details:
- $70 per share, valuing the equity at $52bn (EV/08E EBITDA of 12.4x)
- Carlos Brito was appointed CEO of the combined entity
- Anheuser-Busch got 2 seats on the board (including one for the Fourth)
- Deal financing: 69% in debt, 13% through asset disposals and 18% through equity issuance.
  - InBev raised $45bn of debt from Banco Santander, Bank of Tokyo-Mitsubishi, Barclays Capital, BNP Paribas, Deutsche Bank, Fortis, ING Bank, JP Morgan, Mizuho Corporate Bank and Royal Bank of Scotland
- The deal was expected to generate $1.5bn of synergies mainly due to cost savings and revenue enhancement
  
ii. Creation of a peer set

Anheuser-Busch InBev is the global leader of the beer market with revenues in 2008 of $36.4bn, including 40% generated in the US. The company also benefited from leading

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7 Title of the book Detroning the King: the Hostile Takeover of Anheuser-Busch, an American Icon, written by Julie MacIntosh and published in October 2010
8 Source: Bloomberg, company information
9 Source: Capital IQ
positions in the biggest markets that are China, Russia, Brazil and Germany and has today a 36.6% market share according to IBISWorld. Therefore, to create a relevant set of peers, we need to select global beer producers, with presence on every continent.

1) **SABMiller (LSE: SAB.L, Market Cap: $68.2bn)**

In November 2015, AB InBev announced the future acquisition of its runner up (16.4% market share in 2015 according to IBISWorld) SABMiller for $108bn. The company has a balanced portfolio of 200 local beers and iconic brands such as Peroni, Castle Lager or Miller Genuine Draft and has a presence on every continent, especially Latin America that has a 33% contribution to group EBITA\(^{10}\). In our view, SABMiller is currently the closest peer of AB InBev, and it will be therefore interesting to pay a special attention to the relative performances of the two.

2) **Heineken (Amsterdam: HEIA.AS, Market Cap: EUR47.9bn)**

Heineken is a Dutch brewing company with over 250 brands, such as Heineken, Amstel, Desperados or Affligem, available in 178 countries. Beer accounts for 85% of the company’s production, and according to the December 2015 IBISWorld report, Heineken is the third player in terms of global market share with 14.9%.

3) **Carlsberg (Copenhagen: CARL-B.CO, Market Cap: DKK96.0bn)**

Carlsberg is a Danish brewing company that was founded in 1847. The brand portfolio mainly consists in premium brands such as Kronenbourg, Holsten, or the Carlsberg brand. Unlike Ab InBev, Carlsberg doesn’t have a strong footprint in the US, but mostly competes with 3G’s company on the European market.

4) **Molson Coors (NYSE: TAP, Market Cap: $21.4bn)**

Molson Coors is the smallest player of this set with an estimated market share of 4.5% in 2015, and a portfolio of 40 brands (much smaller than the peers), however, like AB InBev, the

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\(^{10}\) 2014 Annual Report
company has a strong presence in the US, explaining why it is still interesting to include it in the peer set.

On the contrary, Ashasi and Kirin, respectively with 5.9% and 5.4% market shares were not included mainly due to the fact that they are not playing in the same geographic market, since their presence is limited to Asia (and Japan in particular for Asahi). Besides, Kirin’s production is not limited to beer, but also includes whiskey, soda, and several pharmaceutical products.

iii. Data Analysis

1) Measuring the outperformance

AB InBev is slightly different than Burger King and Kraft Heinz for two main reasons. First, Lemann, Telles and Sicupira are directly shareholders of the firm; 3G isn’t involved. Second, we will be analyzing the performance before and after 2008, using InBev as our pre-2008 company. Therefore, since InBev was already under the control of the Brazilian trio, we won’t observe drastic changes (the company was already performing well, unlike Heinz and Burger King before they were acquired). However, looking at AB InBev is still necessary: indeed, it will allow us to see how the trio manages to maximize the synergies and assess whether they are able to smoothly integrate a huge company like Anheuser-Busch.

To measure the relative performance of the portfolio companies, we selected one key metric: Total Shareholder Return (TSR). This way, we will be able to compare the value created for shareholders through capital gain and dividends. To create the graph below, we gathered data on Datastream and rebased at 100 for all the peers on the day ABI started trading as a combined entity (November 17th, 2008). Then, we simply used the daily variation in the index to draw the lines.
As a result, we get the following performances:

- **AB InBev**: +282%
- **SABMiller**: +228%
- **Carlsberg**: +221%
- **Heineken**: +133%
- **Molson Coors**: +15%

Based on this Total Return Index, ABI has been outperforming its peers from 2008 to 2012 (the period we decided to focus on), especially since the end of the year 2011 (+67% from November 2011 to December 2012 vs. 61% for Carlsberg, 51% for Heineken, 31% for SABMiller and 10% for Molson Coors).

Interestingly, the market doesn’t seem to really apply any premium to ABI in spite of the good TSR performance. On the contrary, apart from year 2008 (where the company was highly levered, 8.6x Net Debt/EBITDA), AB InBev is consistently trading below its peers and especially SABMiller at around 10.0x EV/EBITDA. In reality, if we take a closer look and try to explain such result, we will see that ABI is trading at a much higher multiple than Carlsberg and Heineken (9.0x and 8.5x in 2010) and is only outperformed by SABMiller and Molson Coors. The latter is a much smaller comparable and benefitted from the agreement
signed in 2008 with SABMiller to create a JV exploiting the North American operations. Finally, according to a note from Petercam (dated October 25\textsuperscript{th}, 2010), SABMiller seems overbought, partly explaining the existing gap in valuation between the two competitors.

Another way of looking at ABI’s performance would be to go through its return ratios, starting by the Return on Equity (ROE). As we can also notice, the Return on Equity seems to have improved since 2008, with ABI only being outperformed by Heineken in 2012, which was the best year for the company (18.7\% vs. 13.5\% for the peer group).

AB InBev’s performance was even better when we looking at the Return on Assets (ROA) as NOPAT / Total Assets. We can notice that Inbev 2007 performance was outstanding (way
above peer average), but also that ABI was able to quick recover from the 2008 crisis and has been the leader in terms of ROA since 2011 (9.0% vs. an average of 4.6%).

Return on Assets

Source: Capital IQ. Own Estimate

To understand such performance, one should decompose the ROA using something close to the Dupont Analysis. \[ \text{ROA} = \left( \frac{\text{NOPAT}}{\text{Sales}} \right) \times \left( \frac{\text{Sales}}{\text{Total Assets}} \right) \]

Consequently, we can infer that between 2007 and 2009, the variation in ROA is mainly due to the Asset utilization ratio that varies significantly. After 2009, the progression is driven by the EBIT Margin (NOPAT = Operating Income \times (1 - Tax Rate)) since the asset utilization is overall stagnating.

AB InBev - Return on Assets Decomposition

Source: Capital IQ. Own Estimate
2) Improved Operating Performance based on InBev’s model

AB InBev has reinforced its number 1 position in 2008 after acquiring Anheuser-Busch. However, unlike Heineken, SABMiller or Molson Coors, the company hasn’t been able to increase without external acquisition its volume of production since 2009 (-0.5% CAGR for AB InBev vs. 11.6% for Heineken, 4.3% for SABMiller, 4.0% for Molson Coors).

In reality, the brewery industry is a mature sector, and volume growth can only be achieved in emerging markets. Cost cutting becomes therefore an important driver for profit.

![Volume Production in million Hectoliters](chart.png)

*Source: Company Information*

In this market, scale offers efficiency and therefore better margins. The company improved both in Volume/Plant and Revenue/Employee since 2008 thanks to its size and economies of scale.
In 2008, brewers face raw material cost inflation, which impacted ABI. COGS as a percentage of Sales went from 41% in 2007 to 46.8% in 2009 affecting the Gross Profit Margin. However, since 2009, the company also benefitted from economies of scales and was able to reach levels from 2007 in terms of COGS.
Gross Margin profit suffered in 2009 because of the raw material cost inflation (from 58.9% in 2007 to 53.2% in 2009), however efficiency improvements due to scale helped the Gross Profit Margin increase from 2009 to 2012. Only SABMiller was outperforming ABI in terms of Gross Margin (68.8% vs 58.7% in 2012).

Nevertheless, it is indeed thanks to the implementation of ZBB and to the synergies captured, that the company was able to reduce its SG&A costs. Between 2008 and 2009, the percentage of sales represented by SG&A dropped by 570bp. After 2009, only Heineken was able to better perform (17.4% of Sales for Heineken vs. 27.1% for ABI). We will focus on the methods used to cut the SG&A costs in the last part of the paper.
From those changes (gain in efficiency and SG&A optimization), AB InBev’s EBITDA margin kept increasing from 2009 to 2012 (32.5% in 2008 to 38.6% in 2012), reinforcing the position of the company as the market leader in this domain (22.4% on average for the peers in 2008 and 22.4% as well in 2012).
3) Market shares: Interesting Positioning allowing the company to grow

AB InBev has large exposure to fast-growing markets in Latin America (undisputed leader in Brazil and Argentina). Besides a growing population, this region of the world also offers growing peer consumption per person.

Source: Company Information
We will see in the last part of this paper that since 2008, in developed market (especially in the United States), AB InBev has been losing market shares. Budweiser and Bud Light, two of the most iconic brands of the company have been the first victims of this phenomenon. However, thanks to its large exposure to growing markets, according to Euromonitor, AB InBev has been able to increase its global market share (from 18.5% to 20.7%) since 2010. This trend was mainly driven by the growth in Latin America where the company has a dominant position (especially in Brazil and Argentina).

![Global Company Market Shares](image)

*Source: Euromonitor*

### 4) Other considerations

Less than a year after InBev acquired Anheuser-Busch, we can observe that the average age of Executive Officers decreased by more than 7 years. We will also take a look at the same numbers for Burger King and Kraft Heinz in order to see if there is a pattern and therefore conclude that 3G usually operates with younger management teams.
In our view, it would be a mistake to link the decrease in Capex in 2009 to the merger. Indeed, we think it has more to do with the credit crisis. As we may see above, between 2009 and 2012, AB InBev was spending a larger percentage of its sales than its peers in Capex expenditures.

However, there is no denying that the company has worked with its suppliers to decrease the Working Capital requirements and therefore facilitate the cash flow generation. Indeed, as we can observe below, the ratio Working Capital / Assets has been drastically decreasing since
2008, going from -3.0% to -8.3% in 2015, while it went from -1.1% to -4.9% for the peer group.

![Working Cap / Total Assets]

Source: Company Information. Own Estimate

From 2005 to 2008, InBev, led by 3G, was already working on improving the Free Cash Flow Margin to generate cash that could be used to finance the Anheuser-Busch offer. Since 2008, AB InBev has been able to be the best performer in terms of converting its Sales into Free Cash Flow (1000bp above the peer average in 2012).

![Free Cash Flow as a % of Sales]

Source: Company Information
Finally, in 2008, the situation wasn’t critical but the very high Net Debt/EBITDA ratio was worrying the management. Therefore, one of the main objectives of ABI after the acquisition was to lower this leverage ratio. The goal was set to go below 2.5x by 2013. Yet, strong cash flow generation and divestments helped lower the huge debt position (much higher leverage than Burger King or Kraft Heinz just after the acquisition). The goal was reached two years in advance.

![Leverage Graph](image)

Source: Datastream

Since InBev already had solid foundations before acquiring AB, changes were not spectacular after 2008. However, thanks to synergies, the company has been able to improve its margins and therefore globally outperform its peers.

b) Burger King

i. Company Presentation

Burger King Corporation was founded in 1953 in Florida. The company was inspired by the precursor of the industry McDonald’s, and after a few years, the two burger-providers became fierce competitors, especially in the United States. During the 1970s and the 1980s and led by Donald N. Smith, a former executive from McDonald’s, Burger King developed new franchise agreements, broadening the menus and redesigning its stores.

During the 2000s, the company experienced many control changes.
In 2002, Bain Capital, the Texas Pacific Group (TPG) and Goldman Sachs acquired Burger King for $2.3bn in cash. They paid 7x cash flows, which was in line with the multiples paid
by Tricon Global Restaurants for the Long John Silver's and A&W Restaurants Inc. chains in March

Four years later, in 2006, the company became a publicly traded entity after a $392M IPO. Proceeds from the IPO were mainly used to reduce the level of indebtedness.

The 3G Deal: Heavy leverage

In September 2010, 3G Capital took BK private again by acquiring the company for $4.0bn (including debt), which represented a 46% premium over the market price at the time. $2.8bn (70%) were financed through debt, and 30% were brought by 3G, making the deal more leveraged than the average 2010 LBOs\(^\text{12}\). Indeed, according to Fortune, for deals valued at $1bn and more, the average Equity portion brought by Investors was equal to 39%. Moreover, for average deals in 2010, the ratio went up to approximately 43% according to Pitchbook, which is way higher than 3G’s. As a result, the group leverage (Net Debt/EBITDA) in 2010 was at 6.2x (Deutsche Bank 03/15/2012).

This deal valued the company at 9.0x the EBITDA, compared to the 8.2x median for US Restaurant acquisitions over the past 5 years according to Bloomberg\(^\text{13}\). Bernardo Hees, a former partner at 3G, was appointed CEO, while Daniel Schwartz, 29 years old in 2010, became CFO. Schwartz took over as CEO in 2013 when Hees moved to Heinz.

Less than two years later after going private, in June 2012, 3G Capital sold 30% to Pershing’s Square, a special purpose acquisition corporation (see the multiples to try to explain the goal of the operation) for $1.4bn, valuing the equity of the company at roughly $4.8bn and 3G’s investment at $3.4bn\(^\text{14}\) (2.8x what they invested 20 months earlier). Following this reverse merger with the special purpose acquisition company, the entity was re-listed on the New York Stock Exchange with 16% of shares available to retail investors.

\(^{13}\) http://www.bloomberg.com/news/articles/2010-09-02/burger-king-to-be-bought-by-3g-capital-group-in-deal-valued-at-4-billion
\(^{14}\) http://www.thestreet.com/story/11484415/2/in-burger-king-deal-ackman-gnaws-on-old-bone.html
Finally, in August 2014, Burger King announced its intention to merge with Canadian chained bakery operator Tim Hortons in an US$11bn deal.

- Expanding the Tim Hortons brand through international master franchise partnerships will be a focus for the new company. Additionally, by locating the new company’s headquarters in Canada, the new entity will benefit from a lower corporate tax rate.
- Furthermore, TH is also well known for its innovative menus and its aggressive expansion strategy towards urban areas, two aspects BK has always been looking to improve.

ii. Creation of a peer set

BK is one of the largest Fast Food Hamburger Restaurants (FFHR), playing on the larger Quick Service Restaurant (QSR) industry and mainly exposed to the US market (60% of the 2014 Sales). Moreover, since the arrival of 3G Capital, BK’s business model completely evolved. The company indeed became one of the few pure franchise players, only keeping a few owned stores for marketing and training purposes.

As a result, to build a relevant set of peers that can efficiently be used to understand the evolution of the operational performance of Burger King, we would need companies that are very similar to Burger King on at least one or two of the various levels:

i) Similar products (QSR companies and especially FFHRS)

ii) Similar geographies (Significant part of the revenues coming from outside of the US)

iii) Similar Business Model (Pure Franchise player)

1) McDonald’s (NYSE: MCD, Market Cap: $113.5bn)

McDonald’s has always been BK’s historical competitor and is the leading FFHR in terms of market shares (15.0% market share in the Global Fast Food Restaurant Industry vs. 3.1% for BK15). Including it in the peer set seemed obvious in order to capture the progress made by BK versus the leader (and biggest player by far) since it was acquired in 2010 and understand

15 IBISWorld Global Fastfood Restaurant Report – October 2015
how they intended to bridge the gap. Besides, McDonald’s and BK have a similar geographic footprint and sell competing products (e.g. Big Mac vs. Whooper).

2) **Wendy’s** (Nasdaq: WEN, Market Cap: $2.9bn)

Like McD, Wendy’s is a pure FFHR and one of the fiercest competitors of BK. Although the two companies may not have the exact same business models anymore (Wendy’s is an asset-heavy company), it also seemed natural to include it in the peer set.

3) **Yum! Brands** (NYSE: YUM, Market Cap: $33.6bn)

Yum is one of the largest QSR companies in the world (9.8% market share\(^3\)) with brands such as Pizza Hut, Taco Bell or KFC. It operates in a similar industry than BK, although it doesn’t exactly sell burgers. We found interesting to add it to the peer set due to the similarity in the geographical development. Indeed, like BK, more than 50% of the company’s revenues come from outside of the US.

4) **Domino’s** (NYSE: DPZ, Market Cap: $6.5bn)

Finally, as we have seen and will develop later, since 2010, BK has decided to grow as a full franchised business. Consequently, in order to properly understand and compare its cost structure and business models, we had to include another full franchised business in the set of peers. Therefore, although the two companies are not selling competing products, having Domino’s in the set can provide some interesting insights.

### iii. Data Analysis

1) **Measuring the outperformance**

Before analyzing in depth the operational evolution of Burger King, we will start by illustrating how Burger King was able to globally outperform its peers. As we did for AB InBev, we will use the Total Shareholder Return as the main measure for this outperformance.
Indeed, this will illustrate how the company was able to return more money to 3G, in the form of capital gain and dividends.

Our goal is to compare the Total Shareholder Return of all the companies included in the peer set and understand how BK performed. To do so, we also used data from Datastream and rebased at 100 on the day of the 3G’s acquisition (September 2010) for all the companies. In this case, unlike AB InBev, we had to make an adjustment though to really capture 3G’s outperformance. Indeed, between September 2010 and June 20th, 2012, Burger King was a private company. As a result, we don’t have any information on the daily variation of the valuation of Burger King. To correct this, we assume the TSR remained flat between 2010 and the day BK went public again (June 2012). We then take the price at which the company was reintroduced, adjust it so that it can be compared to the last trading price of 2010 and compute the variation. We add that variation to 100, giving us a starting point after which we simply use Datastream information on the TSR. Why do we need this adjustment? Without it, we would have started the graph in 2012, but it would have undervalued the increase of the TSR for Burger King.

Finally, it should be noted that since December 2014, Burger King started trading under the name Restaurant Brands International, the entity comprising both Burger King and Tim Hortons. Using the method described above, we get the following graph:

**Total Return Index**

![Graph showing Total Return Index over time](image)

*Source: Datastream, Own estimates*

**Overall performance of the Index:**

- Domino’s: **+1,071.8%**
- **Burger King:** +375.8%
- Wendy's: +201.4%
- Yum!: +117.1%
- McDonald's: +103.1%

These results provide two key lessons:

- The market particularly appreciates the 100% franchised business of Domino’s. Since 2010, Domino’s has been, by far, the most successful player of the peer set. We will try to understand later why.

- However, Domino’s set aside, Burger King has clearly outperformed the other peers, and especially its main competitor McDonald’s.

Indeed, if we were to exclude Domino’s to really show the outperformance against the more similar peers, the graph would look this way:

**Total Return Index without Domino's**

![Graph showing total return index without Domino's](image)

*Source: Datastream, Own estimates*

Another way to illustrate Burger King’s good performance since the acquisition and to prove that the market starts appreciating the new business model and the new philosophy is to look at trading multiples. Indeed, in 2009, before 3G acquired the company, Burger King was trading below its peers at a 7.6x EV/EBITDA multiple, versus an average of 9.6x for its peers. A few years later, in 2012, Burger King was still trading a little below the average, 12.7x vs. 13.1x but got much closer. It is finally in 2013 and 2014 that Burger King traded at a premium (15.5x vs. 13.4x and 15.5x vs. 12.7x). One should also observe that Domino’s
multiples increased in a similar fashion approximately at the same time, opening a gap between asset-light (BK, DOM) and asset-heavy companies (MCD, WEN, YUM).

This gap proves that the market is ready to pay a premium for asset-light companies in the QSR industry (potentially also partially explaining why Domino’s and Burger King outperformed their peers in terms of total shareholder return) because it ensures larger cash flow generation, improves the margins, decreases the Capex requirements and offsets the commodity risk. Overall, this strategy enables for instance the companies to use debt leverage as a way to increase the value creation (we will see later that BK and DOM have indeed decided to increase their indebtedness thanks to their better ability to generate free cash flow, boosting their returns).

However, one should also assume that the premium paid for Burger King is also a way of rewarding the changes operated by Hees and Schwartz, and especially the cost cutting strategy that allowed to further increase the margins.

![EV/EBITDA Multiple](image)

*Source: Datastream*

Let’s now look at the evolution of the different financial and operating metrics at Burger King in order to explain the relative outperformance of Burger King since 2010.

### 2) Refranchising and Sales Improved Performance

As we said earlier, since the acquisition, BK’s business model has shifted, from a classic model, mixing owned and franchised stores (close to MCD and Wendy’s), to a 100% franchise model (like Domino’s). Indeed, over the 11,925 Burger King stores in 2008, 1,429 were owned by the company (12.0%), generating revenues of $1.7bn (73.2% of the total), and 10,496 were operated by franchisees, generating $0.7bn in fees and property revenues (26.8%
of the total). In 2012, the number of owned store shrank to 418, and finally reached 52 in 2013 (the company kept a few restaurants in Florida for training and marketing purposes).

Consequently, sales dropped brutally, from $2,457M in 2008, to $1,971M in 2012 and finally $1,199 in 2014.

![Burger King Sales vs. Number of owned stores](image)

**Source:** Company Information

However, at the same time, system-wide sales increased at Burger King, from $12.3bn in 2010 to $14.4bn in 2014 representing a 3.5% CAGR over the period, vs. 3.2% for McDonald’s and 1.8% for Wendy’s. Maintaining a steady growth in system-wide sales by supporting franchisees is key for a 100% franchise business. Moreover, once again, Domino’s
overwhelmingly outperformed the three other companies with a 9.2% CAGR, which is in our view the main driver for the gigantic total shareholder return seen above.

System-wide Sales Growth

![Graph showing system-wide sales growth for BK, McDo, Wendys, and Domino's from 2009 to 2014. BK consistently shows above-average growth, while Wendys and Domino's show more variable performance.]

*Source: Company Information*

System-wide growth at Burger King can be explained by an increase in the number of stores rather than an increase in the utilization of the stores. Indeed, according to the graph below, Sales/Unit remained relatively constant, around $1.2M/store for Burger King. Thanks to its breakfast products, McDonald’s was able to perform way better than its peers with sales of $2.4M/store. Therefore, the only factor explaining the system-wide growth, especially for Burger King and Domino’s (9.2% and 3.5% CAGR over the period), is the number of stores opened.

Sales / Unit

![Graph showing sales per unit for Burger King, McDonald's, Wendys, and Domino's from 2008 to 2014. Burger King consistently shows the highest sales per unit, while the other companies show varying levels of performance over the years.]
Burger King and Domino’s experienced the highest growth in the total number of stores since 2010 (4.1% and 5.6% CAGR 10-14 respectively, vs. 2.6% for McDonald’s). Unlike McDonald’s and Burger King, Domino’s also experienced a slight but real increase in its Sales/Unit from $670K in 2010 to $766K in 2014 (3.4% CAGR over the period). The combination of a much higher store growth with an increase of Sales/Unit explains the System-wide sales growth outperformance and makes the financial outperformance we saw earlier logical. Indeed, in a 100% franchise model, every incremental system-wide dollar of revenues turns into a fee for the parent company that is almost pure profit, provided that the fixed costs remain constant (which is the case for Domino’s).

![Number of stores - Growth Rate](image)

Besides, since 3G’s arrival, not only were the sales impacted by the new business model, but also have they significantly changed geographically. Indeed, between 2011 and 2014, the percentage of sales coming from the US went from 67.2% to 53.4%, while it stayed at the same level at McDonald’s.
At the same time, emerging markets (mainly Latin America) have grown in significance, from 4.4% of the sales in 2010 to 11.9% in 2014. This is the result of 3G's strategy that aims at conquering untapped markets to support the organic growth of the portfolio company.
3) Cost cutting and Efficiency Improvements

This deep transformation mechanically increased the Gross Profit and EBITDA Margins. Indeed, by shifting to a 100% franchise model, Burger King eliminated most of the COGS (Food and Paper, Payroll and Employee Benefits, Occupancy and other) and allegedly deflated its Balance Sheet. Only Franchise Expenses, resulting from lease agreements with third-party landlords, remained on the Income Statement as COGS. Indeed, in many cases, Burger King doesn’t own the property, but subleases it to a franchisee in a separate agreement. Therefore, the gross profit margin went from 32.9% in 2010 to 73.0% in 2014, and the EBITDA margin from 17.5% to 63.5%.

Source: Company Information
However, this mechanical improvement of the margins doesn't really show how 3G's managers were able to improve the business and make it more efficient. As we explained, it is only driven by the shift in the business model and not by operating improvements. To actually really monitor the cost cutting measures, and not simply witness the effects of the new business model, we will compare different ratios among the peers, using Total Assets as the denominator. This will allow us to adequately observe whether Burger King became more efficient than its peers.

Surprisingly, when first looking at the Total Assets, one can notice that instead of deflating after the refranchising, Burger King’s Balance Sheet actually inflated and doubled in size, going from $2.7bn before the acquisition to $5.8bn right before acquiring Tim Hortons in December 2014.

According to a report from Morgan Stanley (September 8th, 2014), the best way to address this issue is simply to adjust the Total Assets for Intangibles, Goodwill and Cash, so that we really reflect the operating returns. By doing so, we don't observe a sharp deflation, but rather stagnation. Indeed, the assets that are removed from the Balance Sheet due to the refranchising are offset by the debt that is added to finance the buyout.

Let's start by looking at Sales/Adjusted Total Assets. While the assets remained constant as discussed above, Sales decreased by half between 2008 and 2013, explaining the shape of this
line. The only interesting insight here is the fact at equivalent number of owned stores, the company has been able to improve the Assets utilization in 2014 vs. 2013 (71.0% vs. 80.8%).

While asset utilization improved from 2013 to 2014, COGS as a percentage remained at a constant level.
Overall, Burger King has always had one of the best ratios of Gross Profit / Adjusted Total Assets. The refranchising strategy mechanically decreased it, but the recent progress made since 2013 in terms of Asset utilization led to a strong increase, from 49.4% in 2013 to 59.0% in 2014.

![Gross Profit as a % of Adjusted Total Assets](image)

*Source: Company Information. Own estimate*

Reducing the SG&A, through Zero Based Budgeting and other kinds of cost cutting methods we will discuss later, has always been one of the trademarks of 3G, and before looking at the numbers, it was on this line of the P&L that we expected to notice the most important variations before and after the acquisition. And indeed, we can observe that SG&A as a % of Adjusted Total Assets went from 32.6% in 2010 (vs. an average of 15.5% for the three remaining peers) to 14.9% in 2014 (vs. an average of 15.7%).
Another way, probably more efficient, to notice the improvements would be to look at SG&A/System-wide Sales and SG&A/Unit. Indeed, analyzing SG&A as a percentage of System-wide sales is relevant since those costs are incurred to support the entire business and not only the owned stores. In 2010, Burger King had an average performance for the sector (3.3%). However, the graph below shows a spectacular improvement: in 2014 SG&A only represented 1.3% of system-wide sales vs. an average of 2.9% for the peers.
Between 2010 and 2014, Burger King was able to divide by more than two the amount of SG&A spent per store (from $40K to $15K), while this number remained flat for the competitors. We will go through the details that led to these results in the last part of the paper.

![SG&A per store chart](chart1.png)

Source: Company Information

Thanks to its ability to decrease the SG&A, the company was able to increase the "true" EBITDA Margin (not only benefitting from the shift in business model described above). As a result, the ratio EBITDA / Adj. Total Assets consistently increased from 2010 to 2014 (29.2% to 51.3%). One has to bear in mind though that the 2013-2014 increase is mainly due to an improvement in the Asset utilization resulting in a better Gross Profit Margin.

![EBITDA as a % of Adjusted Total Assets chart](chart2.png)

Source: Company Information. Own estimate
Since the refranchising strategy was fully implemented in 2013, we can even compare the drivers of this improvement for years 2013 and 2014. As we imagined, most of the increase can be explained by a better Sales/Total Assets ratio. However, one should also notice that Burger King was able to improve its EBITDA Margin from 58.1% to 63.5% (in this case the ratio is meaningful since the change in sales between 2013 and 2014 doesn’t depend on the mix owned/franchise anymore).

![Decomposition of EBITDA/Total Assets](image)

*Source: Company Information. Own estimate*

One of the most important benefits of the refranchising strategy is the reduction in Capex requirements. Indeed, the need to invest is transferred to the franchisees. For instance, in the franchise agreement signed with Carrol’s Restaurant Group, the largest BK franchisee in the world, in 2012 (part of the refranchising plan) for 278 stores, the company committed to invest in Capex to remodel 450 stores over the next three years, to the brand 20/20 restaurant image (instead of Burger King doing it). The result is remarkable. Capex went from 13.6% of Adj Total Assets in 2009 to 2.1% in 2014. If we break the Capital expenditures down into three categories (costs to build new restaurants, costs to maintain existing ones and corporate investments), we will see that obviously the two first categories almost disappeared. In 2009, BK was investing $65.4M to build new company restaurants and restaurants that they could lease to franchisees, vs. $1.1M in 2013. Moreover, the company was investing $110.1M in the existing restaurants in 2009 vs. $12.4M in 2013. But most importantly, 3G was even able to decrease the amounts invested in information technology systems and corporate furniture:
from $28.5M in 2009 to $13.2M in 2013 (we will describe and analyze some measures that were implemented in the last part of the paper).

**Capex as a % of Adjusted Total Assets**

![Capex as a % of Adjusted Total Assets](chart)

Source: Company Information. Own estimate

Automatically, an increase in the EBITDA Margin combined with a strong decrease in the Capex requirements led to an increase in the Cash Flow generation. The company went from an average Cash Flow generation in 2008 (11.7% of the Adj. Total Assets) to an outstanding performance, generating cash flows that represented up to 36.2% of the Adj Total Assets. This will enable Burger King to endure a larger indebtedness that will boost the returns, allow to redistribute in the form of dividends or share repurchase and allow to accumulate some cash used to finance future acquisitions (what they did with Tim Hortons. Cash went from $187M in 2010 to $546M in 2012 and finally $1,013M just before the acquisition in 2014).

**Free Cash Flow as a % of Adjusted Total Assets**

![Free Cash Flow as a % of Adjusted Total Assets](chart)

Source: Company Information. Own estimate
4) Additional Considerations

As expected, due to the leveraged structure of the deal, the Net Debt / EBITDA ratio increased significantly after 2010, from 1.8x in 2009 to 6.2x in 2010. Thanks to the strong cash flow generation, this ratio went down to 3.0x in 2014.

The most important insight to get from this graph though, is that Domino’s, although not being under an LBO anymore, remained highly leveraged thanks to its large free cash flow generation. This might be a model for Restaurant Brands International in the future, which can easily support a 3.5-4.0x leverage.

Besides, as we saw with AB InBev, 3G’s acquisitions are often combined with changes of leadership. In Burger King’s case (also true for Heinz), this was particularly clear. Indeed, part of the culture spread by Lemann, Telles and Sicupira is that meritocracy will always prevail over experience or seniority. As a result, they are not afraid to appoint young and motivated people trained at 3G to very senior executive positions at the portfolio companies.
By Refranchising, BK was able to remove from its Balance Sheet most of its employees, only keeping people working in the headquarters. Even there, 261 people were laid off among the 413 that were dismissed company-wide.

Hees and Schwartz after him however emphasized the need to maintain a good customer experience in spite of the cost cutting strategy. This is why they also focused their attention on pushing franchisees to accelerate the remodeling pace of existing stores and increased the number of field “staff”. These “coaches” now cover 30 units vs. 90 before, helping
franchisees improve the customer experience and their processes. The results are clear. Over the period 2008-2014, BK has been the top performer among the peer set (1.1% CAGR vs. an average of 0.9%).

![American Customer Satisfaction Index - Rebased to 1](image)

*Source: American Customer Satisfaction Index, University of Michigan*

Nevertheless, one element caught our attention: the decrease in advertising spend. Indeed, although the system-wide Sales of BK have increased, the amount spent in advertising by BK and the franchisees has decreased in the US. This actually doesn’t mean that the company doesn’t care about marketing, but the management decided to focus more on larger and shorter campaigns.

![Burger King Advertising Spending in the US](image)

*Source: Statista*
From this analysis we can conclude that since 2010, Burger King has been able to outperform most of its peers, creating more value for its shareholders than McDonald’s, Wendy’s or Yum!.

The 100% franchise model that had proved successful for Domino’s has allowed the company to trade at a premium compared to the peers and can be seen as a good strategic decision made by Hees and his team. The second main source of improvement was the ability to drastically reduce the SG&A costs, while maintaining an above-average system-wide sales growth (mainly driven by new openings).

Finally, the combination of those two elements allowed the company to add leverage (and therefore boost the returns) while accumulating large cash amounts thanks to the strong free cash flow generation that was used to acquire Tim Hortons. This is part of the Buy & Build (B&B) strategy that we will develop later, creating value through applying similar operational changes at the standalone company while also benefitting from additional synergies.

Nevertheless, there are still areas of improvement left:

- No organic growth (Sales/Unit) over the period, launch of new products hasn’t been efficient enough, and advertising spend was cut significantly (maybe too much?)

c) Kraft Heinz

i. Company Presentation

Founded in 1869 by Henry J. Heinz, Heinz manufactures and sells a broad line of food products including Ketchup and Sauces (with Brands such as Heinz and Classico), Meals and Snacks (Ore Ida, Heinz Beans or Quero) and Infant Nutrition (Plasmon in Italy or Complan in India). Thanks to the marketing abilities of its founder, the quality of the products sold and the great team spirit enhanced by Henry, the family business flourished for a long period of time before stagnating in the 1960s. As a result, Anthony O’Reilly, one of the most famous top executives at the time, became CEO in 1979 and started reviving the company by expanding into Baby Foods and Weight Watchers and decentralizing the decision process. After two decades of success, he stepped down in 1997, replaced by Bill Johnson. Johnson focused on
entering emerging markets (percentage of sales in those markets went from single digits to 24%\textsuperscript{16}) by external acquisitions.

A few years later, in 2006, investor and activist Nelson Peltz acquired a 5.4% stake in the company and started calling for major cost-cutting moves such as shutting down 15 plants, eliminating more than 2,700 jobs, reducing the discounting and laying the emphasis on marketing. Instead of fighting, Johnson and Peltz became allies, and they started working on streamlining Heinz.

As a result, a few months before 3G and Warren Buffet came in, Heinz generated two-thirds of its sales ($11.6bn) outside of the US, including 20% from emerging markets, especially Brazil and China, and had already started working on its profitability.

Let’s now look at the details of the two deals that involved 3G and Berkshire before we analyze the impact of 3G on the operating performance of those companies.

The Heinz Deal

- 3G and Warren Buffet acquired Heinz together in June 2013. They agreed on a 14.0x EBITDA Multiple, valuing the company at $27.8bn ($23.3bn excluding debt), and paying $72.5 per share, a 20% premium over the stock’s closing price.
- Funding details\textsuperscript{17}:
  - 3G Initial Investment: $4.1bn (50% of the ownership)
  - Berkshire Equity Investment: $4.1bn (50% of the ownership)
  - Berkshire Preferred Equity Investment: $8.0bn (with a 9% dividend)
  - Debt: $14.1bn from J.P. Morgan Chase and Wells Fargo (including senior secured term loans, a senior secured revolving credit facility and a second-lien bridge loan facility\textsuperscript{18})
  - Similar Leverage than on the Burger King LBO (71% debt vs. 70%) if we consider the Preferred Equity Investment as debt (otherwise 42% vs. 70%)
- 3G and Berkshire committed to keep the headquarters in Pittsburgh, helping convince the shareholders to accept the offer along with the 20% premium.

\textsuperscript{16} http://fortune.com/2013/10/10/squeezing-heinz/

\textsuperscript{17} Societe General Report, 03/31/2015

\textsuperscript{18} https://www.moodys.com/research/Moodys-Berkshire-ratings-not-affected-by-Heinz-deal--PR_266488
- Warren Buffett immediately announced that Heinz was going to be “3G’s baby” on CNBC\(^{19}\), revealing that the Brazilian company was going to be in charge of running the day-to-day operations.

The Kraft Deal

- In 2015, Heinz announced that they were acquiring the Kraft Foods Group that had been spun off in 2012 from its parent Mondelez International and that was losing ground to larger rivals.

- **Deal Details**
  - Kraft Shareholders will receive a special cash dividend of $16.5 per share ($10bn) and 49% of the combined entity
  - Heinz shareholders will get 51%
  - The Board will consist of 5 members from Kraft and 6 from Heinz, and the Management has committed to a co-headquarter in Chicago and Pittsburgh

- Based on Bloomberg’s valuation at the time\(^{20}\), this values the equity of the new company at $83bn

<table>
<thead>
<tr>
<th>Number of shares outstanding: 588mm</th>
<th>Per Share</th>
<th>Total ($bn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kraft Stock Price as of 03/25/2015</td>
<td>$86,02</td>
<td>50,6</td>
</tr>
<tr>
<td>Kraft Special Dividend</td>
<td>$16,50</td>
<td>10,0</td>
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<tr>
<td>Implied post-dividend Kraft share value</td>
<td>$69,52</td>
<td>40,6</td>
</tr>
<tr>
<td>Kraft shareholders %</td>
<td>49%</td>
<td></td>
</tr>
<tr>
<td><strong>Implied Kraft + Heinz equity Value</strong></td>
<td><strong>82,8</strong></td>
<td></td>
</tr>
<tr>
<td>Heinz net debt</td>
<td>11,3</td>
<td></td>
</tr>
<tr>
<td>Kraft net debt</td>
<td>8,7</td>
<td></td>
</tr>
<tr>
<td>Heinz preferred stock</td>
<td>8,0</td>
<td></td>
</tr>
<tr>
<td><strong>Implied Kraft + Heinz Enterprise Value</strong></td>
<td><strong>110,8</strong></td>
<td></td>
</tr>
</tbody>
</table>

Implied Kraft + Heinz equity Value 82,8
Heinz shareholders % 51%
Implied Value of Heinz contributions 42,2

New equity investment used to pay the dividend 10,0

**Value of remaining Heinz equity** 32,2

*Source: Company Information, Bloomberg Estimates 03/25/2015*

\(^{19}\) [http://dealbook.nytimes.com/2013/02/14/berkshire-and-3g-capital-to-buy-heinz-for-23-billion/]

This implies that 3G almost quadrupled the value of its initial investment in Heinz in only two years (based on the deal terms at the announcement, on March 25th. The implied valuation of Heinz will be slightly different after the stock starts trading as a combined entity on July 2nd). Besides that, cost synergies are estimated to reach $1.5bn through Zero Based Budgeting (ZBB), rationalization of the manufacturing footprints, integration of the distribution and streamlining of the organization.

Finally, the deal created a $29bn Sales company distributed as follows:

---

**2015 Sales by Geography**

- United States: 70%
- Canada: 9%
- Europe: 9%
- Rest of the World: 12%

*Source: UBS Report (02/26/2016)*

**2015 Sales by Product Category**

- Cheese: 26%
- Refrigerated Meals: 14%
- Beverages: 15%
- Infant/Nutrition: 12%
- Meals: 9%
- Sauces: 4%
- Other Products: 20%

*Source: Susquehanna Report (10/26/2015)*
Heinz and Kraft Foods (and obviously Kraft Heinz) belong to the broad Packaged Food Industry, and are key players on the Sauce, Meals, Cheese, Beverages and Infant sub-industries. Moreover, as we saw earlier, after the 2015 Kraft acquisition, the group now heavily depends on the North American Market (79% of the sales). Finally, Kraft Heinz is one of the biggest actors in the market in terms of market size (even more after the deal) with a market cap of approximately $96.1bn (April 2016). Thus we took into account those three factors (category of products sold, geography and size) to create a relevant set of peers.

1) **Mondelez International** (Nasdaq: MDLZ, Market Cap: $67.7bn)

Although Mondelez may not compete exactly on the same market than Kraft Heinz (40% of sales from Biscuits, 30% from Chocolate, 16% from Gum and Candy, 9% from Cheese and 6% from Beverages according to 2015 Company Information) or even in the same areas (34% Europe and 26% North America), it remains a key player of the Packaged Food industry. But most importantly, the fact that Kraft and Mondelez recently spun off and that rumor has it that 3G may want to reunite the two former partners under a new giant, makes it necessary in our view to include it in the peer set.

2) **General Mills** (NYSE: GIS, Market Cap: $38.6bn)

The United States Retail also represents the largest part of the company’s net sales (67% of the $17.6bn) and is divided into five business segments: Meals (26% and directly competing with one of the most important activities of Kraft Heinz), Cereal (22%), Snack (20% and also competing with Kraft Heinz), Baking Products (19%) and Yoghurt (13%). Consequently, General Mills appears to be a fairly similar company and including it in the peer made sense to us.

3) **Kellogg Company** (NYSE: K, Market Cap: $27.4bn)

Like Kraft Heinz, Kellogg is well established in the United States, representing 67% of the revenues. Its biggest division consists in US Snacks (23.9% of the sales) with brands such as Cheez-It, Town House or Club, competing with those of Kraft Heinz. U.S. Morning Food is the second most important division with 22.1% of the sales. Although Kellogg may not be as
similar to Kraft Heinz as General Mills, it remains an important competitor that has to be taken into account.

4) Campbell Soup Company (NYSE: CPB, Market Cap: $20.2bn)
Finally, we decided to also include Campbell Soup in the peer set due to the numerous competing products. Indeed, the company develops products from soups and simple meals to snacks and healthy beverages, just like Kraft Heinz.

Some consumer products companies were not included:
- Conagra was too small of an actor
- Nestle isn't a US player
- MKC was too far from the product mix.

iii. Data Analysis

One of the main differences between Heinz and the previous case studies (ABI and Burger King), is that in this case, we only have one full year (2014) of data during which 3G's managers had the opportunity to improve the business. Indeed in 2015 the company had to integrate Kraft, which obviously will have a negative impact on the pro-forma results, and in 2013, the company was acquired in the middle of the year. Therefore, to best capture the value added by 3G in this case, we will have to focus on the difference between 2013 and 2014, and later analyze FY 2016.

Looking at Heinz, if we were to use Datastream data the way we did with Burger King and AB InBev, we wouldn't be able to notice any outperformance (see below):
However, according to some calculations that have been made after the Kraft Heinz deal, we are able to say that 3G almost quadrupled the value of its investment in Heinz (thanks to the level of leverage, and to the operational improvements they were able to make in less than a year and a half). If we were to do a similar adjustment than what we did with Burger King, this is how the Index would look like:

Since the outcome of the TSR analysis is uncertain, we will need to find other metrics to assess whether Heinz has been able to outperform its peers between 2013 and 2014. Besides,
due to the fact that the company was taken private, we won’t have any data on trading multiples to view the market’s reactions to the changes implemented at the company. Consequently, the only metric we could use at the moment to measure the efficiency versus the peers would be, in our view, the Return on Assets. As we did with Burger King data, we adjusted the Total Assets for goodwill, intangibles and cash to reflect the true operating performance. The result is clear: in one year, the ratio went up by 1290 bps, from 35.4% to 48.3%, making Heinz the most efficient company of the set (in 2014, the average excluding Heinz was 31.2%). Note that the 2015 should be disregarded since it is computed as the pro-forma EBITDA (no synergies included) over the sum of the two balance sheets. Let’s assume that the ratio will go up again in 2016.

\[
\frac{\text{EBITDA}}{\text{Adj. Total Assets}} = \frac{\text{EBITDA Margin} \times \text{Sales/Adj. Total Assets}}{\text{Adj. Total Assets}}
\]

What are the main drivers explaining this performance?
If we break the ratio into two components, we get:

\[
\frac{\text{EBITDA}}{\text{Adj. Total Assets}} = \frac{\text{EBITDA Margin}}{\text{Sales/Adj. Total Assets}}
\]

By doing so we realize that the increase is directly attributable to the improved EBITDA Margin, that largely offsets the decrease in Asset utilization.
Let's now look at the data to try to understand how the company managed to improve so quickly its margins.

1) Sales Analysis

As expected, sales declined severely between 2013 and 2014, explaining why the Asset utilization ratio went from 192% to 178%. Yet, one should notice that this decrease in sales affected the entire peer set, it was simply more visible at Heinz: in 2011, the average sales growth of the set was equal to 8.8%, 4.6% in 2012, 1.5% in 2013 and -2.6% in 2014.
Actually, the decrease in Sales was not an accident but was the result of the SKU rationalization strategy. To increase the margins, Heinz decided to eliminate the least profitable products from its offering. As we can see below, this was the main factor explaining the YoY change in sales (Fx effects are excluded).

![Graph showing Heinz Sales over years]

Source: Company Information

![Graph showing Price/Unit, % ACV (i.e. Distribution), Avg. # of Items, Velocity, Base $ - YoY Change (i.e. No Promo)]

Source: Nielsen, 52 weeks ended May 16, 2015

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<tr>
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<tbody>
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<td>Heinz</td>
<td>1002</td>
<td>845</td>
<td>906</td>
<td>996</td>
<td>1039</td>
<td>1081</td>
<td>1052</td>
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<tr>
<td>Growth</td>
<td>-15.7%</td>
<td>7.2%</td>
<td>9.9%</td>
<td>4.3%</td>
<td>4.0%</td>
<td>-2.7%</td>
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</tr>
<tr>
<td>Kraft</td>
<td>3949</td>
<td>3690</td>
<td>3847</td>
<td>4082</td>
<td>4102</td>
<td>4160</td>
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<tr>
<td>Growth</td>
<td>-6.6%</td>
<td>4.3%</td>
<td>6.1%</td>
<td>0.5%</td>
<td>1.4%</td>
<td>-3.6%</td>
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</tr>
</tbody>
</table>

Source: IRI and BMO Capital Markets
Moreover, although the management had decided to lower the number of promotions in order to protect the margins, it seems that sales were still going back up (see graph below):

![Graph showing sales percentage and dollar sales on promotion over time.]

Source: Nielsen – xAOC plus c-store

Indeed, it is clear that after the acquisition, the value of sales made on Promotion kept declining. Sales were also declining until June 2014, after which it seems that other measures helped reverse the trend.

2) Efficiency

Right after the closing of the deal, the new management also announced several layoff phases at Heinz. As a result, the number of employees decreased by 7,900 between 2013 and 2014 (-24%) while sales only decreased by 4.6%. 350 out of those 7,900 were working at the headquarters.
Mechanically, this increased the ratio Sales / Employee. Indeed, it seemed that Heinz had some room for manoeuvre here since the company had the worst ratio among its peers before 2013 ($307K/employee in 2011 vs. $519K/employee for the peer group). In 2014, driven by 3G’s decisions, the ratio went up to $476K/employee and finally to $654K/employee after the merger with Kraft, almost making Kraft Heinz the best performer on that matter. A progression is expected in 2016 thanks to the potential synergies that are not fully captured yet between the two businesses.
As we said earlier, one of the largest projects 3G undertook right after acquiring Heinz was to rationalize the SKUs. Indeed, the company decided to eliminate non-profitable products, naturally leading to lower COGS and improving the Gross Profit Margin. Additional COGS savings are expected for 2016 thanks to the integration of Kraft.
In 2014, Heinz was able to catch up with its peers in terms of Gross Margins (around 35% in 2015). Before the arrival of 3G in 2013, Heinz was one of the worst performers among the set of peers.

Since 2013, not only has Heinz worked on COGS reduction to improve its Gross Margin, but the company has also applied its “secret sauce” on SG&A expenses. As a result, SG&A costs went from 19.8% of Sales in 2013 to 12.5% of Sales, which is a very promising performance.
Consequently, the EBITDA Margin has increased by 870bp turning Heinz into the best performer of the peer set (around 20% for General Mills and Campbell).
4) Other considerations

A few days after the 2013 deal was closed, 11 out of the 12 top managers at Heinz were replaced by internal promotes and a couple of external hires. Besides, most of the new managers were much younger than their predecessors. Indeed, in 2015, the average age of the top managers at Kraft Heinz was 10 years lower than in 2011.

Source: Company Information. Own Estimate
Another interesting point is the amount of leverage put by 3G after 2013. Known for its proven capacity to expand margins and generate steady cash flows, 3G always levers up (they did it with ABI and BK) to boost its returns. Heinz is no exception and one could expect that the average Net Debt/EBITDA ratio will remain higher than the 2.0x of 2010 and 2011.

![Leverage Chart](image)

*Source: Datastream*

Capex Requirements at Heinz have always been lower than the rest of the industry. This hasn’t changed with the arrival of 3G (3.5% in 2015, 3.7% in 2014, 3.5% in 2013)

![Capex as a % of Sales Chart](image)

*Source: Company Information*
However, a strong effort has been made to limit the Working Capital requirements in order to generate more cash flow. From 2012 to 2014, the ratio Working Capital / Assets went from 2.5% to -7.6%, while the same ratio for the peer group went from 4.8% to 2.6%. The company is now the number one performer, only followed by Mondelez.

![Working Cap / Adjusted Assets](chart.png)

*Source: Company Information. Own Estimate*

Finally, thanks to the low capex and Working Capital requirements and the strong EBITDA Margin, Heinz was able to generate very strong cash flows (1230bp above the peer average). This is actually what allowed the company to add huge amounts of debt (6.6x leverage in 2015) without being downgraded by rating agencies. Moody’s even upgraded the company’s rating after the Kraft merger, stating that the combination of the two entities was likely to have a stronger credit profile than Heinz as a stand-alone company.
Finally, throughout the analysis of these three portfolio companies, one can easily identify very similar patterns in the way the companies were transformed after they had been acquired. SG&A reduction, decrease in the number of employees, low Capex and younger leadership are among the numerous common characteristics of the changes operated.

Below is a table summarizing the results we found after analyzing the performance of the three portfolio companies.
From now on, we will try to understand the chronological process at work when 3G acquires a company based on the operating results we previously found.
III. Lessons from 3G’s acquisitions

We have seen so far that 3G was outperforming its peers in terms of returns and that was due to the changes they implemented at their portfolio companies, turning them into lean, profitable and cash flow generating businesses. We have now the opportunity to look back and define the generic 3G Playbook to understand how 3G actually achieved the operational improvements we noticed.

a) Step 1: Sourcing and Financing

According to the home page of its website, 3G has a “particular emphasis on maximizing the potential of brands and businesses”. Indeed, since its first investments, the three Brazilian businessmen have always focused on established and renown brands such as Brahma (leader of the Brazilian beer market at that time), Burger King, Heinz, Kraft, Stella Artois, and Budweiser (all in the consumer sector). The statement made by Marcel Telles at the Endeavor’s 2013 CEO Summit perfectly sums up their investment philosophy\(^{21}\): “They (the companies they invest in) have to have something: a strong brand, a distribution system, a franchise, something that enables them to survive and still be excellent”. According to the book The 3G Way, 3G focuses on companies that are present in developed markets, with “above-average competitive advantages” and “large potential efficiency gains”. Indeed, one of 3G’s major strength is the ability to turn a business into a profitable cash flow generating machine. However, building a brand and growing a business isn’t part of their mission. This is why selecting brands with strong pricing power and appeal to customers is very important. In that sense, they have a philosophy that is close to Warren Buffet’s, who always asserts: “Invest in what you know”. This resemblance in the investment philosophies might also explain the fact that the two companies (3G and Berkshire) get along so well when it comes to selecting new targets.

Besides, when acquiring a company, 3G Capital uses a significant amount of debt, like every other LBO firm. Nevertheless, it is important to note that 3G tends to close deals that are approximately 10% more leveraged than its peers. Indeed, if we take a look at the acquisitions we previously analyzed, we will notice that the Debt/Equity ratios are much higher than those

\(^{21}\) Book The 3G Way written by Francisco de Mello in 2014
of competitors in the LBO industry. 70% is the usual percentage of debt used by 3G. In 2008, when InBev acquired AB, the company raised $45bn from a consortium of 10 banks (in the middle of one of the greatest financial crises). That year, according to PitchBook, LBO firms usually financed their deals with 60% debt (10% less than InBev). Same situation in 2010, when 3G acquired Burger King. On average that year, LBO firms were financing deals with 56.6% debt. Nevertheless, BK received a debt commitment from J.P. Morgan Chase and Barclays Bank and only put $1.2bn worth of equity in a deal valued at $4.0bn including debt (30% of equity vs. approximately 43% for the rest of the industry). Again, in 2013, when 3G and Berkshire acquired Heinz in a deal valued at $28bn, $8bn were equity from 3G and Berkshire (29%), and the rest (around 71%) was financed through debt from J.P. Morgan and Wells Fargo and $8bn in preferred equity from Berkshire that actually can be considered as debt (with a 9% dividend). That year, the median debt percentage for buyouts peaked at 66%, still below 3G’s debt portion.

In our view, there are two main explanations for that phenomenon:

- 3G has built an impressive track record of numerous success stories in which portfolio companies generated steady and strong cash flows. As a result, banks, such as J.P. Morgan that financed both Burger King and Heinz deals, are not afraid to exceed the

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usual percentages of debt used in LBO transactions. This echoes Ivashina’s and Kovner’s (2010) paper we quoted in the first section, asserting that PE firms could get favorable financing thanks to their relationships with banks. 3G seems to be perfectly benefitting from this aspect of financial engineering.

- In our view, the second explanation for this easy access to debt financing has more to do with branding. Indeed, there is no denying that having Warren Buffett as your co-investor and advocate has a positive impact on the banks. Besides, the Oracle of Omaha has invested in several deals alongside the Brazilian trio (Heinz in 2013, Tim Hortons in 2014, and Kraft in 2015) and keeps saying in interviews and his annual letters to shareholders that he is willing to enhance his ties with 3G.

As a result, besides being able to close larger deals while taking lower personal risks, this higher leverage has allowed 3G to benefit even more from the effects of the financial engineering, boosting its returns and contributing to its global outperformance. The trio is also capable of providing some of its own money and take large risk. In 2008 they jointly put EUR1.5bn as a guarantee in the AB InBev transaction).

b) Step 2: Introducing a new management culture

i. A 3G acquisition always comes with management shakeups

Berkshire is known to rarely interfere with the management of the acquired companies, preferring to support the team that is already in place. This is probably the main difference between the two partners. Clearly, one should expect major changes in the chain of command after a 3G acquisition. At Burger King, the deal was immediately followed by numerous top management changes: Bernardo Hees (a partner at 3G since 2010) was appointed CEO, Daniel Schwartz (a partner at 3G since 2008) was appointed CFO, Flavia Faugeres, a Brazilian partner at a marketing consulting firm was appointed Chief Marketing Officer, and Steven Wiborg, previously CEO of Heartland Food Corporation, a US Franchise operator, was appointed Executive Vice President. At Heinz, changes were even more drastic. Hees, who moved from Burger King to Heinz in 2013 (replaced as CEO by Schwartz), decided to let go 11 out of the 12 executives of the company after very quick informal discussions, favoring internal promotions and hiring a couple of external managers. At AB InBev, the situation was slightly different in 2004 and 2008, since it was, in both cases, about merging two entities. Still, the Brazilian shareholders have always pushed to put in charge their
managers. For instance, although it was agreed in 2004 that the CEO of Interbrew would become the CEO of the combined group InBev, it only took a year for Carlos Brito, former partner at GP Investimentos and CEO of AmBev backed by the Brazilian trio, to become CEO of InBev. Nowadays, 10 out of the top 15 executives at Ab InBev were born in Brazil and have ties with 3G.

Part of the 3G Playbook is actually to come with its own management team, and especially its own CEOs. Carlos Brito, Bernardo Hees and Daniel Schwartz, the three CEOs of AB InBev, Kraft Heinz, and Burger King, have all been converted to the 3G culture.

Carlos Brito met Jorge Lemann in 1987, when the founder of Garantia agreed to finance his MBA at Stanford. Once he graduated, in 1989, he joined Brahma, the brewer Garantia just acquired. Since then, they remained very close, and according to Cristiane Correa, the author of *Dream Big*, Brito operates AB InBev as Lemann would. Bernardo Hees, too, got a scholarship from the Estudar Foundation (founded by Lemann) to study economics at PUC in Rio and later did an MBA at Warwick. He joined GP Investimentos in 1998 and was appointed CEO in 2004. He became a partner at 3G in 2010 a few months before being appointed CEO at Burger King and has always followed the three partners’ principles. Daniel Schwartz joined 3G in 2005 at 24 years old, right after graduating from Cornell. He quickly showed that he could be trusted and was appointed CFO of Burger King in 2010. He replaced Hees as CEO in 2013.

These three people, symbol of the PSD ("poor, smart, desire to get rich") philosophy, are sincere advocates of the 3G way and were appointed as “3G Managers” rather than industry experts (none of them had prior experience in the industry they went to). They operate as what Fortune called\(^\text{23}\) “a SWAT team of loyal executives who jump from company to company”. Nominating new management teams and especially new CEOs is a way of ensuring that key positions are filled with people the trio completely trusts, who will take the right decisions, in line with the 3G Playbook.

According to Gompers, Kaplan and Mukharlyamov (2015), coming with one’s own management team is fairly common. 31% of the PE investors follow that strategy, and, although it remains complicated to conclude that it is perfectly correlated, the paper suggests that those specific investors have a better past performance.

\(^{23}\) [http://fortune.com/2013/10/10/squeezing-heinz/](http://fortune.com/2013/10/10/squeezing-heinz/)
Finally, it is interesting to notice that 3G acquisitions are always followed by a significant decrease in the age of the top management, showing that trusting younger executives is also part of the culture. Indeed, the average age of executives at the three portfolio companies the year preceding 3G’s acquisition was 52.7 (52.8 at Burger King, 52.5 at Heinz and 52.7 at Anheuser-Busch) vs. 52.4 for the peers. The year following the acquisitions, the average was 41.2 at 3G portfolio companies vs. 54.2 for the peers. 3G Executives are on average 13 years younger than executives working for their competitors. 3G founders proved they are ready to invest in young people and not afraid to give them responsibilities.

ii. 3G created a meritocratic organization looking for the best talents

Meritocracy wasn’t a principle well known in Brazilian companies when Lemann created Garantia. However, inspired by Goldman Sachs, he was convinced that performance and hard work had to be rewarded by high remuneration, promotions or access to the partnership. In every company Lemann is involved in, the base salary is reduced, often below the market average, but the bonus could increase rapidly. Encouraging large variable remuneration to reach specific goals, the trio enriched a lot of people (at Garantia, more than 200 people have earned more than $10M\textsuperscript{24}). For instance, in 2008, after InBev acquired Anheuser-Busch, the company had accumulated large amounts of debt in a difficult macroeconomic context as we saw earlier. This debt had to be reduced quickly, and, in order to motivate employees, the group offered a package of 28 million share options (valued at $1bn) to 39 senior executives if they were able to cut the debt by half by 2013. The target was achieved two years ahead of the deadline and Carlos Brito even received the largest variable remuneration a Brazilian ever got according to the magazine Epoca Negocios. Indeed, as we saw in section II, the Net Debt/EBITDA ratio at AB InBev decreased from 8.6x in 2008 to 2.4x in 2011 (2.5x being the target to reach by 2013) illustrating how the cash flow generation was important between those two years.

More generally, the goal is for managers to develop an entrepreneurial spirit and behave as if they were owners of the business in order to maximize the alignment of incentives with shareholders. This is why emphasis is given to stock compensation. In 2014, Hees received for instance $7.3M in employee stock options at Heinz. According to a 2012 proxy filing, Flavia Faugeres, just after being appointed Chief Marketing Officer at Burger King, received

\textsuperscript{24} http://agorafinancial.com/2015/03/25/ruthless-with-results/
$2.8M in option awards, while Daniel Schwartz received $2.7M in options (he was still CFO at that time, and was only 32 years old), $2.9M in 2013 and $3.5M in 2014.

Besides, according to the book *The 3G Way*, ABI developed a process to distribute the bonuses:

- The company first determines the total amount of cash available for distribution
- The potential Bonus will be equal to a multiple of the base salary. To determine the multiple, one should calculate the “Pie” = EVA * Cash Available %
- The Economic Value Added (EVA) is equal to Nopat – Cost of Capital
- Finally Bonus = Pie / Monthly Payroll

Finally, 3G also pays a special attention to the recruitment process, targeting students from top-tier MBA programs such as Harvard, Stanford, Booth, Sloan, Columbia, Wharton, LBS IESE CEIBS. In 2013, according to the 2014 AB InBev Annual Report, 21 MBA students were selected to join the summer internship program from a pool of 642 applicants.

c) Step 3: Cut inefficiencies and improve margins

i. Zero Based Budgeting and SG&A Optimization

3G has always been presented as an aggressive cost-cutter eliminating relentlessly thousands of jobs at portfolio companies. But the company is probably also well known for its Zero Based Budgeting (ZBB). McKinsey & Company defines ZBB as “a repeatable process that organizations use to rigorously review every dollar in the annual budget, manage financial performance on a monthly basis, and build a culture of cost management among all employees”. The concept was first introduced by Pete Pyhrr 40 years ago at Texas Instrument, and based on Fortune’s information\(^{25}\), Accenture has become 3G’s preferred partner when it comes to implementing ZBB in its portfolio companies.

At Burger King, implementing ZBB allowed to observe immediate results. Between 2011 and 2010, management G&A decreased by 30% from $356M to $250M (SG&A as a percentage

\(^{25}\)[http://fortune.com/2013/10/10/squeezing-heinz/]
of Total assets went from 32.6% to 25.1%), mainly due to cost transparency in the Travel and the Technology areas and the elimination of 375 corporate and field positions (in Miami) according to a Deutsche Bank report from 2012. Between 2011 and 2012, they decreased by 14% from $250M to $214M (from 25.1% to 21.9% of Total Assets). In two years, corporate headcount was reduced by 40% and incentive compensation was reorganized. Besides, management also imposed measures (some seemed surprising at first) that appeared less meaningful but helped optimize the business. For instance, employees were asked to use Skype to make long-distance calls instead of using their phones, or scan documents and e-mail them instead of using express delivery services such as FedEx. The corporate jet was sold, expensive traditional soirées were stopped and walls in offices went down: everyone had to sit in an open-plan office (just like all the companies run by the three partners). This allowed BK to have the most competitive structure in terms of G&A per store compared to its peers ($15K vs. $42K for its peers).

At Heinz, results were visible even more rapidly. Between 2013 and 2014, Heinz saved $900M, including $675M in SG&A (SG&A as a percentage of Sales went from 19.8% to 12.5%). According to an UBS report from 2016, among these $675M saved thanks to ZBB, $200M were saved through indirect overhead (travel, software, rent), $75M of inefficient ads were cut, and 5,100 office jobs were cut, representing $350M. To achieve such results, executives had for instance to stay at Holiday Inn hotels, couldn’t spend more than $45 per day when they were on the road, and had to give up their offices to work on tables in open-spaces.

Finally at AB InBev, they started by cutting all the perks, sold the famous corporate fleet, sold the amusement park to Blackstone and limited the expenses. Besides, according to WSJ, they saved $325K just by telling employees in the UK to use double-sided black-and-white printing. The company also limited the number of BlackBerries (from 1,200 to 720), sacked 1,400 employees in the US (75% of them in St Louis) and turned the office into a large and packed open-space. Finally they also reduced ad spending, realizing that simply focusing on mainstream sports events wasn’t the most efficient strategy anymore due to the changing demographics of beer consumers. All these measures allowed the company to save $700M in

26 http://fortune.com/2015/03/25/3g-capital-heinz-kraft-buffett/
2009 according to a J.P. Morgan 2010 report. As a result, between 2008 and 2009, the SG&A/Sales ratio went from 32.8% to 27.1%.

ii. Gross Profit Improvements

To improve the profitability of its portfolio companies and boost its returns, 3G also tries to maximize the Gross Profit Margin by lowering the COGS.

At Burger King, the new business model simply eliminated most of the COGS. Indeed, the 100% franchise model got rid of almost everything (Food and Paper, Occupancy, Employee Payroll). The only costs still incurred are franchise expenses (leases), on which not much can be done. Therefore, our discussion will mainly deal with AB InBev and Heinz.

3G's main idea to improve the Gross Profit Margin is to eliminate the less profitable SKUs and the underlying COGS. Heinz eliminated 9% of its SKUs, while ABI eliminated 36% of the SKUs in the US. However, in ABI's case, the company wasn't able to reduce the COGS/Volume ratio. Indeed, because of input costs pressures, the Gross Profit Margin decreased after the acquisition (from 58.9% for InBev in 2007, to 53.2% in 2009 for AB InBev). The company had to wait until 2012 to fully recover and reach the level of InBev pre-acquisition.

On the contrary, in one year, Heinz was able to increase its Gross Profit Margin by 340 bps through:

- Plant efficiency (6 plants were closed, and 1800 workers were laid off) = $100M
- Company limited its discounts and worked on lower trade spend = $200M
- Increase in revenue per SKU of 8%  

iii. Working Capital Efficiencies

As we have seen, 3G is used to drastically increasing the leverage of its portfolio companies to finance an acquisition. Consequently, companies have to increase their Free Cash Flow to pay back the debt. To do so, 3G has tried to decrease its Working Capital Requirements. According to Stephanie Strom, in a New York Times article from April 2015, 3G has been consistently negotiating (at ABI and Kraft Heinz) with its suppliers to have 120 days to pay
them while requiring payment from their own customers in 30 days. As a result, in 2015 at AB InBev, the ratio Working Capital/Assets reached -8.3%, below the peer average of -4.9%. At Kraft Heinz, one could also observe a similar trend. Indeed, from 2012 to 2014, the ratio Working Capital / Assets went from 2.5% to -7.6%, while the same ratio for the peer group went from 4.8% to 2.6%, illustrating how the company, backed by 3G, was able to outperform its competitors in this domain.

Finally, due to the shift in business model that occurred at Burger King, and since the company doesn’t directly operate the restaurants anymore, looking at the Working Capital wouldn’t be relevant.

d) Step 4: Buy & Build Strategy

The Buy & Build strategy (B&B) is really key for the success of the 3G Playbook for three reasons: it creates value through synergies, creates value by applying best-demonstrated practices to target companies, and provides growth opportunities to young talents.

Antartica, Interbrew, Anheuser-Busch, Grupo Modelo, Kraft, Tim Hortons and potentially SABMiller. This is a list, non-exhaustive, of bolt-on acquisitions made by 3G portfolio companies in approximately a decade.

Every time, the management has been able to integrate the company, spread the culture and create value through synergies:

- At ABI, $2.25bn in synergies were completed (13% of AB’s sales), contributing to 45% of the EBIT vs. $1.5bn expected and announced in 2008 (8.5% of sales). Thanks to Brito’s expertise, the company generated $750M of additional cost synergies after the acquisition (pure value creation since it wasn’t even captured in the price paid by InBev).

- In 2012, after acquiring Mexican brewer Modelo for $20bn, the company expected to realize $600M in cost synergies (8% of sales). In fact, they realized $1bn (13% of sales) two years after the completion of the deal.

- After closing the Kraft Heinz merger, management announced they were targeting $1.5bn in cost synergies by 2017, mainly driven by COGS synergies and Upside source (trade spend, duplicative costs)
As we can see, portfolio companies have consistently exceeded their synergy targets thanks to the 3G expertise when it comes to implementing a B&B strategy.

Besides, not only can 3G create value through synergies, but also by applying all the best-demonstrated practices we have described above to their targets. For instance, after the Kraft Heinz merger, UBS analysts estimated the stand-alone savings at $750M, just by applying Heinz’s standards in terms of SG&A to the Kraft business. An example of such measure was the announcement made by Kraft officials that the headquarters of the company were moving from a 700,000-square-foot office in a suburb of Chicago to a 170,000-square-foot one in the city. Besides, employees were notified a few days after the merger that free Kraft snacks were going to be removed from offices and that only double-sided printing was allowed.

Finally, as Cristiane Correa described in *Dream Big*, implementing a B&B strategy that “Sustains the Momentum with a Big Dream”, seems to be the only way to keep the system going. Indeed, the 3G model works well because the companies offer interesting career opportunities to talented people. Yet, the only way to keep being able to reward those talents (through bonuses or promotions) is to keep growing at a higher pace. This is why the B&B strategy is so important: it keeps creating new positions to fill with the talented people the company already recruited. The day 3G stops growing through external acquisitions is the day 3G and its portfolio companies won’t attract the best people anymore.

Thus, from the analysis of the operational performance of three portfolio companies and, one can say undoubtedly that 3G is able to generate alpha thanks to its expertise in i) sourcing and financing, ii) implementing a meritocratic culture, iii) Cost-cutting and iv) expanding through M&A.

After a few years during which the market was a little suspicious about the model, 3G was able to show public investors that they were able to consistently deliver good results and return the value to shareholders.

However, the 3G model hasn’t convinced everyone yet, especially outside of Wall Street. In particular, the company has had to face harsh criticism from PE experts, journalists, or even unions, who keep emphasizing some of the limitations of the model.
e) The limitations of the model

i. The model makes it extremely difficult to generate organic growth

Managers at portfolio companies seem to be sacrificing top line in order to focus on improving the profitability of the business. At Burger King, due to the new business model, sales were divided by 2.5 the year after the acquisition, from $2.5bn in 2010 to $1.1bn in 2013. Over the same period, the EBITDA went from $438.8M to $665.6M (a 15% CAGR) proving where the true focus was.

At Heinz, the SKU rationalization strategy also led to a decrease in sales (-4.6%) the year following the acquisition, from $11.4bn in 2013 to $10.9bn in 2014. However, at the same time, like Burger King, the EBITDA increased by 40% from $2,111M to $2,956M.

In our view, the lower number of product launches and the low success rate of those products observed since 3G started investing is one of the key drivers of this systematic decrease in sales:

Since 3G’s arrival, Heinz only launched two products (less than its peers), the yellow mustard that we have analyzed earlier, and the Sriracha-flavored ketchup. This is far from the 200 new products launched by Campbell Soup in fiscal year 2015\(^{27}\), the 50 new products launched by General Mills in 2015\(^{28}\) or the 40 new Kellogg products announced for 2016\(^{29}\).

At BK, the management has tried to be more creative, but the issue was more in the fact that some of the major product launches turned out to be unsuccessful. In 2013, the company launched Satisfries, a star product marketed as “healthier” French fries containing 20% fewer calories and 25% less fat. Within a year, the initiative was stopped and franchisees had the choice to take it off the menu. Only 2,500 out of the 7,400 stores in the US and Canada decided to keep them\(^{30}\). Yet, BK was also successful in launching some products, such as the Chicken Fries. In a conference in July 2015, Daniel Schwartz explained that the Chicken Fries


were profitable and sold really well. According to a Fortune article\textsuperscript{31}, it even boosted the Q2\textsuperscript{2015} system-wide sales in constant currency (+5.5\% while sales at McDonald’s dropped by -0.7\% over the same period). Finally, in 2016, BK decided to start selling hot dogs. Even if it is still early to judge the results of such initiative, the Carrols Restaurant group has already announced the decision was a success and that their stores were selling between 80 and 120 hot dogs per store per day, although marketing outside social media has been inexistennt.

Finally, it is also worth noting that product innovations have also had a limited success at ABI. The company launched in 2012 Bud Light Lime-a-Rita, a margarita-flavored beer to target younger women. In 2013, sales reached $462M\textsuperscript{32}, making it one of the most successful product launches according to the company. However, a year later, sales collapsed and according to Brito’s conference in July \textsuperscript{2015}, the franchise is struggling, dragging down revenue per barrel. Another example of failed product launch was the very marketed Bud Light Platinum. After a good start, the growth slowed\textsuperscript{33} and the product contributed to the general decline in market share.

Mechanically, since there has only been a few product launches, and since those launches were in most cases unsuccessful, it is not surprising to observe that portfolio companies have lost market shares with time:

- According to a WSJ article\textsuperscript{34} quoting a McKinsey & Co study, Heinz “lost market share in 65\% of the food categories in which it has brands, maintained share in 16\%, and gained in less than 20\%”. Based on an RBC report (2015), at Heinz, the only product that was able to significantly gain market shares was the yellow mustard.

\textbf{Market share evolution of Heinz products}

\textsuperscript{31} http://fortune.com/2015/07/27/burger-king-chicken-fries-boost/
\textsuperscript{34} http://www.wsj.com/articles/3g-capitals-brands-lose-market-share-amid-focus-on-costs-1439163319
- At AB InBev, the rise of craft beer has hit hard Budweiser and Bud Light, the two iconic beers of the group. Both brands lost market shares and were not able to stabilize yet.

<table>
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<td>2.7</td>
<td>2.5</td>
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</table>

Source: Euromonitor

- At Burger King, according to IBISWorld and to a Morgan Stanley report (September 2014), it seems that Burger King’s market share has decreased over time (QSR market), while McDonald’s was able to break through. It is a phenomenon that started in 2000 (on the FFHR market) but that 3G was unable to stop. Indeed, between 2010 and 2013, the market share of BK (QSR market and not FFHR) went from 5.1% to 4.1%.
Burger King Market share in the US

Source: IBISWorld

BK has even lost ground in the QSR HAMBURGER industry.

BKW has lost over 7.5pts of US market share since 2000

Source: Technomic, Morgan Stanley Research

Although the companies have always been able to find external ways of growing their businesses, the McKinsey study on Heinz that we quoted raises doubts about 3G’s ability to keep creating value on the long-term. We don’t have enough hindsight yet to assess whether the firm was able to address that long-term issue, however we will keep monitoring the performance of portfolio companies to determine if this has an impact on the returns at some point.

ii. The model causes internal reluctance
The 3G model is based on meritocracy and rewards hard-work and almost unlimited commitment. Many people threw themselves into work at Garantia, GP Investimentos, 3G, but also at portfolio companies. Many of them were generously rewarded and got rich working for the Brazilian trio. However, there is no denying that this model is very demanding and challenging. In *Dream Big*, Cristiane Correa made an extensive description of the relationships at Garantia, of the almost unbearable pressure to meet the targets. There is no denying that the model enhances the competition between employees, creating a sort of unhealthy work environment. Besides, many measures resulting from the implementation of ZBB weren’t very popular among employees. As a result, based on glassdoor data, 3G portfolio companies poorly performs in terms of employee satisfaction, illustrating a form of reluctance to definitively adopt the model.

First, 3G CEOs have a poor average approval rate of 50% versus 71% for its peers. Hees, at Kraft Heinz, has the worst score (20% approval rate), while Daniel Schwartz is the only one that is just below average (64% vs. 74%).

![CEO Approval - 3G Companies vs. Peers Sets](image)

*Source: glassdoor*

The three companies are also the worst performers of their peer sets when it comes to company recommendation. Indeed, based on glassdoor data, only 29% of Kraft Heinz employees would recommend to work there, 44% at Burger King and 52% at AB InBev. The 3G average is equal to 42% vs. 65% for the peers.
iii. The 3G Playbook has a very high social cost

Finally, although 3G is supposed to focus on “eliminating unnecessary costs“ as Warren Buffett said in his last letter to shareholders, one can’t totally ignore the social cost of the model. Since 2008, portfolio companies have sacked about 12,500 people (1,400 from AB InBev headquarters, 7,900 at Heinz including 350 at the headquarters, 2,500 at Kraft, 400 at Burger King and 350 at Tim Hortons).

This has obviously been bad publicity for 3G and has even affected some people close to the firm. The relationship with 3G was even questioned by some Berkshire’s shareholders, who don’t support the 3G playbook. Warren Buffett had to defend its ties with the Brazilian firm and justified some of their moves.
Conclusion

Throughout this thesis, we highlighted the fact that planned and consistent operational changes were key to generating outstanding returns. We showed, through the example of 3G Capital, that the systematic use of a Playbook, which is actually based on some of the very basic tools of LBO firms (high leverage, cost cutting, bolt-on acquisitions) allowed them to turn good companies with established brands into outperformers. Consequently, this generated very high returns for 3G (35% IRR according to our estimates) who is likely to keep applying this winning formula.

In Section I, we showed that the LBO industry was becoming more competitive, leading to an increase in acquisition prices and a depletion of good targets. Because of that, returns have been decreasing, making it absolutely necessary for LBO funds to find alternative sources of value creation. Operational engineering has been one, and top tier firms already started creating structures to help them implement consistent operational changes at portfolio companies. 3G Capital is an example of such firm, outperforming by far the rest of the market, and relying on its established model to keep creating value for its shareholders.

In Section II, we went through the changes operated at three different portfolio companies, describing how 3G was able, every time, to eliminate unnecessary costs, increase significantly margins and generate impressive cash flows. The relative progress made by these three portfolio companies before and after they were acquired by the three Brazilian businessmen compared to the peer sets we created leaves no doubt as to the reason of this success: the 3G model.

Finally, in Section III, we went over the different stages of the process in order to define what specific measures of the Playbook led to these impressive results. Although the model has some limitations, it has proven to be undeniably effective, and we look forward to seeing what the trio has prepared for the future.
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