FUNDAÇÃO GETULIO VARGAS
ESCOLA BRASILEIRA DE ADMINISTRAÇÃO PÚBLICA E DE EMPRESAS
MESTRADO EXECUTIVO EM GESTÃO EMPRESARIAL

ASSESSMENT OF VALUE CREATION IN PRIVATE EQUITY: THE ACQUISITION OF BURGER KING BY 3G CAPITAL

DISSERTAÇÃO APRESENTADA À ESCOLA BRASILEIRA DE ADMINISTRAÇÃO PÚBLICA E DE EMPRESAS PARA OBTENÇÃO DO GRAU DE MESTRE

Daniel Jobst Elmar Hoene

Rio de Janeiro – January 2016

DANIEL JOBST ELMAR HOENE

PROFESSOR RONALDO C. PARENTE, PH.D.

ASSESSMENT OF VALUE CREATION IN PRIVATE EQUITY: THE ACQUISITION OF BURGER KING BY 3G CAPITAL

Master's thesis presented to Corporate International Master's program, Escola Brasileira de Administração Pública, Fundação Getulio Vargas, as a requirement for obtaining the title of Master in Business Management.

Dissertation submitted in partial fulfillment of requirements for the degrees International M.Sc. in Management, at the Universidade Católica Portuguesa, and Executive Master's in Business Administration at Fundação Getulio Vargas,

Rio de Janeiro, January 5th 2016.

Abstract

This thesis elaborates the creation of value in private equity and in particular analyzes value creation in 3G Capital's acquisition of Burger King. In this sense, a specific model is applied that composes value creation into several drivers, in order to answer the question of how value creation can be addressed in private equity investments. Although previous research by Achleitner et al. (2010) introduced a specific model that addresses value creation in private equity, the respective model was neither applied to an individual company, nor linked to indirect drivers that explain the dynamics and rationales for the creation of value. In turn this paper applies the quantitative model to an ongoing private equity investment and thereby provides different extensions to turn the model into a better forecasting model for ongoing investments, instead of only analyzing a deal that has already been divested from an ex post perspective. The chosen research approach is a case study about the Burger King buyout that first includes an extensive review about the current status of academic literature, second a quantitative calculation and qualitative interpretation of different direct value drivers, third a qualitative breakdown of indirect drivers, and lastly a recapitulating discussion about value creation and value drivers. Presenting a very successful private equity investment and elaborately demonstrating the dynamics and mechanisms that drive value creation in this case, provides important implications for other private equity firms as well as public firms in order to develop their proprietary approach towards value creation.

List of Abbreviations

APV	Adjusted Present Value
CAPEX	Capital Expenditures
CEO	Chief Executive Officer
DCF	Discounted Cash-Flow
D/E	Debt to equity ratio
EBITDA	Earnings Before Interest Taxes Depreciation and Appreciation
$EBITDA_{Entry}$	EBITDA at the entry point (acquisition stage)
$EBITDA_{Exit}$	EBITDA at the exit point (divestment stage)
ESOP	Employee Stock Ownership Plans
EV	Enterprise value
EV/EBITDA	EV/EBITDA Multiple
FTE	Full time equivalent
GP	General partner
IRR	Internal Rate of Return
LBO	Leveraged buyout
LP	Limited partner
MBI	Management Buy-In
MBO	Management Buy-Out
$Multiple_{Entry}$	EV/EBITDA multiple at the entry point (acquisition stage)
$Multiple_{Exit}$	EV/EBITDA multiple at the exit point (divestment stage)
NWC	Net working capital
(P&L)	Profit & Loss statement.
RL	Levered return
RU	Unlevered return
SBO	Secondary buyout
S&P 500	Standard & Poor's 500 Index
t	Average corporate tax rate
WC	Working capital

List of Figures

List of Appendices

Table of Contents

1 Introduction

1.1 Contextualization and Relevance of the Problem

In line with the current peak in worldwide mergers and acquisitions activity, the volume of private equity investments dramatically surged in the first half of the year 2015. The Global M&A deal making totaled US$2.2 trillion after the first two quarters in 2015, whereas, financial sponsor[1] deal volume reached US$413 billion in the same time period, which accounts for approximately 18,5% of total M&A deal volume. Mainly driven by a boost in deals with a volume of over $5 billion, this respectively equals a 40% increase for global M&A deal volume, and beyond that a 49% increase in financial sponsor activity compared to the previous year 2014[2]. Not only due to the absolute growth rates of private equity investments, but also given the relative proportion to overall M&A volume, it appears as private equity is back on track. After tumbling in the post- financial crisis era, the year 2014 was the strongest year since the all-time record year of private equity in 2007[3].

Yet, despite the recent and former success story of private equity, the question if LBOs create value and achieve superior returns is discussed contradictorily within existing academic research. Recent papers by Achleitner et al. (2011) and Acharya et al. (2012) found that private equity houses achieve higher financial risk-adjusted returns for their portfolio companies, compared to their public peers. In contrast, a previous study by Kaplan & Schoar (2005) found, that average buyout funds return's, net of fees, are not substantially exceeding the average S&P 500 returns. However, results are reported to be highly heterogeneous, as fund size and maturity, are reported to be contributing factors to positive fund performance.

The past twenty-five years have seen increasingly rapid and diverse advances in the field of value creation and sources of value in leveraged buyouts. On the one hand, Jensen (1989) shows how substantial leverage can be a valid explanation for value creation in LBOs. On the other hand, parallel research by Kaplan (1989b) and Lichtenberg & Siegel (1990) reports that operating performance and productivity are predominant explanations for value creation in private equity investments. More recent developments in the field of leveraged buyouts and private equity, have led to a renewed interest in creation of value as well as it's different drivers. As increased regulation derogates outrageous leverage ratios in today's LBO transactions,

[1] Note that LBO or private equity firms are frequently named as financial sponsors.
[2] Thomson Reuters (2015): Mergers & Acquisitions Review – First Half 2015.
[3] Thomson Reuters (2014): Mergers & Acquisitions Review – Full Year 2014.

operational performance improvement is becoming increasingly relevant, in both, academic papers and practitioner's reviews[4] (Guo et al. 2011; Acharya et al. 2012).

The following paper, will analyze the question of how value creation can be assessed in private equity investments and what are thereby the main drivers of value creation. Hence, the following research question is formulated:

RQ1: How to assess value creation in private equity investments

The primary relevance of this paper is to apply the value creation model of Achleitner et al. (2010) on a single company. By analyzing the research question by means of the Burger King example, it will be shown that value creation is not purely a matter of tax benefits due to high leverage ratios, but rather a more complex construct that includes many different drivers on different levels. The problem of former models that analyze value creation in the private equity context is that operational and financial risk are not separately analyzed. Applying the value creation model of (Achleitner et al. 2010; Achleitner & Capital Dynamics 2009), allows to separate returns that are attributable to leverage, from unlevered returns. Additionally, the direct drivers are complemented by an analysis of indirect drivers that seek to explain the resulting direct drivers.

Moreover, as Shimizu et al. (2004) already suggested years ago that learning from successful mergers can be a relevant source of competitive advantage, the aim of this paper is to show how a successful private equity transaction can create value. On this note managerial recommendation will be inferred that might also be transferable and applicable in other cases. The relevance of this paper is first of all to correctly apply the Achleitner et al. (2010) model on one specific deal and thereby showing different drivers of value creation. Moreover, it will be complemented by analyzing and interpreting "indirect drivers" (Loos, 2005) that seek to explain how value can be created from an operational perspective.

[4] Morgan Stanley (2009): Operational improvement: The key to value creation in private equity.

1.2 Justification of the Theme Selection

To the author's knowledge, the acquisition of Burger King had not yet been subject to any form of analysis in academia. Alongside, the selection of 3G Capital's acquisition of Burger King as a demonstrating example for value creation and the related drivers has several other justifications, as follows.

Firstly, due to the private equity firm, 3G Capital, which is based in Rio de Janeiro and was amongst others founded by Brazil's richest businessman Jorge Paulo Lemann. The past acquisitions of Burger King and H.J. Heinz Company, already helped to elevate the name of 3G Capital across the front pages of global business news. Yet, the recent add-on acquisitions of Kraft Foods and Tim Hortons and the subsequent mergers that were completed in cooperation with Warren Buffets Berkshire Hathaway, forming respectively, the Kraft Heinz Company and Restaurant Brands International, left no doubts that 3G Capital is one of the big players in today's world of private equity. Besides the aforementioned deals, associates of 3G Capital are also major shareholders in the world's largest beer brewer, Anheuser-Busch InBev, and highly involved in the ongoing take-over of SABMiller[5].

Second, the acquisition of Burger King was chosen due to the time frame, data availability and structure of the acquisition. As the acquisition was completed in October 2010, roughly six years ago, it seems to be a good point in time to draw an intermediate conclusion about the value that was created through the previous buyout. Moreover, the deal offers wide access to publicly available data, since 3G Capital, reoffered parts of Burger King on the stock exchange, only a few years after its delisting. Also the structure of the deal is favorable to analyze the different levers of value creation, on the one hand due to the usage of a significant amount of leverage. The company was acquired for about US$ 4 billion in 2010 including debt, whereas an estimated 70% of the purchase price was financed by debt[6]. On the other hand, due to 3G Capital's reputation of substantially restructuring and improving the operations of its portfolio companies[7].

In 2014, Burger King acquired the Canadian company Tim Hortons, mainly financed by 3G Capital and Warren Buffet's Berkshire Hathaway. After the announcement of the acquisition, but before the completion, Burger King's stock closed with a total market capitalization of almost US$11 billion, which compared to the initial offer price, indicates a substantial amount

[5] Bloomberg Business (2015): Ab InBev Buys SABMiller for $107 Billion as U.S. Deal Agreed.
[6] Reuters (2010): Burger King agrees to $3.3 billion sale to 3G Capital.
[7] Fortune (2015): Here's what happens when 3G Capital buys your company.

of value that may have been created. Despite, the vast synergy potential that arose due to the formation of Restaurant Brands International, an entity that combines Burger King and Tim Hortons, the following paper will only analyze the value creation of Burger King on a stand-alone basis.

1.3 Structuring of the Paper

After the introduction, this paper begins by visualizing the most important theoretical concepts that are relevant for this work. This includes a general overview about private equity, followed by an introduction to the Burger King acquisition, including the most important actors, namely Burger King and 3G Capital. The main part of the literature review examines different value drivers in private equity that are either direct or indirect. Going on, the four main propositions are illustrated, including their respective expected results. In addition, the methodology part explains the used method, the quantitative method that is used to assess individual value drivers is particularly explained in detail.

Moreover, the main part and contribution of this paper is the next part that analyses direct as well as indirect value drivers. On the one hand, direct drivers are not only qualitatively explained for the Burger King deal, but also quantitatively processed. Indirect drivers on the other hand are rather difficult to quantify. Since they are only indirectly creating value and thereby most likely have a positive impact on one or several direct drivers itself, they will be qualitatively assessed based on the Burger King deal (Loos 2005; Berg & Gottschalg 2005). Finally, the paper is completed with a final discussion that debates value creation and its assessment in the Burger King deal. For a comprehensive structure of the paper, please refer to Appendix 1, at the end of this document.

2 Literature review and theoretical development

The theoretical and literature section of this paper, begins with an overview about terms and dynamics within the field of private equity. Besides, an overview about the participants, background and course of the Burger King deal is provided. Thereafter, this section is structured as depicted in Appendix 2**,** which constitutes the different levels of value drivers that are subsequently analyzed.

2.1 Understanding private equity

The intrinsic denotation of the term private equity is equity capital that is not publicly listed on a stock exchange[8]. Whereas this might also include investments in young companies, as Start-ups, through venture capital firms or angel investors, this paper will solely focus on private equity firms that invest in mature businesses and typically acquire a controlling stake or the majority of shares in a company (Loos 2005). The term private equity is often analogously used in line with leveraged buyout, which represents the traditional form of private equity[9], where the investment firm acquires a company or division that is formerly publicly traded. Subsequently, the firm is then taking private, by redeeming the outstanding shares from the public market (Kaplan and Strömberg 2009). Since the buyout is usually financed by a high proportion of debt, this form of transactions is called leveraged buyout. Going forward, we will adapt the view of Kaplan & Strömberg (2009), by using the terms leveraged buyout and private equity compatibly.

The organizational form of private equity firms, is typically a limited liability corporation or partnership (Kaplan & Strömberg 2009). In line with the partnership designation, investment professionals within a private equity firm are often called general partners (GP). The general partners, set up the private equity fund and raise equity from investors, the so called limited partners (LP) (Sorensen et al. 2014). Private equity funds are ordinarily *closed-end*[10], with a time horizon of around 10 to 12 years, meaning that investors normally cannot withdraw their initial funds before the maturity date. The GPs subsequently invest the raised funds, during the first five years of the fund's life time, by acquiring a controlling majority position in several

[8] Investopedia (2015), accessible at http://www.investopedia.com/terms/p/privateequity.asp.
[9] Buyouts concern the most mature form of private equity investments. Other possible areas of private equity investments are in increasing maturity order: Seed, Start-Up, Expansion, Replacement Capital and lastly buyouts (Loos 2005).
[10] For a discussion of *closed-end* versus *open-end* funds please refer to Stein (2005).

companies, which they on average hold for around 5 years in their portfolio (Kaplan and Schoar 2005). Appendix 3 depicts the main steps in a typical buyout process.

Leveraged buyouts, are further contextualized between *Management Buy-outs* (MBO) and *Management Buy-Ins* (MBI). In the context of a MBO, the current management of a public firm, initiates the process of raising capital from external providers, usually private equity firms, to achieve a change of ownership. Correspondingly in the case of a MBI, an external management takes over control, by acquiring a majority stake of the target company, with the support of a private equity firm[11]. In order to acquire a company and obtaining a controlling majority stake, LBO firms have to pay a premium to the former public target shareholders. A study by Bargeron et al. (2008) found that the average premium paid by private equity firms, is 28,5% above the target market price. This is substantially lower, compared to the premium of 46,5% that is on average paid by public firms, who engage in strategic acquisitions. A possible explanation for this might be that corporate buyers buy different types of firms compared to LBO firms (Bargeron et al. 2008). This might be related to the different rationales of both types of buyers. Whereas corporate buyers are often aiming towards the realization of synergies, for instance through market power or economies of scale and scope (Seth 1990), financial sponsors rather look for established firms with "strong, non-cyclical and stable cash-flows with significant unused borrowing capacity" (Loos 2005, p.11).

Depending on the investment strategy, private equity firms hire different kinds of professionals. Commonly, they hire professionals with significant investment as well as operational know-how and industry expertise. On the one hand, if the buyout firm is pursuing a *value* or *organic growth strategy*, general partners, who previously worked as industry managers or consultants are likely to play a significant role in the value creation process. On the other hand, if the firm is adopting a *buy-and-build*[12] strategy, the LBO firm might rather rely on professionals that were formerly working as bankers or accountants. *Buy-and-build* strategies might thereby involve a less active management approach, then a *value* or organic *growth* strategy (Cf. Acharya et al. 2012; Achleitner, Betzer & Gider 2010; Loos 2005).

Moreover, private equity can be categorized to the alternative investment class that for instance also includes hedge funds (Jurek & Stafford 2015). The compensation structure of general

[11] Note that in both, MBOs as well as MBIs, the majority of capital is usually provided by the private equity fund. The managers usually solely contribute a fraction of the capital.

[12] A "buy-and-build strategy" is generally pursued through inorganic growth, thereby "financing expansion through multiple acquisitions", after the completion of the initial buyout (Loos 2005, p. 11).

partners in private equity is thereby equal to hedge fund managers, which typically charge a fixed management fee of 1,5% to 2% of the total invested capital as well as a 20% profit sharing fee, also called incentive fee or carried interest (Sorensen et al. 2014; Jurek & Stafford 2015). The carried interest (carry) is often related to the compensation of a call option, as it gives the general partner the right to participate in potential value increases in the future[13] (Sorensen et al. 2014). Given the call option like compensation of general partners[14], and the associated limited risk of losses in the case of default, critics charge that this might cause another principal agent problem between limited partners and investors, as "GPs are prone to overinvestment, and potentially will be willing to gamble by taking large levered stakes in portfolio firms" (Axelson et al. 2013, p. 2229).

The aforementioned principal agent problem has been especially critical in the 1980s, when leverage ratios surged towards as much as 90% (Guo et al. 2011). As a consequence, many leveraged buyouts resulted in bankruptcy, which consequently lead to an intensive slowdown in private equity investments during the 1990s. With the beginning of the 21st century, private equity accelerated once more, and reached its peak in 2007. Yet, one year later, as a consequence of the financial crisis, the private equity market tumbled once more, primarily due to the slump of debt markets (Kaplan & Strömberg 2009). However, this time the industry recovered rather fast, and seems to be back on track, with 2014 being the strongest year after the record year of private equity in 2007[15].

2.2 The Burger King buyout

On October 19th 2010, both 3G Capital as well as Burger King Holdings, Inc. confirmed the completion of the transaction, whereby an affiliate of 3G Capital acquired Burger King, including its outstanding debt for around $4 billion[16]. The following paragraphs will introduce both of the involved parties, and present the most important occurrences during the pre-acquisition as well as the post-acquisition stage.

2.2.1 Burger King Holdings Inc. before the buyout

Burger King, which is today the second largest fast food chain in the world, was founded in 1954, when James McLamore and David Edgerton acquired a small burger franchise in Miami.

[13] pwc (2012): How US private equity compensates management through the investment lifecycle, available at: https://www.pwc.com/us/en/hr-management/assets/pwc-how-us-private-equaty-compansates-management.pdf.
[14] General partners usually contribute a small fraction of capital from their own pockets to favorable terms- this is called sweet equity.
[15] Thomson Reuters (2014): Mergers & Acquisitions Review – Full Year 2014.
[16] Burger King (2010): Press Release - 3G Capital Completes Acquisition of Burger King Holdings, Inc.

The company's growth across the United States was primarily spurred by the success of Burger King's signature burger, called the *Whopper*[17]. After many changes of ownership with various diverse corporate owners during Burger King's history, the company was sold in a leveraged buyout in 2002, to a consortium of private equity investors, from its previous owner Diageo, which is mainly known for its alcoholic beverages. The private equity consortium, including well-known firms as TPG Capital, Bain Capital and Goldman Sachs Capital Partners acquired Burger King, for $1,5 billion[18]. In 2006, the joined acquisition consortium that involved multiple private equity firms, which academic literature names "club bidding" (Marquez & Singh 2013), took the firm public in an IPO with an offering share price of $17, whereas only 69% of the shares were floated to the public and the remaining 31% were kept by the consortium[19].

2.2.2 3G Capital - a global investment firm

3G Capital is a private equity firm that was founded in 2004 amongst others by three of Brazilian's most successful businessmen and investors, namely Jorge Paulo Lemann, Alexandre Behring and Marcel Herrmann Telles[20]. The investment firm is headquartered in New York City, and has another office in Rio de Janeiro, Brazil[21]. According to it's own records, the firm focuses on "long-term value, with a particular emphasis on maximizing the potential of brands and businesses"[22]. The investment firm is nowadays especially known for its acquisitions of Burger King and H.J Heinz Company. At the latest, after acquiring and combining Kraft Foods with Heinz, thereby founding the Kraft Heinz Company, the name 3G Capital resounded throughout the world[23]. The transaction was financed and executed in cooperation with Berkshire Hathaway's Warren Buffet.

2.2.3 The course of the Burger King buyout

The former CEO and Chairman of Burger King, John Chidsey, referred to 3G Capital's offer to take over Burger King's outstanding shares, as a "call out of the blue". The investment firm has beforehand offered a price of $24 per share, which equals a 46% premium on Burger King's market price. Whereas the equity investment is worth $3,26 billion, the overall deal including

[17] About money (2010): History of Burger King.
[18] Altassets (2010): TPG, Bain, Goldman exit Burger King as 3G pays $4bn.
[19] Reuters (2010): Burger King agrees to $3.3 billion sale to 3G Capital.
[20] Note that the other founding partners are Carlos Alberto da Veiga Sicupira and Roberto Moses Thompson Motta.
[21] Bloomberg (2015): http://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=23471434.
[22] Heinz Group (2015): http://news.heinz.com/press-release/finance/hj-heinz-company-and-kraft-foods-group-sign-definitive-merger-agreement-form-k.
[23] Reuters (2015): http://www.reuters.com/article/2015/07/02/us-kraft-heinz-idUSKCN0PC2K520150702.

debt is estimated to be worth $4 billion. An analyst from the Telsey Advisory Group commented that the offered price seems to be a good deal for Burger King's shareholders. According to other market experts the valuation seemed to be very high, yet, it was noted that there might exist the potential to significantly improve Burger King, while being a private company[24]. At the time of the acquisition Burger King was experiencing difficulties, not only due to the impact of the financial crisis, but also since as some critics commented, the previous investment consortium, exploited Burger King as a "cash cow"[25]. This might in parts explain the market price before the announcement of the acquisition, when shares were short around 31% compared to the end of the year 2008. In comparison, the shares of Burger King's biggest rival, McDonalds, were up by around 18%[26]. Since Burger King, was previously controlled by another PE firm, or rather a small pool of firms, the buyout can be further specified as a secondary buyout (SBO)[27].

2.2.4 The post-acquisition phase

After the completion of the merger, the managing partner of 3G Capital stated: "We are excited to work together with the company's employees and franchises to continue to invest in the brand for the benefit of all its guests, employees and franchises"[28]. With the holding of 3G Capital, many things changed in the following years. The most obvious change was the sale of around 1.300 company owned restaurants between 2010 and 2013. Thereby, the overall number of restaurants declined from 1.344 to only 52 proprietary restaurants. The total number of restaurants in 2013 counted 13.667, with 52 company restaurants and the remainder of 13.615 restaurants owned by franchises. These previous sell-offs were part of the global "refranchising initiative", which was finalized in 2013[29]. In parallel to making the overall business model leaner, with less restaurants directly owned and substantially more franchising, many personal changes were effective at Burger King's corporate offices. In Burger King's headquarter in Miami-Dade County, Florida, the total FTE headcount shrank from around 800 to less than 300 people[30]. Besides, none of the former directors of Burger King Holdings, was in office at the

[24] Reuters (2010): http://www.reuters.com/article/2010/09/02/us-burgerking-idUSTRE6801CB20100902.
[25] NY Times (2012): http://www.nytimes.com/2012/06/23/opinion/nocera-burger-king-the-cash-cow.html?_r=0.
[26] Reuters (2010): http://www.reuters.com/article/2010/09/02/us-burgerking-idUSTRE6801CB20100902.
[27] See Arcot et al. (2015) for a detailed analysis of the general mechanisms of value creation in secondary buyouts.
[28] 3G Capital company website (2015), accessible at: http://www.3g-capital.com/bkw.html.
[29] Burger King Worldwide Reports: Fourth Quarter and Full Year 2013 Results.
[30] Interview: Tim Brueggemann (2015).

end of the analyzed holding period, whereas the majority was directly brought in by 3G Capital[31].

Another major highlight in the post-acquisition phase was Burger King's return to the public stock markets in 2012, only shortly after going private in 2010. However, the company did not choose to go public via a traditional IPO, instead used a "reverse merger" with Justice Holdings[32]. The firm is closely linked to hedge fund manager Bill Ackman and its only purpose was to find another business to acquire. In the reverse merger, Justice Holdings bought a minority stake (29%) of Burger King from 3G Capital for around $1,4 billion in cash. In turn, Justice Holding was delisted in London and in turn again listed at the New York Stock Exchange under the name of Burger King with the ticker "BKW"[33]. Until the end of the considered holding period, 3G Capital remained the main and controlling shareholder with 71%, followed by the hedge fund Pershing Square Capital Management again from Bill Ackman, owning approximately 10% of the equity[34].

Given the aforementioned "refranchising initiative", total revenues were declining during the first three years of 3G Capital ownership. This is simply explainable since revenue per company restaurant is higher compared to the revenue that is achieved from franchise and property payments[35]. The future prospects of the company appear to be good. Due to positive *comparable sales growth* in the last years and system sales growth expected to grow again the company is expected to improve the top-line results going forward[36].

2.3 Value creation in Private Equity Investments (LBOs)

Until today, many attempts have been made to analyze value creation in private equity investments. In general, academia differentiates between value creation on the fund level and value creation on the transaction level (Achleitner et al. 2010). Several studies have addressed fund performance and compared it to public market indices, as for instance Kaplan & Schoar (2005), who found that average fund performance is not significantly higher compared to the average returns of the S&P 500. More recently published studies, as Phalippou & Gottschalg

[31] Burger King Worldwide: Annual report (2013) and Burger King Holdings: Annual report (2010).
[32] The Wall Street Journal (2012): Burger King Returns to Public Market on NYSE.
[33] Business Insider (2012): Bill Ackman's Special Purpose Entity Finally Makes Its Move.
[34] TheStreet (2014): How Burger King's Brilliant Brazilian Billionaire Turned $1.2B
[35] Burger King evaluates sales according to system sales growth and comparable sales growth: "System sales growth refers to the change in sales at all company-owned and franchise restaurants in one period from the same period in the prior year. Comparable sales growth refers to the change in restaurant sales in one period from the same prior year period for restaurants that have been open for thirteen months or longer." (Burger King Worldwide Reports: Fourth Quarter and Full Year 2013 Results, p.10).
[36] Interview

(2009) and Harris et al. (2014) revealed mixed results for fund performance. From a critical perspective, Phalippou & Gottschalg (2009) propose that private equity funds returns after accounting for fees, are round 3% below the market returns. Contrary, Harris et al. (2014) provide supporting evidence for the hypothesis that private equity funds outperform the S&P 500 index in turn by 3% annually, whereas Sorensen et al. (2014, p. 1977) remain critical, "if this outperformance is sufficient to compensate investors (LPs) for the cost of risk and long-term illiquidity". Other scholars, as Kaplan (1989b), Nikoskelainen & Wright (2007), Achleitner et al. (2010), Guo et al. (2011), Achleitner et al. (2011), Acharya et al. (2012) and Achleitner & Figge (2014) are rather focused on value creation on the transaction level, by examining different samples of buyouts. In contrast to academics, who analyze returns on the fund level, these authors often seek to understand and explain the drivers of value creation in private equity investments.

Generally speaking, academic literature in the field of buyouts, views the concept of value creation from two different perspectives, namely, enterprise value (EV) and equity value. Whereas, Nikoskelainen & Wright (2007), measure returns on both dimensions, Achleitner et al. (2011) examine value creation from the perspective of the shareholders, therefore measure the impact on equity value. This differentiation between equity value and enterprise value is important, due to the variety of finance instruments that are used in leveraged buyouts. Thus, a buyout might significantly increase the equity value, without enhancing the enterprise value (Nikoskelainen & Wright 2007)**.** As general partners in private equity ordinarily try to maximize the initial investment of the limited partners, in order to maximize their own carried interest, this thesis adapts the view of Achleitner et al. (2011) by focusing on the return on equity, when for instance calculating the IRR.

Empirical academic publications often highlight the importance of individual drivers of value, as Muscarella & Vetsuypens (1990), who analyze the value creating impact of operational improvements, and Kaplan (1989a), who on the other side explains value creation through tax benefits resulting from tax shields when financing a firm with debt. Contrary, academic papers exist that offer a broader and holistic spectrum of drivers of value creation (i.e. Acharya et al. 2010; Achleitner et al. 2010). Besides, Loos (2005) is one of the authors who also offers a holistic perspective and condensates value creation in leveraged buyouts between direct and indirect drivers. In addition, the author finds that only direct operational drivers actually create value, by improving the cash flows of the buyout firm, whereas indirect drivers rather indirectly contribute to value creation, since they are not directly quantifiable. (Loos 2005, p. 21).

Furthermore, the Ph.D. dissertation of Pindur (2009) decomposes value creation in LBOs into five dimensions, which can be categorized into an internal and an external perspective. On this note, Pindur (2009) emphasizes that different dimensions are usually interrelated and not necessarily mutually exclusive.

Additionally, Berg & Gottschalg (2005) provide a comprehensive framework that views value generation in buyouts from three different dimensions. The first dimension concerns the phase where value creation takes place during the buyout. Thereby value creation can already take place during the *acquisition phase* and last through the *holding period* to the *divestment phase*. In addition, the second dimension analyzes the causes of value generation in buyouts, whereas value generation is equated with an increase in equity value during all phases of the buyout. Hence, the equity value is calculated as follows:

$$Value\ of\ Equity\ = Valuation\ multiple * Revenues * Margin - Net\ debt$$

According to the authors, Berg & Gottschalg (2005), the valuation multiple, described as financial arbitrage is conceptualized as a special form of value generation cause. In opposition to the other levers that are characterized as value creation levers, the valuation multiple is defined as being value capturing, since it is not affecting the financial performance of the company. Furthermore, value creation levers are differentiated according to primary levers and secondary levers, comparably to the traditional value chain (Porter 1985; Stabell & Fjeldstad 1998). Whereas the primary levers, i.e. financial engineering in Appendix 4, have a direct effect on financial performance, secondary levers only indirectly affect financial performance through one or multiple direct drivers[37]. To sum up, Appendix 4 shows a comprehensive summary that includes all levers of the second dimension and how they can be explained. Lastly, the third dimension views the sources of value generation in buyouts. Thereby it is important to distinguish between *intrinsic* and *extrinsic* generation of value[38]. On the one hand, *intrinsic value generation*, is a form of value that takes place within the portfolio company, without specific influence of the buyout firm. Thus, this kind of value generation would appear in any PE investment and does not reflect specific capabilities of the private equity firm, as for instance expertise or network. *Extrinsic value generation*, on the other hand, is attributable to the

[37] The definition of primary levers and secondary levers is in line with respectively direct drivers and indirect drivers, defined by Loos (2005). In the following both terms are applied interchangeable.
[38] Extrinsic and intrinsic value generation of Berg & Gottschalg (2005) are comparable to the internal and external perspective that is explained in Pindur (2009).

capabilities of the buyout firm, and would without the participation of the private equity firm not appear in the portfolio firm (Berg & Gottschalg 2005).

2.4 Direct drivers of value creation

According to Guo et al. (2011), Acharya et al. (2012) and Achleitner et al. (2011) the most common explanations of value in the form of increased returns are: (i) operational performance improvement, (ii) higher sector valuation multiples and (iii) the usage of leverage. In line with this, Achleitner et al. (2010) provide a comprehensive framework, that allows for a clear identification and interpretation of different value drivers. Their model separates the leverage effect, from other value drivers, as the effect of operational improvement and the multiple effect. This is especially relevant, as previous models did not explicitly differentiate between operational and financial risk (Achleitner et al. 2010). In this paper, the following levers are normally denominated as direct drivers, yet the terminology might vary in other papers, for instance in Berg & Gottschalg (2005), who categorize these drivers in their framework as primary levers[39].

2.4.1 Value through leverage

Leverage as a direct driver of value, is traditionally defined as interest payment deductions or "tax benefits from the perspective of the buyout company" Kaplan (1989a, p. 613). These benefits occur to the equity holder through tax shields, that increase the return to investors in the firm. Higher returns are justified by an increased financial risk that comes with the issuance of larger amounts of debt that, help to finance the transaction (Modigliani & Miller 1958). Since tax shields, increase free cash flow that is available to equity holders, leverage is likely tohave a positive effect on firm value. Whereas no universally accepted ideal level of leverage exists, many different theories exist, that conceptualize the ideal capital structure. *Tradeoff theory* is one of the fundamental theories, which suggests that firms need to balance the benefits of tax advantages, with the disadvantage of financial distress costs, also known as bankruptcy costs (Myers 2001). Contrary, *free cash flow theory*, another important concept, argues that costs of financial distress are negligible, as long as a firm generates significant operating cash flows,

[39] Berg & Gottschalk (2005) designate the effect of leverage as "financial engineering" and the effect of operational improvement as "increasing operational effectiveness". Both former drivers are categorized as primary levers, which will be used interchangeably in this paper with the term "direct driver". Yet, the framework of Berg & Gottschalg (2005) classifies the multiple effect as a "value capturing" driver instead of a value creating primary lever.[40] These tax payments might for instance favor for instance the respective government. Amongst others, this can include, taxes of capital gain, paid by the former pre LBO shareholders and capital gain taxes of the LBO firm due to the sale of assets after the LBO transaction (Jensen 1989).

after financing future investment opportunities with a substantially positive net present value. Therefore, free cash flow theory is likely to suggest higher levels of leverage than tradeoff theory, especially for mature firms (Myers 2001). However, evidence by Axelson et al. (2013) suggests that capital structure in buyouts, is rather influenced by the conditions of the debt market, depending on the "price and availability of debt" (Axelson et al. 2013, p. 2264). With this in mind, buyouts are more levered when credits are easily available and interest rates are in turn low (Axelson et al. 2013). Moreover, Achleitner et al. (2010) suggest that private equity firms seem to be able to apply higher leverage ratios, due to their experience and standing in the market. Typically, debt to equity ratios decrease in the years after the completion of the buyouts, as private equity sponsors use large portions of the generated free cash flow to pay back debt (Kaplan 1989a).

Leverage is certainly the most controversially discussed driver of LBO value creation in academic literature. Especially the question if higher leverage ratios create value is subject to considerable discussions within academia. In line with Kaplan (1989a), Achleitner et al (2010) show that financial engineering on average contributes to about one third of the created value in a sample of 206 European buyouts between 1991 and 2005. In addition, more recent work by Guo et al. (2011) finds, that increased leverage yields higher tax shields, which in turn result in increased cash flows. Additionally, they state, that in general targets with a low debt ratio have higher potential for improvements in tax shields, since the higher the increase in leverage, the higher the improvements in cash flows, which is comparable to the findings of Renneboog et al. (2007). Yet, the magnitude of the effect also highly depends on the maintenance of the higher debt ratio after the PE firm exited the investment (Guo et al. 2011).

On the contrary, Bergström et al. (2007) claim that leverage can from a societal perspective not be regarded as a driver for value creation. Thus, according to the authors leverage is rather redistributing wealth through the creation of tax shields instead of creating new value. As some even argue that the aforementioned tax payments come at the expense of society, Jensen (1989) argues that apart from the potential tax deductions, realized by interest tax shields, through financial engineering of private equity firms, LBO transactions also come along with the creation of new sources of tax[40]. Finally, it is important to note, that next to the discussed financial engineering related benefit of leverage, that is rather mechanical, another rather

[40] These tax payments might for instance favor for instance the respective government. Amongst others, this can include, taxes of capital gain, paid by the former pre LBO shareholders and capital gain taxes of the LBO firm due to the sale of assets after the LBO transaction (Jensen 1989).

behavioral finance related effect exists. This topic is mainly attributable to Jensen (1986) and Jensen (1989) who discuss the positive effect of debt on agency costs as well as the motivational efficiency impact of debt.

2.4.2 Value through the multiple effect

The second main lever of value creation is the multiple effect. The mechanisms behind this driver are changes in valuation multiples between the point of entry and exit, keeping all other effects constant (Achleitner et al. 2011). Pragmatically formulated, value is created by buying cheap and selling more expensive. The multiple effect, also referred to pricing in buyouts, is usually analyzed according to the EBITDA/EV multiple, as for instance in Acharya et al. (2012). According to Achleitner et al. (2011), EBITDA/EV is the most commonly used multiple in private equity. It is measured by the difference in enterprise value through changes in entry and exit EBITDA/EV multiples between the entry and the exit date, both respectively multiplied with the initial EBITDA value at the entry point. In case the EBITDA/EV multiple is higher at the exit of the investment, it appears that value had been created, measured by increased returns to equity holders when divesting the asset (Achleitner et al. 2011).

Academic papers seem to agree that the multiple effect is a justifiable dimension of value creation, yet there has been little agreement on the question if improvements are attributable to the private equity firm or the overall market conditions (Achleitner at al. 2011). Research by Cumming et al. (2007) classifies pre buyout undervaluation of target companies as one of the "chief sources of shareholder wealth gains" (Cumming et al. 2007, p. 440). Therefore, spotting undervalued targets and as a result paying lower entry multiples, is value creating, presupposed that the PE firm achieves a higher exit multiple. More recent evidence by Acharya et al. (2012), has examined that the improvement of multiples is higher for PE sponsor's portfolio companies in comparison to publicly traded peers. They classify the multiple effect as one of the main "explanatory factors for abnormal performance" (Acharya et al. 2012, p. 371). In accordance, Bargeron et al. (2008) show that private equity firms pay substantially lower premiums for their acquisitions compared to mergers or acquisitions of public companies.

Finally, Guo et al. (2011), show that around 20% of buyout returns, in a sample of 192 large leveraged buyouts, are attributable to to the increase in valuation multiples during the holding period. Kaplan and Strömberg (2009) interpret these findings as the ability of private equity firms, to buy firms cheaper compared to strategic bidders. However, higher multiples might not only be achieved by the general partner's negotiation skill or ability to spot attractive

undervalued targets, but are also influenced by credit market conditions. Thus, in times of cheap borrowing, valuation multiples are likely to be higher than in times of high interest rates (Guo et al. 2011).

2.4.3 Value through operational improvement

Value creation on the operational dimension, is generally characterized as the improvement of operational performance through the active participation of the private equity firm[41] (Achleitner et al. 2014). Increasing equity returns through the operational improvement of the acquired target after the completion of the LBO is one of the most common sources of value creation in the field of private equity (Acharya et al. 2012; Bergström 2007**)**. It is comprised of EBITDA and/or cash flow enhancing measures as (i) increased revenue, (ii) reduced cost and (iii) optimized working capital as well as capital expenditures (Kaplan 1989b, cited after Achleitner & Figge 2014**)**. The former two (i) increased revenue and (ii) reduced costs are categorized as EBITDA margin improvements[42], whereas (iii) working capital and CAPEX optimization is classified as a cash flow enhancing driver[43].

A study conducted by Muscarella & Vetsuypens (1990)**,** analyzed 72 LBOs, that were again divested by going public between 1983 and 1990. The results show, that these companies on average achieved significantly stronger improvements in profitability, compared to publicly traded peers that have previously not gone through a leveraged buyout. Cost reduction, were particularly mentioned to be the main performance improving measure, within the sample of the study, whereas measures as sales growth and streamlining of asset utilization played a minor role. Since, LBOs at this time used very high levels of leverage, returns on equity used to be very high. Yet, the paper could not show, that LBOs obtain increased returns for their investors (Muscarella & Vetsuypens 1990).

Moreover, Kaplan (1989b) examined a sample of 76 large buyouts, completed in the 1980s, that showed positive results of increased market value through operational improvements. The study presents significant improvements in operating income and net cash flow, as well as decreases in CAPEX, evidently achieved by aligned incentive structures in the post buyout

[41] This active management or ownership approach is often referred to as “hands-on approach”.
[42] Note that (i) increased revenue and (ii) reduced costs ceteris paribus also increase cash flow through higher EBITDA.
[43] In the following, this section differentiates between direct drivers of operational improvement that either create value by improving EBITDA itself, usually through reduced costs or higher revenues, or by enhancing and generating free cash flow, for instance by improving asset utilization.

period (Kaplan 1989b). Nevertheless, Guo et al. (2011) relativized the aforementioned results, in a more recent study with a sample of buyouts, that were executed between 1990 and 2006. Even though, their results showed that operating performance in LBOs was equal or slightly higher as compared to their respective peer group, the magnitude of improvements was substantially smaller than the previously presented results by Kaplan (1989b). Despite the weak evidence for performance improvement, Guo et al. (2011) suggest, that value creation may be possible through a more efficient utilization of firm assets. For instance, by selling of non-productive assets, return on assets can be increased, provided that the EBITDA remain stable.

Furthermore, Achleitner et al. (2011), amongst other, confirm that operational improvements, in terms of EBITDA margin improvements and sales growth, create value for equity holders, while analyzing a comprehensive dataset of 1980 buyouts between 1986 and 2010. Even though, the authors could not confirm that PE sponsors were able to achieve superior sales growth compared to their publicly traded peers, they found that increased sales can positively influence the exit multiple at the end of the holding period (Achleitner et al. 2011). Accordingly, research of Acharya et al. (2012) explored empirical evidence for the operational performance improvement by private equity firms. The authors explored a sample of 110 transactions from 14 different traditional private equity firms, between 1995 and 2005. They found that margin improvement and sales growth are linked to superior performance during PE ownership. Yet, only the EBITDA margin was improved above the related sector level, whereas they could not show that sales growth is significantly improved compared to peers. Ultimately, Acharya et al (2012) conclude that operational performance improvements can explain superior returns and lead to the creation of financial value. As naturally not all transactions create value, the realization of performance improvement often distinguishes successful from unsuccessful deals.

2.4.3.1 EBITDA improvements

EBITDA is typically used as the foundation for the financial valuation of companies in the field of private equity and one of the most used multiples. The fraction of operational value creation, that has been achieved through improvements in EBITDA, is conceptualized as the improvements in EBITDA within the holding period. As previously mentioned, this can be achieved through both higher revenues as well as higher EBITDA margins, by reduced operating costs. In practice, EBITDA improvements are typically achieved through a combination of both, lower costs as well as higher revenues (Achleitner & Capital Dynamics 2009).

The model provided by Achleitner & Capital Dynamics (2009), which is subsequently used to analyze the creation of value in the Burger King deal, measures value added by changes in EBITDA during the holding period of the private equity firm. Generally speaking, operating profits can be increased through cost reductions and sales growth, either organically by growing internally or inorganically through external growth. Loos (2005) sees external growth through acquisitions as "a key strategy of LBO firms" (Loos 2005, p. 205).

From an internal growth perspective, private equity firms often rely on industry knowledge and operational experience. Thus, most of the leading private equity firms are positioned and structured according to key industries (Kaplan & Strömberg 2009). The Carlyle Group, one of the largest private equity firms in the world is only one example for a private equity firm that is organized around its core industries. The firm specifies its specialization approach according to industries as "central to the firm's ability to create value". Their "valuing depth over breadth" approach includes 11 core industries [44], from *aerospace* over *financial services* to *transportation*[45]. Moreover, by hiring investment professionals with operational experience and industry know-how, or by cooperating with external consulting groups, private equity firms, might be able to further improve the operating value of their portfolio companies (Kaplan and Strömberg 2009). The private equity firm Clayton, Dubilier & Rice, for instance, closely works in cooperation with former industry experts, as Jack Welch, former CEO of General Electrics or Sir Terry Leahy, former CEO of Tesco, who both support the firm's by improving their operational engineering[46].

According to Acharya et al. (2012), human capital factors are a dominant feature to explain operating profit improvements in private equity investments. They argue that the experience and the background of general partners in private equity firms, have an impact on the direction and success of value creation. When the partners are former consultants or previous industry managers, they are more likely to contribute to positive EBITDA growth of the portfolio company through internal improvement programs. By leveraging their skills and industry know-how, partners might contribute towards improving sales, by exploring further markets or through cost cutting programs. In opposition to partners with operational know-how, general

[44] The full list of core industries: Aerospace & Defense, Commodities, Consumer & Retail, Energy & Power, Financial Services, Healthcare, Industrial, Real Estate, Technology, Telecom & Media, Transportation.
[45] Carlyle Group – our business – industry expertise, viewed at https://www.carlyle.com/our-business/industry-expertise.
[46] Clayton, Dubilier & Rice (2015) – Firm profile, viewed at http://www.cdr-inc.com/about/firm_history.php.

partners with former experience in banking and corporate finance, are more likely to follow an external growth strategy, by acquiring further companies.

2.4.3.2 Cash Flow improvements

The effect created by improvements in free cash flow is an operational driver of value creation and called the *free cash flow effect*. Free cash flow can on the firm level be used to pay back debt or to distribute to shareholders through dividends and share buybacks. The real lever of value creation here is the creation of cash flow, not as often mistakenly stated, the process of paying back debt, which is denominated as *deleveraging* (Achleitner & Capital Dynamics 2009). Previous research by Lehn & Poulsen (1989) show that there is evidence for higher cash flows of firms that have gone private through a leveraged buyout, in comparison to a benchmark of firms that stayed public.

In accordance to the the Achleitner & Capital Dynamics (2009) model, enhanced cash flows can be composed of increases in EBITDA, working capital effects, changes in investments and depreciation and payment of interest and taxes. Since the mechanisms of EBITDA and leverage were already presented previously, this section will illustrate the impact of improved asset utilization on cash flows. Achleitner & Figge (2014, p.409) call this "streamlining of capital expenditures and working capital. Existing research recognizes the critical role of improved asset utilization. Thereafter, cash flows can be improved, by increasing the productivity of assets, despite a constant level of profitability, for instance by using working capital more efficiently (Guo et al. 2011). Thus, private equity firms reduce working capital of portfolio companies during the holding period, primarily by lowering inventory levels and collecting receivables more quickly (Easterwood et al. 1989). Correspondingly, Holthausen & Larcker (1996) show that firms that have gone through LBOs on average maintain significantly lower levels of working capital in comparison to publicly traded peers.

A much debated question is whether and to what extent the reduction of capital expenditures contributes to value creation. While some argue that lower CAPEX increase cash flows, others pledge that private equity firms need to guarantee the long run profitability of their investments, whereas reductions in capital expenditures can be counter productive and harm the firms in the medium- to long-term (Loos 2005). Yet, former research provides evidence for reduced investment activities in the post acquisition stage of private equity investments (Cf. Kaplan 1989b; Smith 1990). Moreover, firms might eliminate "non-productive assets" which may not only generate one time payments through the sale of these assets, but also increases returns on

assets (Guo et al. 2011, p. 497). The nature of these asset sales is usually driven by efficiency considerations (Seth et al. 1993).

2.5 Indirect drivers of value creation

As previously introduced by Loos (2005), indirect drivers are less directly enhancing value, since they are not visibly increasing cash flows or EBITDA, which makes it very difficult to measure them. Yet, they play a major role in the entire value creation process of LBOs, due to their likely interdependence with direct drivers and ability to impact direct drivers, which in turn enhances operational performance. This is in line with Berg & Gottschalg (2005) who explain, that indirect drivers, which they define as *secondary levers*, do not have a direct impact on financial performance, yet they contribute to value creation through direct levers and therefore help to explain value creation in LBOs.

Typically, academic literature, views the following indirect drivers as (i) changes in corporate governance, (ii) alignment of management incentives, (iii) leverage as a form of controlling managerial behavior and (iv) culture and form of communication (Kaplan & Strömberg 2009; Loos 2005; Achleitner & Figge 2004). This paper will mainly discuss the former two, corporate governance and management incentivizing, as they are likely to have the biggest impact in the case of Burger Kings acquisition.

2.5.1 Corporate governance

Due to different corporate governance practices around the world, various different definitions and conceptualizations of corporate governance exist. Desender et al. (2013, p. 823) describe corporate governance as "a system of interrelated practices having strategic or institutional complementarities, where governance practices will be effective only in certain combinations", based on various authors that previously defined the concept of corporate governance. In line with these findings, Rediker & Seth (1995) claim that effective control through monitoring is very likely attributable to a simultaneous combination of governance mechanisms, instead of only a single one. Moreover, Capron & Guillén (2009, p. 805) conceptualize corporate governance as "the allocation of rights and obligations among the firm's stakeholders, including shareholders, managers, workers, and others with a stake in the corporation."

Furthermore, the concept of corporate governance is closely related to the principal-agent theory. This theory describes the situation where a principal contracts an agent to perform a certain task, thereby delegating the right to make certain decisions to the agent. Under the assumption, that the agent also tries to maximize his own utility, it is likely that he will

sometimes diverge from the best interest of the principal (Jensen & Meckling 1976). This phenomenon of agency conflicts is especially applicable in public firms, where interests between the shareholders (principal) and managers (agents) are often divergent. Amongst others, corporate governance is one of the most frequently discussed theories, that antagonizes the agency conflict. Thereby, the corporate governance mechanisms assist to reduce the agency problem by supervising management, as for instance through board control, direct shareholder supervision and external auditors (Watts and Zimmerman 1990; Adams 2010; Desender et al. 2013). However, limiting the agency problem by supervising managers comes with a cost, that academic literature calls, agency cost. Agency costs thereby comprise the sum of the cost of counteracting measures as well as the loss, that is caused by managers deviating behavior, which can not be prevented by the aforementioned measures (Jensen and Meckling 1976).

The dynamics of corporate governance and the associated agency costs are very different in LBOs and going private transactions. Kaplan & Strömberg (2009) denote private equity firms more active involvement in corporate governance and stricter control of the board as "governance engineering". Former research by Jensen (1989) already criticized the operating inefficiency in public corporations, due to the failure of being effectively able to monitor management. The engagement of active investors, such as private equity firms, might thereby "recapture the lost value (…) using debt and high equity ownership to force effective self monitoring" (Jensen 1989, p. 8). Next to the "control function of debt" (Jensen 1986, p.325), private equity firms often, replace the top management of the acquired companies and even staff seats of the board with their own people. Guo et al. (2011) analyze a sample of 192 LBOs between 1990 and 2006 and detect, that the former CEO is replaced in more than one third of the analyzed transactions. Besides, they identified that on average more than 50% of the board seats are occupied by affiliates of the PE firm (Guo et al. 2011). These changes in the corporate governance structure of portfolio companies are therefore likely to lower the agency costs of the portfolio company (Kaplan 1989b). Yet, most of previous studies do not engage with another form of agency problem, that concerns the choice of capital structure in leveraged buyouts. Axelson et al. (2013) suggest, that due to their option like compensation, general partners of private equity firms might use leverage ratios that exceed the amount of debt that is in the best interest of people that invested in the fund (LPs). The relative importance of both effects might be an interesting field for future academic research.

Edgerton (2012) analyzes the hypothesis that managers are self-interested, and might engage in excessive compensation and spending of corporate resources. By analyzing the usage of

corporate jets, he finds that firms that have previously gone private in a LBO have significantly smaller jet fleets, whilst many public firms seem to engage in excessive use of corporate jets. Since the analyzed firms where very large, the excessive usage of jets, may have a relatively small impact on operating financial performance, but "could represent the tip of a larger iceberg of excessive compensation and other agency costs" (Edgerton 2012, p. 2188). Therefore, the author proposes that increased monitoring through corporate governance mechanisms in LBOs might lead to higher shareholder value through a reduction in agency costs.

Furthermore, if and how changes in governance in the private equity context, create value seems difficult to measure, yet, Guo et al. (2011, p. 503) state, that "governance activities appear important in explaining operating gains". Also Nikoskelainen & Wright (2007) provide empirical evidence for a value increasing effect due to changes in corporate governance, in the context of leveraged buyouts. Nevertheless, regressing governance variables on operational performance measures gives mixed results. While changes in management appear to positively contribute towards increased cash flows, contrarily, a higher board involvement of PE firms appears to be negatively related to profitability (Guo et al. 2011).

Finally, a theoretical model, developed by Aguilera & Jackson (2003) is subsequently (in the analysis part) used to describe the dynamic changes within the different dimensions of corporate governance, that emerged from the acquisition of Burger King by 3G Capital. A condensed summary of the main framework is depicted in Appendix 5.

2.5.2 Incentives

According to Smith (1990) another possibility that seeks to reduce the agency problem is the alignment of management incentives with the interests of shareholders. Thus, both, corporate governance mechanisms, and management incentives are ways that can contribute to reduce agency costs (Smith 1990). Going one step further, some authors, as Cornelli et al. (2013) even classify incentives as a component of corporate governance, due to their statement, that "much of the empirical literature on corporate governance and boards studies the provision of incentives and pays less attention to monitoring" (Cornelli et al. 2013, p. 432).

Whereas the previously introduced option like or profit sharing fee of the general partner can also be seen as a form of incentivizing, this part is rather concerned with another form of incentives, namely, management incentives (Cf. Axelson et al. 2010; Sorensen et al. 2014; Jensen 1989). The difference between management incentives in public corporations and private firms, which are controlled by a private equity firm is that in the latter, "management

incentives are built around a strong relationship between pay and performance" (Jensen 1989, p.15). Accordingly, Easterwood et al. (1989) also recognize the change that is subject to incentive systems after a buyout, which generally lead to a stronger convergence of pay and employee performance. They argue that incentive systems are "important to develop motivational systems for employees to achieve the key tasks" (Easterwood et al. 1989 p. 41).

Furthermore, incentives do not only mean that a fraction of the yearly salary is variable and linked to performance, but also include the participation in equity financing of management. It is thereby common that management contributes a fraction of the upfront equity capital to finance the deal. Guo et al. (2011) explored a sample of 94 deals, whereby 58 out of 94 deals included equity contributions from management. They propose that the more equity management owns, the greater the alignment between shareholders and management, thus, the lower the agency costs. Nikoskelainen & Wright (2007) even regard the equity ownership of management as one of the main explanations to value enhancement in buyouts. While also pronouncing the close link between incentives and governance, the authors claim that equity ownership creates "self-monitoring effects", which in combination with incentives contributes to an increase in firm value (Nikoskelainen & Wright 2007, p. 26). In addition, participation in the financing of the firm's equity might not only affect management, but also a broad base of the staff in the portfolio firm, through *Employee Stock Ownership Plans* (ESOP) (Easterwood et al. 1989).

3 Propositions and expected results

Traditionally, leverage had played an important role in private equity, whereat, some authors even identify leverage, as the main driver for value creation in private equity (Cf. Kaplan 1989a). Despite the controversy and missing unanimity in academia about the effect and ideal level of leverage, this paper acknowledges the marginal tax savings that come along with an increased amount of debt (Modigliani & Miller 1958). However, outrageous debt levels, also bear an increased risk of default, which creates bankruptcy costs. Deals during the 1980s, were commonly levered with a debt ratio of up to 90% (Guo et al. 2011). As the acquisition of Burger King was substantially financed by debt, which accounted for approximately 70% of the acquisition price, but not overly, compared to deals in the 80's, there seems to be a potential for value creation through substantial interest tax shields. Thus, the following proposition is suggested:

> *Proposition 1: Value in the Burger King deal is created through higher debt ratios, the effect of leverage*

Next, as previously shown, market multiples seem to be correlated with the level of interest rates in the market. Taking this for granted, indicates that in times of very low interest rates multiples are higher. This could on the one hand be due to pure luck, but as shown also partly through skills, as investment timing. Given the long investment horizon of 3G Capital and the assumed diligent planning and screening process prior to its acquisitions, the investment firm does not have the pressure to close its funds and divest at a specific point in time. Compared to other private equity firms, they are not maintaining a closed-end fun, which makes them more flexible (Cf. Kaplan & Strömberg 2009). In this case since the global and U.S. economy strongly improved between 2010 to 2013, the analyzed horizon, we propose that increased valuation multiples also play a role in creating value. Therefore, proposition 2 is formulated:

> *Proposition 2: Value is created through variations in market prices, the multiple effect*

According to the literature review, operational improvement, can be seen as the most up to date and most frequently discussed topic in recent academic works. Complementary, 3G Capital's history has illustrated their capacity and ability to create value through operational excellence. A first initial look at the profit & loss and cash flow statement, shows that both EBITDA as well as cash flow have significantly improved during the first years of the holding period. Whereas, EBITDA increased with a compounded annual growth rate (CAGR) of around 10%, cash flow from operations expanded from approximately $206 million in 2010 to around $525

million in 2013, which equals an average annual growth rate of roughly 37%. It appears as these two measures are in alignment with the initial assumption that the Burger King deal created value by operational improvements, which is the rationale for stating proposition 3:

> *Proposition 3: Value is created through improved operations, the operational improvement effect, which can be split into*
>
> *3.1 Value creation through EBITDA improvements*
>
> *3.1.1 Increased revenue*
>
> *3.1.2 Improved margin*
>
> *3.2 Value creation through cash flow improvements*

It is expected that operational improvement is the most important source or driver of value creation in the Burger King deal. This hypothesis is on the one hand adapted from research, conducted by Achleitner et al. (2010), on the other hand preliminary confirmed by initial qualitative research about 3G Capital's value creation approach. By comparing the results of the analysis with a benchmark of other PE deals, it is expected that the deal created more value through operational improvement, than the average PE deals of the same dimension.

Whilst, the former propositions are rather concerned with explaining the dimensions and direct drivers of value creation, lastly factors are analyzed that may positively contribute towards value creation, and contribute to explain how value is created, foremost on the operational level. Since public firms also make use of leverage, improve their operations and occasionally engage in mergers & acquisitions, where they might be exposed to the multiple effect, we want to analyze what really differentiates value creation in private equity from the creation of value in public firms. As shown in the literature review, corporate governance and incentives are two management tools, which are described as indirect drivers of value creation. Besides, their underlying mechanisms often change in the context of buyouts. The case of 3G Capital's acquisition of Burger King suggests that both the dynamics of governance and incentives changed due to the context of the acquisition, since Burger King incentivizes not only senior management, but also less senior people, i.e. the analyst level. Moreover, the corporate governance environment changed on a great deal, as for instance top management and the board of Burger King was replaced by affiliates of the 3G Capital network. Corporate governance is often strongly in line with incentives, and not strictly separable. Both together might be powerful to contribute to value creation, where governance might give direction and incentives contribute towards alignment. Hence, we proposition 4 is stated and going forward qualitatively analyzed:

Proposition 4: Indirect drivers play a role in explaining value creation in leveraged buyouts, especially on the level of operational improvements:

4.1 Corporate governance is an indirect driver of value

4.2 Incentive alignment is an indirect driver of value:

Finally, it is expected that corporate governance and incentives are a key differentiation criteria compared to other funds, which might be related to the fact that 3G Capital does not have the pressure to divest at a certain point in time, in contrast to many closed-end funds. It is thereby anticipated that it will not be possible to correctly quantify all drivers of value. All the more it is expected that 3G creates value through a consolidation of many different factors, which are often interdependent and not mutually exclusive.

4 Methodology

4.1 Presentation and Description of the Method to be used

This thesis uses quantitative and qualitative analyses. Thereby it is important to mention that there is no stringent approach, which has been used throughout this thesis. Two research papers, namely Achleitner et al. (2010) and Acharya et al. (2012) were especially important during the course of the quantitative part that seeks to present an answer to the question of what are the main drivers of value in the Burger King buyout. It has to be clarified that this thesis seeks to apply and consequently interpret the results, using the previously introduced theories, instead of validating them. Amongst others, the previously introduced framework of Berg & Gottschalg (2005) is used to qualitatively supplement and explain the quantitative findings, whereas the focus will be set on the drivers, which are analyzed through the Achleitner et al. (2010) model. In addition, a corporate governance framework of Aguilera & Jackson (2003) is used to understand the dynamics of corporate governance.

As a basis for applying the model, provided by Achleitner & Capital Dynamics (2009) and Achleitner et al. (2010), we first of all need to identify the firm value, respectively the value of Burger King's equity at the determined exit date. Therefore, several established methods are used, as (i) market multiples, (ii) the discounted cash flow approach and (iii) market capitalization. Based on the results of the previous valuation results, we can calculate the internal rate of return (IRR), a method that is commonly used especially in private equity investments. When calculating the internal rate of return of a project, not only the initial upfront investment has to be regarded, but also all the cash flows during the life time of the project (Damodaran 2012).

Achleitner et al. (2010) argue that previous approaches that seek to measure value creation in LBOs do not separate operational and financial risk. Therefore, they provide an alternative method, which is in line with the approach of Achary et al. (2012). Both approaches have in common that they differentiate returns, which are attributable to leverage from returns that have been achieved on an unlevered basis. Hence, Achleitner et al. (2010) go a step further by offering a framework that allows to differentiate the unlevered returns by different levers of value creation. Applying this framework subsequently facilitates the interpretation and comparison of the results. This is why Achleitner et al. (2010) is chosen as the main framework in the quantitative part of this thesis. Appendix 6 summarizes the respective summary of results of the Achleitner et al. (2010) study, which found that on average, approximately one third of

the created value stems from leverage, whereas the other two thirds come from the operational and multiple effect (Achleitner et al. 2010). These drivers are also covered in the previous structure of the literature review, as depicted in Appendix 7.

The explained returns by Achleitner et al. (2010) attributable to operational improvement or from the risk perspective operational risk, are composed of (i) increased EBITDA margin[47], streamlining working capital and CAPEX[48], and the multiple effect. Lastly a combination factor is added that represents combined changes in EBITDA growth and EBITDA Multiples (Achleitner et al. 2010). In the previously proposed value creation structure, EBITDA margin and free cash flow improvement are situated on the second level of value generation, as respective measures or drivers of operational performance improvement that is situated on the first level. The multiple effect and the leverage effect are both levers at the first level. Appendix 6 summarizes and highlights the dimensions and measures that are explicitly derived through the application of the model, developed by Achleitner et al. (2010) and Capital Dynamics[49].

In order to derive the effect of leverage, we can apply the formula provided by, Achary et al. (2012), who in their paper examine excess returns generated by private equity firms. All the more, they differentiate between excess returns that are attributable to financial leverage in comparison to other levers. In order to derive the excess returns, which are associated to the generated interest tax shields, it is proceeded as follows. First, the Internal Rate of Return (IRR) of a certain deal is calculated, also characterized as the levered return (R_L). Second, the unlevered return (R_U) is derived, by un-levering the IRR (R_L) with the following slightly simplified formula[50]:

$$R_U = \frac{R_L + R_D * (1-t) * \frac{D}{E}}{1+\frac{D}{E}}$$

whereas: $t = average\ corporate\ tax$; $\frac{D}{E} = average\ leverage\ ratio$

Following, we subtract the unlevered return from the levered return and therefore derive the difference in the IRR between the levered and unlevered firm. By dividing the difference in IRR by the levered return (R_L), the fraction of IRR that is attributable to the leverage effect is

[47] Some authors further split this into the effect of increased sales and operating cost reduction, e.g. Muscarella & Vetsuypens (1990).
[48] Achleitner et al. (2010) call this free cash flow effect.
[49] First published in an article, written by Prof. Dr. Dr. Ann-Kristin Achleitner (TU Munich) and Dr. Katharina Lichtner and Dr. Christian Diller (both Capital Dynamics).
[50] Slightly simplified from Acharya et al. (2012).

derived[51]. Going forward, we want to explain the increase in equity through the remaining other effects, thus, all but the leverage effect.

The multiple effect is operationalized by subtracting the entry multiple multiplied by the entry EBITDA $(Multiple_{Entry} * EBITDA_{Entry})$ from the respective exit multiple that was previously also multiplied with the entry EBITDA $(Multiple_{Exit} * EBITDA_{Entry})$ (Achleitner et al. 2010). In addition, the model provided by Achleitner & Capital Dynamics (2009), measures value added by changes in EBITDA as follows. To begin with, EBITDA at the entry point is subtracted from the EBITDA value at the end of the holding period. Following, the resulting difference is multiplied by the entry EBITDA multiple. The outcome of this is the absolute value, attributable to improvements in EBITDA. The free cash flow lever, is derived by summing up the free cash flows that a firm generates in the prospective holding period. These cash flows can for example be distributed to shareholders through dividend payments or share buybacks, or can also used to repay debt and therefore in turn possibly decreasing the cost of debt. As Burger King's total debt did not decrease during the holding period, but rather slightly increased, we assume the cost of debt to be constant. As usually both multiples and EBITDA change over the holding period, there has to be a correction factor that accounts for this effect. The correction factor is calculated by multiplying the change in EBITDA with the change in the multiple, as follows: $(Multiple_{Exit} - Multiple_{Entry}) * (EBITDA_{Exit} - EBITDA_{Entry})$. In some cases, the correction factor is negative, as for instance EBITDA increased, while simultaneously the multiple decreased over the holding period[52].

Furthermore, the time frame of the analysis has to be defined. Since the acquisition took place on October 19, 2010[53], which lies in the middle of the fourth quarter, the analysis in the quantitative part will for simplicity purposes only include cash flows starting from January 1, 2011[54]. When calculating the IRR for Burger King's shareholders, we assume that the initial investment took place on December 31, 2010. On the other side, the time frame for the holding period is closed with the assumed exit date on December 31st 2013, including all the cash flows that accrued in the fiscal year 2013. The closing date, is on the one hand determined by the availability of data, but foremost by the combination of Tim Hortons and Burger King as Restaurant Brands International in August 26, 2014[55]. This acquisition changes many of the

[51] Wertsteigerungshebel in Private Equity-Transaktionen (Zürich, November 2009).
[52] Wertsteigerungshebel in Private Equity-Transaktionen (Zürich, November 2009).
[53] Burger King Worldwide (2013): Annual report 2013.
[54] Including the cash flows of the fourth quarter would also only marginally impact the results.
[55] Burger King Worldwide (2014): Press release.

previous circumstances and brings new sources for operational improvement through the potential realization of synergies, but also further tax improvements that might be feasible through tax inversions[56]. Thus, the chosen time frame for the financial analysis ranges from the fiscal year 2011, starting on January 1st, 2011 to the fiscal year 2013, ending on December 31st 2013 under Burger King Worldwide. However, for comparison purposes we will also look at prior annual reports that lie before the acquisition of Burger King by 3G Capital in October 2010, in order to better forecast financial data.

In parallel to the quantitative analysis of value drivers, the case is systematically analyzed on a qualitative basis and contemporaneously related to prevalent academic literature. The chosen structure is thereby top-down, starting from the examination of value creation and the composition into it's main drivers in *Chapter 5: Quantitative analysis of direct drivers.* After the disaggregation of the main value drivers into *5.2.1 The effect of leverage*, *5.2.2 The multiple effect* and *5.2.3 The effect of operational improvements,* the obtained results are critically discussed in 4.2.4. Lastly, indirect drivers of operational improvement are analyzed in *Chapter 6*, which might also partially affect the aforementioned direct drivers. The qualitative analysis of these indirect drivers is mainly based on publicly available information as well as the result of one qualitative interview with Tim Brueggemann, a divisional Vice President at Burger King. Since Mr. Brueggemann is based in Miami, Florida, the semi-structured interview was conducted via telephone. The interview guideline and the respective results can be found in Appendix 17.

4.2 Basic Assumptions Adopted and limitations of the method

This paper adopts some of the main assumptions from Achleitner et al. (2010). First of all, it is assumed that debt availability is restricted, which is likely to be increasingly relevant in the future. Besides, by unlevering the IRR, and thereby separating operational from financial risk, it is assumed that the returns to equity are better comparable across different transactions (Cf. Achleitner et al. 2010). Finally, equity returns are calculated gross of fees, paid to the private equity firm, which means that the equity returns to the final investors are lower as they are still subject to the fees that are charged by the private equity firm. The paper focuses on value creation and the individual drivers, without regarding on how value is distributed among the different groups of investors. This is why we did not include the $1,4 billion proceeds to 3G Capital, after the reverse merger in 2012, as this is regarded as a wealth transfer between

[56] Derived from: http://www.corpgov.net/2015/01/corporate-inversions/#more-21549.

different investors of Burger King, instead of creating value. Alternatively, when only including the returns to 3G Capital one could add the $1,4 billion in the calculation of the IRR, but from this point weighing future cash flows (for instance dividends and the overall equity at the exit date) with 71%. Thereby, one can calculate the returns that are exclusively attributable to 3G Capital.

In this research there are several sources for limitations. The main limitation is that this thesis views value creation, by focusing on the perspective of the investors. Beyond that value creation could also view other perspectives and for example consider the consequences and potential value losses through downsizing of jobs. As the literature review is mainly based on traditional private equity funds, which are usually closed-end, it is important to state that the firm 3G Capital differs in some of these aspects, for instance due to the long-term investment horizon.

Furthermore, it is important to state that this is not a valuation thesis. The main focus lies on identifying the composition of value creation and the related qualitative interpretations. Additionally, there are some constraints in data collection, between the point of the acquisition, where Burger King went private and the renewed relisting of parts of Burger King shares at the New York Stock Exchange on June 20, 2012[57]. This is why the ratio of debt to equity is not available throughout the whole period. Since the debt levels were only slightly varying during the holding period, the D/E ratio at the exit point was applied to calculate the effect of leverage. The model introduced by Achleitner et al. (2010) suggested to apply an average rate. Moreover, not including parts of the last quarter in 2010, might pose further restrictions on the derived results, which are however not expected to adversely change the final results of this paper.

Finally, this thesis used a holistic case study approach and not an empirical analysis that can be generalized and applied to other firms and scenarios. The analysis is also purely based on the Burger King deal, therefore analyses the deal on the transaction instead of the the fund level. Accordingly, many of the results are not necessarily transferable and may not be easily imitable in other deals.

[57] Restaurant Brands International (2014) press release: World's third largest quick service restaurant company launched with two iconic and independent brands: Tim Hortons and Burger King.

5 Quantitative analysis of direct drivers

This part of the thesis is depicting the value that was created at Burger King in the given time period. In a first step the value of the enterprise, respectively the value of the equity at the divestment stage is calculated. Based on this value and the entry value the resulting IRR is derived. Thereafter the achieved IRR is split into several components, the direct value drivers, which are at the same time qualitatively interpreted.

5.1 Valuation and calculation of IRR

In the following several approaches are used to estimate the value of Burger King. The most appropriate method is used to derive the respective IRR for the investors of Burger King.

5.1.1 Market multiples approach

The multiple valuation is based on a selected peer group of mostly American fast-food restaurant chains, as for instance the McDonald's Corporation or Sonic Corporation as well as fast food holdings as for example Yum! Brands[58]. The average *Enterprise Value/EBITDA multiple* (EV/EBITDA) of the peer group to date equals 13,16[59], which is illustrated in Appendix 8. As some of these competitors have a strong focus only on the American market the peer group might not completely accurately represent an appropriate multiple for Burger King, yet as Burger King's self-appointed biggest global competitor McDonald's Corp., is evaluated on a 13,53 *EV/EBITDA* multiple, the value of 13,16 seems to be representative. Multiplying the aforementioned multiple with Burger King's EBITDA of $588 million in 2013, yields an enterprise value of $7.737,84 million.

5.1.2 Discounted Cash-flow approach (DCF)

In order to evaluate Burger King based on its discounted future cash flows, the P&L and other financial measures such as changes in NWC are forecasted. These forecasts have to be carefully considered, as they rely on many different assumptions. First of all, total future revenue development was estimated by analyzing *franchise and property revenues* and *company restaurants revenues* separately. Whereas the number of company restaurants is assumed to stay constant going forward, the number of franchises is expected to grow by 3,5% annually[60].

[58] Yum! Brands, Inc. is a global firm that manages licensed brands as Pizza Hut, Taco Bell and Kentucky Fried Chicken (KFC), http://www.yum.com/.
[59] It is acknowledged that a more accurate result would have been achieved by taking the respective multiple at the artificial exit date of Burger King on (31.12.13).
[60] In 2014 the increase in new franchises was 5,2%, the estimated 3,5% is slightly lower than the value of 2014 and in line with forecasts in the annual report of Burger King.

In addition to the increase in the number of franchises, a volume increase in franchise revenues of 0,5% was applied for each individual franchise restaurant as well as the proprietary company restaurants[61]. Appendix 9 summarizes the sales forecasts for 2014 until 2018 and depicts all individual forecasts that were contributing to the overall calculation. Based on the previous years and the interview results with Tim Brueggemann, Vice President at Burger King, operating expenses are further reduced by annually 5%. However, in order to get more cautious and slightly more conservative results, this was only applied for the years 2014 and 2015, whereas expenses are assumed to stay constant between 2016 and 2018. Applying the previously mentioned assumptions with the forecasts for depreciation[62], interests[63] and taxes[64], results in a net income of $316,4 million in 2014. The complete forecasts of Burger King's P&L are depicted in Figure 1.

P&L - Burger King Worldwide (in $ million)

		2013A	2014F	2015F	2016F	2017F	2018F
	Revenue	**1.146,3**	**1.200,1**	**1.240,4**	**1.282,4**	**1.325,9**	**1.371,2**
	Franchise and property revenues	923,6	976,3	1.015,5	1.056,3	1.098,7	1.142,9
	YoY	15%	5,70%	4,02%	4,02%	4,02%	4,02%
	Company restaurant revenues	222,7	223,8	224,9	226,1	227,2	228,3
	YoY	-0,8	0,50%	0,50%	0,50%	0,50%	0,50%
-	Operating expenses	558	**530,4**	**503,9**	**503,9**	**503,9**	**503,9**
=	**Income from operations(EBITDA)**	**588,0**	**669,7**	**736,6**	**778,5**	**822,1**	**867,3**
	Operating margin	*51,3%*	*55,8%*	*59,4%*	*60,7%*	*62,0%*	*63,3%*
-	*Depreciation*	65,8	68,9	71,3	73,6	76,1	78,7
	EBIT	**522,2**	**600,8**	**665,3**	**704,9**	**745,9**	**788,6**
-	Interest expenses, net	200	179	179	179	179	179
-	Loss on early extinguishment of debt	0	0	0	0	0	0
=	**Income before income taxes (EBT)**	**322,2**	**421,9**	**486,4**	**525,9**	**567,0**	**609,7**
-	Taxes	89	105	122	131	142	152
	Tax Rate on EBT	27%	25%	25%	25%	25%	25%
=	**Net Income**	**233,7**	**316,4**	**364,8**	**394,5**	**425,3**	**457,3**

Source: Annual report 2013, Bloomberg 2015, Own calculations

Figure 1: Profit & Loss statement of Burger King Worldwide based on own calculations

The cost of debt is always a very critical factor in LBOs. In general, a high proportion of generated cash flows is used to pay back debt, which suggests that another valuation could be more appropriate, as for instance the Adjusted Present Value method (APV). The APV method first discounts the unlevered cash flows with the unlevered cost of capital and second discounts the interest tax shield of each year respectively with a different cost of debt, whereas the discount rate is usually lower in the last years of the explicit period. Yet, when looking at the

[61] This is attributable to the "comparable sales increase" in existing restaurants, mainly attributable to improved marketing efforts and optimized menu offering.

[62] The rationales for the other forecasts are as follows, starting with *Depreciation*: (Damodaran 2012) suggests to calculate depreciation based on the percentage of depreciation to sales in the previous year, hence the year 2013 and for example not the average of five years since depreciations are less affected by fluctuations.

[63] With the debt level at the end of 2013, a cost of debt of 6,11% was calculated (weighted average of the current outstanding debt in 2013 yields an average interest rate of 6,11%), This is also in line with the high yield bond that has been issued in 2014 (Terms on the B-/Caa1 transaction were finalized at 6%) (http://www.highyieldbond.com/burger-king-2-25b-7-5-year-high-yield-bonds-b-caa1-price-to-yield-6/).

[64] The assumed tax rate is 25%, which is fairly in line with the tax rate in 2012 and 2013. Because of internationally dispersed operations the tax rate is slightly below the US-tax rate.

last financial years at Burger King (2010 until 2013), illustrated in Appendix 11, one can see that there were no major extraordinary debt repayments and that the debt level is relatively stable (in absolute terms). This is why in this case, APV was considered as a possible valuation method but in the end given the mentioned rationales not chosen as a valuation method.

Moreover, in order to run the DCF valuation, CAPEX and changes in NWC[65] were forecasted. As a benchmark for future investments, the ratio of *CAPEX/Sales* in 2013, which equals 2,22% is applied to the future year[66]. Finally, a weighted cost of capital of 6,29% was used to discount the respective free cash flows, yielding an enterprise value of $12.647 million. It is important to note that a high proportion, approximately 81%, of the EV is constituted of the terminal value. The calculation of the WACC is depicted in the aforementioned Appendix 10, whereas the DCF valuation is shown in Figure 2.

DCF - valuation (in $ million)

		2013A	2014F	2015F	2016F	2017F	2018F	TV
	EBIT	**522,2**	**601**	**665**	**705**	**746**	**789**	
-	Tax on EBIT (T x EBIT)	131	150	166	176	186	197	
=	**NOPLAT**	**392**	**451**	**499**	**529**	**559**	**591**	
+	Depreciation	66	**69**	**71**	**74**	**76**	**79**	
-	d Investment in Working Capital	-93	6	5	5	5	5	
-	Capital Expenditures	26	27	28	29	29	31	
=	**Free Cash Flow From Operations**	**525**	**487**	**538**	**569**	**601**	**635**	
+	Cash Flow from Investing activities	43	0	0	0	0	0	
=	**Free Cash Flow To The Firm**	**482**	**487**	**538**	**569**	**601**	**635**	**13.973**
	PV FCFF		**458**	**476**	**474**	**471**	**468**	
	PV Terminal value		**10.300**	Percentage of EV:		81%		
	Enterprise Value		**12.647**					

Figure 2: DCF valuation methhod results of Burger King, based on own calculations.

5.1.3 Market capitalization approach

A first indication for positive returns is visible when comparing Burger King's enterprise value, based on market capitalization and total debt. It is thereby apparent that Burger King's enterprise value significantly increased from the end of 2010, a few months after the acquisition, to December 31st 2013. According to this data, the enterprise value increased by more than 3,5 times to around $10,3 billion. This enterprise value is composed of the market capitalization of $8.050 million in addition to the total debt of $3.037 million, subtracted by cash & equivalents in the amount of $787 million. The development of market capitalization and total debt between 2009 and 2013 is depicted in Appendix 11[67].

[65] As no reliable data about working capital levels are available, the increase in working capital as a percentage of increase in revenue is used (from the year 2013). This is fairly in line with Damodaran (2012) who suggests to look at the peer group average for increase in working capital as a percentage of increase in revenue.
[66] CAPEX were significantly reduced mainly due to the "global refranchising initiative" (Burger King Annual Report 2013).
[67] Note that there is no available public information for market capitalization at the end of 2010 and 2011, as the company was taken private by 3G Capital.

The enterprise value of around $10.305 million, which was calculated using market capitalization and net debt was ultimately used to calculate internal rate of return. Compared to the other two methods, it seems to be the most appropriate approach as it is specific to Burger King and not dependent on a variety of assumptions. The multiple valuation method for instance is based on competitor's valuations and includes many other factors that are neither specific to Burger King, nor to a buyout context. In turn, the DCF valuation depends on many different assumptions that highly vary according to the analysts partly subjective assessment. Additionally, the DCF method values the equity based on future cash flows, which may overstate the value creation until a specific date. The DCF might therefore be more relevant in an attempt to calculate and decompose the IRR before the completion of a deal for instance in order to forecast value creation in the acquisition stage of a deal.

5.1.4 Calculation of the IRR

In order to calculate the IRR, equity value at the point of exit is needed, which is previously defined to be December 31st 2013. Besides, the derived the free cash flows that were available during the holding period and distributed through dividends and debt repayments, are included. It is important, to also include these cash flows to the equity holders, since according to Damodaran (2012), we cannot only use the entry and exit equity value to derive the correct IRR. Besides, the IRR is calculated on a cross-basis without accounting for fees that were charged by the management of 3G Capital.

The IRR is then calculated on the basis of three components. Firstly, the initial equity investment of $1.200 million on December 31st, 2010. Secondly, cash flows accrued to equity holders through dividend payments of around $393, $14 and $84 million respectively at the end of 2011, 2012 and 2013. Thirdly, the previously derived equity value of $8.050,42 million, at the point of exit on December 31st, 2013. Finally, based on these cash flows, an *Internal Rate of Return* (IRR) of 113,18% is calculated[68].

5.2 Analysis and composition of direct drivers

As formerly mentioned, one big advantage of the model provided by Achleitner et al. (2010) is the intuitive application. Thereafter, we can assess value creation in the acquisition of Burger King, by breaking down the Internal Rate of Return of 101,91%, into different levers.

[68] Note that if we wrongly had ignored the cash flows that were distributed to investors during the holding period, the IRR would have been substantially lower (88,60%).

5.2.1 The effect of leverage

In order to derive the value that can be attributable to leverage, the value of the unlevered firm was calculated. This was done with the unlevered IRR of 70,23%, which was derived, using the previously introduced formula in the methodology part[69]. Applying the IRR of 70,23% as yearly growth on the initial investment of $1.200 million, during the respective holding period, results in an equity value of the unlevered firm of $5.919,58 million. Subtracting the previously derived value from the exit equity value of the levered firm ($8.050,42 million) delivers the effect that is attributable to leverage, which is equal to $2.130,84 million in value increase. Most likely, value through leverage is to a large part attributable to the PE firm and therefore extrinsic to Burger King. It is unlikely that Burger King would have issued a similar proportion of debt without the influence and control of a financial sponsor. Moreover, it is possible that Burger King, through the help of 3G Capital, was able to reduce the capital cost of debt, since 3G Capital is most likely a "repeat player" on debt markets (Berg & Gottschalg 2005). The effect of leverage is visible through tax savings during the holding period and depends on the relation of debt to equity that is maintained during this period[70]. Yet, it is also largely dependent on the initial financing structure, which is set during the acquisition phase.

5.2.2 The multiple effect

Going forward, the marginal creation of value will be examined that is attributable to all other drivers except leverage. It is important to note that the value explained by the following drivers, is in total slightly higher than the value of the unlevered firm of $5.919,58 million, as we also have to add up the dividends that have been paid out before the exit date. Adding the sum of dividends, which have been paid out during the holding period ($491,7 million), yields an overall value of gross cash flow through non financial levers of $6.411,28 million.

As the exit multiple is not known, it had to be calculated by dividing the enterprise value at the exit date (m$8.169,68), which is comprised of the sum of the unlevered equity value at exit (m$5.919,58) and net debt (m$2.250,1), with the EBITDA at the point of exit. The difference of the resulting exit EV/EBITDA multiple (13,89) and the entry EV/EBITDA multiple (8,53)

[69] Note that we calculated the unlevered IRR using the debt/equity ratio at the divestment point instead of an average during the holding period. This is done since market capitalization is not applicable for the years 2010 and 2011. Moreover, note that we calculated the unlevered IRR from the basis of the levered IRR that does only include the entry and exit equity values. Since we are interested in calculating the value of the unlevered firm, with help of the IRR, we are not including past cash flows that were already distributed to investors.

[70] Private equity firms usually do not keep the capital structure of portfolio firms constant. The capital structure is generally dynamic as explained in Fischer et al. (1989).

is then multiplied with the EBITDA value at the point of entry (m$444,6). The calculation yields $2.384,28 million, the marginal increase of value through the multiple effect.

Since the Burger King deal has in reality not yet reached the divestment stage, the used EV/EBITDA multiple was calculated based on the unlevered equity value. When using the market capitalization approach, to determine the firm value of Burger King, the increased multiple might therefore in parts be explainable through investors expectations on future performance, i.e. higher future cash flows. This can be extrinsic to the controlling stake of 3G Capital, whereas investors have positive expectations in the future prospects of Burger King as a portfolio company of 3G Capital. In accordance with Berg & Gottschalg (2005), the multiple is likely to be positively affected by improved operating performance[71]. Increasing Burger King's EBITDA from $444,6 million in 2010 to $558,0 million in 2013, might have therefore had a positive effect on increasing the multiple, next to other reasons, as for instance improvement in public market valuations in the fast food industry. Other explaining factors from the Berg & Gottschalg (2005) framework that influence the multiple effect, as private information, are likely to play a minor role, since they are more relevant in MBOs.

Superior market information and deal-making capabilities could also have played a role, as 3G Capital possesses a strong network around the world[72] and usually directly approaches its targets, thereby surpassing structured bidding processes that involves more competition due to multiple bidders, which usually drives up the price that the acquirer pays (Barney 1988). Thereby they potentially pay a smaller multiple at entry or detect an undervaluation, thus creating value already during the acquisition phase. Finally, the optimization of corporate scope most likely played a role in increasing the multiple that would have been reached through a divestment at the end of December 2013. By selling off assets, which are potentially undervalued, as for instance, Burger King's action of selling 1.292 company-owned restaurants between 2010 and 2013, might not only have freed cash flows, but also increased the average value of assets (Berg & Gottschalg 2005).

All of the aforementioned causes for the multiple effect are extrinsic to the private equity firm (Cf. Berg & Gottschalg). Most of these causes are likely to have appeared during the acquisition and divestment phase, whereas the optimization of corporate scope appeared during the holding period. Moreover, it is suggested that the multiple effect in the Burger King example is closely

[71] Compare this also to Achleitner et al. (2011), who found that higher sales are positively contributing to higher exit multiples.
[72] Interview: Tim Brueggemann (2015).

related to the operational improvement that has been taken place during the holding period as well as the future expected improvements in EBITDA and cash flows that are anticipated.

5.2.3 The effect of operational improvement

The two main drivers of operational improvement are the effect of EBITDA enhancement and the cash flow effect. First, the result of the EBITDA improvement effect is $1.223,38 million, which solely reflects the changes in EBITDA within the three years of the holding period. Within this time, the EBITDA increased by 32,25% from m$444,6 at the end of 2010 to m$588 in December 2013[73]. The EBITDA effect can further be broken down into the effect of sales improvement, margin improvement and a correction factor. Appendix 12 summarizes the results comprehensively. Given the change in the Burger King business model that included selling most of the proprietary restaurants, sales were constantly decreasing within the considered time frame. Hence, the growth in EBITDA was only generated through margin expansion, with at the same time a significant decline on the top-line. Therefore, the overall development in sales theoretically contributed negatively towards the overall EBITDA effect. Thus, the correction factor of around $3.878 million accounts for simultaneous changes in both drivers (negative sales growth and improved EBITDA margin). Breaking down the sales development in *franchise and property revenues* and *company restaurant revenues* helps to understand the dynamics behind the decrease in sales and to make implications about future developments. Contrariwise to the declining revenues through company restaurants, franchise and property revenues were constantly growing, on average at 11,8% during the holding period. As by the end of 2013 all restaurants were sold[74], going forward the EBITDA effect is expected to be considerably stronger, as top-line growth is added next to the further likely margin improvements. It cannot be ruled out that parts of these future improvements are already factored into the multiple effect, as previously discussed.

Additionally, the cash flow effect, leads to an absolute value increase of $834,6 million. This effect is composed of the dividend payouts during the holding period (m$491,7) and the reduction in net debt of $342,9 million between the entry and the exit point. The reduction in net debt is often also known as de-leverage effect. The cash flow effect measures the cash flows that were generated throughout the holding period (Capital Dynamics & Achleitner 2009). In this case cash both debt repayments and dividend payments were considered for the cash flow effect. Lastly, as suggested in the Achleitner et al. (2010) framework, a combination effect of

[73] The effect is calculated by multiplying the difference of m$588 and m$444,6 by the entry multiple (8,53).
[74] Except of the 52 restaurants in Florida that are kept as company owned restaurants

$769,02 million is added, which measures simultaneous changes in EBITDA and multiple during the holding period.

Comparing the different levers of the operational improvement effect, with the framework provided by Berg & Gottschalg (2005) it appears as on the one extreme the margin improvements are rather related to *increasing operational effectiveness,* whereas on the other extreme the decline in sales is related to *increasing strategic distinctiveness* in Berg & Gottschalg (2005). The cash flow effect, is also strongly related to the *reducing capital requirements* lever, which is a sub-lever of *increasing operational effectiveness*, in the given Berg & Gottschalg (2005) framework. However, given the strong influence of EBITDA towards free cash flow it remains questionable if the Achleitner et al. (2005) model accounts for this lever correctly. Therefore this paper suggests an alternative method to derive the impact of the cash flow effect. Two approaches might be feasible to only regard the capital requirements elements and ignoring operating profits, in the cash flow effect. As depicted in Appendix 13, two methods are suggested, one forward looking and one backwards looking method. The first method that accounts for the past perspective adds up the sum of free cash flows that are attributable to depreciation, NWC and CAPEX. It functions similar as the method proposed by Capital Dynamics & Achleitner (2009), but the hereby proposed method ignores the effect of operating profits, which result in a much smaller cash flow effect[75]. Using this method, the absolute impact of the cash flow effect would be only $256 million. The second proposed method, forecasts depreciation, NWC and CAPEX and calculates the enterprise value, only based on these three elements. Discounting with the appropriate cost of capital leads to an enterprise value of approximately $198 million, which is attributable to the impact of the cash flow effect or *changes in capital requirements*.

5.2.4 Relative importance of value drivers

Consequently, it is useful to look at the absolute effect of value creation and the relative effects of the different value drivers. Achleitner et al. (2010) present their results with the help of the *money multiplier*[76], which is defined as the "ratio of all positive and negative cash proceeds"

[75] Note that the previous calculation included all dividend payments and the final reduction in net debt. In theory, this should equal the free cash flow available to the firm, during the holding period. However, since not all free cash flows to the equity are directly distributed to the shareholders, and for instance in 2011 the dividend payment was higher than the generated free cash flows to the equity, the sum of the free cash flows is different from the sum of payments to shareholders and principal payments and debt push downs to creditors. For the former calculation of the free cash flow effect, this paper used the sum of dividends and reduction in net debt, as suggested in Capital Dynamics & Achleitner et al. (2009).

[76] Acharya et al. (2012) define this as the "cash-in/cash-out multiple".

(Achleitner et al. 2014, p. 430). Applying the money multiplier to each of the individual drivers, shows the contribution of value as depicted in Figure 3.

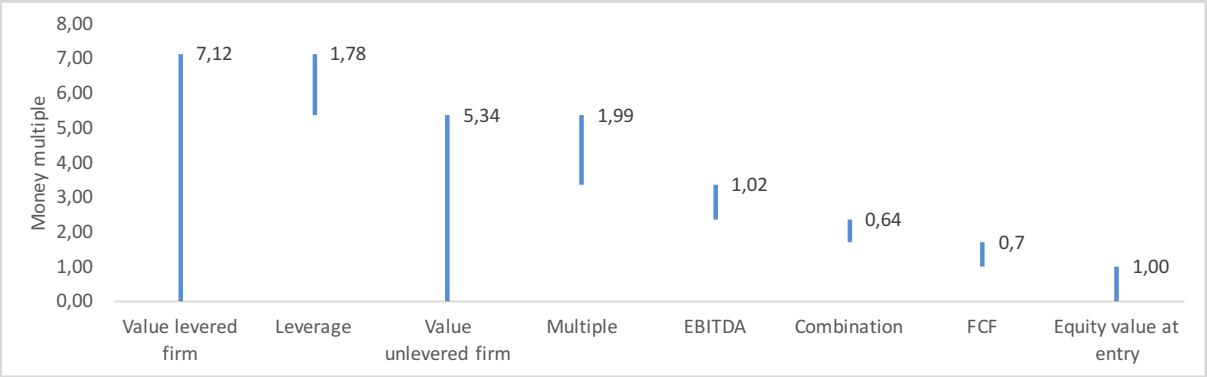


Figure 3: Money multiple contribution of each value driver, including entry equity value

Moreover, since we are interested in the overall value increase, or the net cash flow, without the initial investment, overall *times money*, is calculated by subtracting 1 from the money multiple (Achleitner et al. 2010). The money multiple[77] is the ratio of positive cash flows to the initial investment[78]. The overall *times money multiple* of 6,12 can furthermore be fully explained by the individual measures. Dividing each individual money multiplier by the overall times money, uncovers the relative effect of each individual driver. Figure 4 illustrates the relative percentage contribution of each driver.

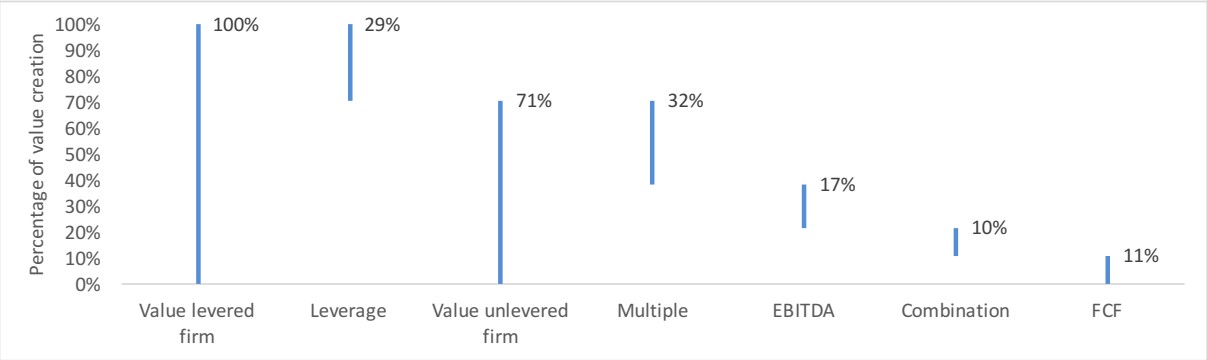


Figure 4 Composition of IRR: Different percentage contribution of value drivers

Finally, the previous approach was applied to Burger King's biggest competitor, the McDonald's Corporation. The publicly available market capitalization was used for the respective holding period of Burger King. The respective IRR for McDonald's shareholders

[77] Multiplying the initial investment by the money multiple yields the overall cash proceeds.
[78] Note that cash proceeds include the exit value as well as formerly distributed cash flows. If further investments are made during the holding period a better definition of the money multiple might be "the ratio of all positive to negative cash proceeds" (Achleitner & Figge 2014, p. 430).

equals 5,92%, without dividend payments[79]. The most striking result of the analyzed data is not only the substantially smaller IRR, but also the composition of individual drivers that constitute the returns. Appendix 14 presents and compares the breakdown of value drivers for McDonald's and Burger King according to the money multiple. These results suggest that the EBITDA effect was the only relevant effect for the public peer, which was on a relative basis still lower than Burger King's improvement in EBITDA[80].

[79] Whereas the same tax rate and cost of debt was assumed. McDonald's cost of debt is expected to be less, amongst others due to the lower leverage ratio.
[80] Burger King's EBITDA increased by approximately 32% between 2010 and 2013 whereas McDonald's only increased EBITDA by 18% in the respective period.

6 Qualitative Analysis of indirect drivers

The formerly analyzed drivers have shown that the Burger King buyout has created a remarkable amount of value. However, it remains questionable why Burger King was only able to take advantage of these drivers in the context of the acquisition of 3G Capital. Would they also have been able to pull the aforementioned drivers on a stand-alone basis? As many of the elements of the value drivers are extrinsic to Burger King, it seems as this question can be answered with: rather not, at least not in the amount that has been shown[81]. In the following we will analyze the indirect or secondary drivers that will partly explain why value generation is different in the context of leveraged buyouts Berg & Gottschalg (2005).

6.1 Corporate governance

In line with incentives, corporate governance is one of the most frequently mentioned indirect drivers in academia. Both indirect drivers are frequently associated to the agency problem and are possible solutions to reduce agency costs (Berg & Gottschalg 2005). The Aguilera & Jackson (2003) corporate governance framework is in this case especially suitable as it views corporate governance from the perspective of the three most important stakeholder groups in the Burger King buyout, namely capital providers (shareholders as well as creditors), management and employees. By using the Aguilera & Jackson (2003) framework, which is depicted in Appendix 5, it is dispensable to analyze other secondary value drivers as (iii) leverage as a form of controlling managerial behavior and (iv) culture and form of communication separately, since they are already indirectly included in the corporate governance framework.

The capital perspective of corporate governance, views the capital structure, interests of capital and the maturity of capital. The capital structure in the Burger King deal changed significantly during the holding period. Whilst 3G Capital's initial investment was financed by approximately 70% debt, the total debt ratio was strongly decreasing to around 29% at the divestment stage[82]. Creditors, who are assumed to be risk averse, generally receive a steady income through interest rates, but do not have control rights in the firm. Control rights for creditors usually only come into play when the company is not able to pay its debt or expulses against certain covenants (Aguilera & Jackson (2003). As Burger King seemingly did not violate any of these terms, the control right remained at the side of the equity investors, which

[81] Whereas it is acknowledged that a certain fraction of value generation would and could have appeared without being acquired by 3G Capital.
[82] The net debt to EV ratio was even lower with approximately 22%.

are mainly represented by 3G Capital. The increased debt ratios, especially during the beginning of the holding period, might have in line with (Jensen 1986) further reduced the flexibility of management, due to the pressure of serving payments to debt-holders. This in turn is likely to have an efficiency increasing effect on the operational results of Burger King[83]. Looking at the concentration of equity ownership (La Porta et al. 1999) of Burger King it gets apparent that ownership is very concentrated[84]. Whereas 3G Capital owned around 70% of the stock's at the end of 2013, a large proportion of the remaining fraction belongs to people that are associated with 3G Capital[85], as for instance the hedge fund Pershing Square Capital Management founded by Bill Ackman, which owns around 10% of the outstanding equity[86]. In the annual report 2013, Burger King states that "the concentration of ownership by 3G Capital may prevent other shareholders from influencing significant corporate decisions"[87]. In contrast to other public firms where ownership is usually rather fragmented, concentrated ownership leads to higher influence of shareholders on management (Aguilera & Jackson 2003). Moreover, comparing financial versus strategic interests of capital (Aguilera & Jackson (2003), it is likely that 3G Capital on the one extreme has financial interests but on the other extreme also possesses strategic interests. The strategic interests as for instance the assurance of control rights, might thereby be a method to serve the financial interests, which is most likely the achievement of a high IRR. Lastly, regarding the maturity, 3G Capital's capital can be regarded as committed, not only due to the high stake of ownership, but also given their long-term investment strategy.

The second perspective on corporate governance is focused on labor, and analyzes the degree of employee influence as well as employee retention at Burger King. The degree of employee's influence is defined as the "ability to influence corporate decision making and to control firm's resources". The principle of the 3G Capital governance system and culture is build around participation. Since the take over, every employee within the corporate headquarter possesses great responsibility, whereas roles are usually not double occupied. Besides, each department and employee is responsible for sticking to its own budgets. This allows each employee to participate in the overall company goals and to have a direct impact. Moreover, due to the open office culture, every employee has theoretically access to the top management and can raise new ideas or potential for improvement. The flat hierarchy level might even be compared to a

[83] This reflects the indirect driver: Leverage as a form of controlling managerial behavior.
[84] 3G Capital owns approximately 70% of the equity.
[85] Interview: Tim Brueggemann (2015).
[86] TheStreet (2014): http://www.thestreet.com/story/12856055/1/how-burger-kings-brilliant-brazilian-billionaire-turned-12b-into-22b.html.
[87] Burger King: Annual report (2013).

"Start-Up feeling"[88]. This way employees at Burger King can influence corporate decision making. Yet, employee influence and liberty are only given as long as employees perform according to their targets. When they reach their proprietary KPIs, control only plays a minor role. However, if these goals are not reached, the environment might also get tougher and subject to stricter external control[89]. The fact that employees in the Burger King headquarter are usually trained as generalists, possibly negatively contributes towards employee retention, as employees might also be able to leverage their skill set in other firms. Yet, employee retention is partially secured by the given bonus structure and compensation scheme. Since a significant portion of the salary is variable and paid out at the end of the year, employees have strong incentives to stay at least until the end of the year[90]. This will further be discussed in the next section that deals with incentives. Furthermore, due to the direct responsibilities and accountability for tasks, employees also have a virtual stake in the firm, which is firm specific and fosters employee retention (Aguilera & Jackson 2003).

Thirdly, corporate governance is viewed from the management perspective. The management works in close cooperation with 3G Capital, and many of Burger King's top executives have formerly worked for either 3G Capital directly or firms that are associated with the firm. Burger King's CEO for example, Daniel Schwartz, is next to his CEO position at Burger King also a director at 3G Capital[91]. Due to these links, agency conflicts are automatically minimized, as management and shareholders are both working for the same firm. Comparing autonomy versus commitment, we can say that management is very committed to 3G Capital, whereas the relationship towards employees shows mixed results. Due to the less hierarchical culture, the relationship is rather committed, yet, regarding personal decisions, management can act very autonomous, especially in the beginning of the holding period, where overall FTE headcount was reduced from around 800 to nowadays around 300 people in the corporate headquarter in Miami[92]. Moreover, looking at the orientation of managers from the Aguilera & Jackson (2003) model, it is clear that Burger King management is strongly working financially oriented. Even though the functional area is also important, all types of management jobs, but also less senior positions are linked to financial metrics. In this sense Burger King is rather organized as a Start-Up, instead of a globally operating fast-food giant[93]. Rather than specializing on tasks, jobs are

[88] Interview: Tim Brueggemann (2015).
[89] Interview: Tim Brueggemann (2015).
[90] Interview: Tim Brueggemann (2015).
[91] Burger King: Annual Report (2013).
[92] Interview: Tim Brueggemann (2015).
[93] Bloomberg (2014): http://www.bloomberg.com/news/articles/2014-07-24/burger-king-is-run-by-children.

frequently rotated, which helps to question old patterns and steadily improve things. Next to the strong learning curve for young managers, this also comes with the downside that errors are committed. The culture of Burger King also allows these errors, yet it is expected that young managers learn fast and not commit the same error for a second time[94].

6.2 Incentives

An important part of the 3G Capital management culture is the component of variable pay. A known Brazilian businessman and former billionaire Eike Batista, noted in an interview in 2012 that the management style of 3G Capital's founding partner Jorge Lemann is unique as "he motivated employees by letting them share the profits –aggressive, but that leads to results"[95]. Assuming that incentives are an element of overall corporate governance (Cf. Cornelli et al. 2013) and applying the former corporate governance framework from Aguilera & Jackson (2003), incentives appear several times in the context of the corporate governance equation. Each employee at Burger King[96], gets a substantial amount of his salary as a performance based variable part that is paid at the end of the year in the form of a bonus. The percentage share depends on the level of seniority and can reach from around 15% on the analyst level to up to 100-200% at the top management level. Middle management positions as "Manager", "Director" and "Vice President" receive up to respectively 30%, 40% and 70%, as a variable fraction in addition to their base salary[97].

Firstly, as an element of the stewardship ship theory, financial incentives might provide a certain degree of autonomy to managers. In relation to the financial orientation of managers, this might facilitate to sometimes "make tough decisions", for instance regarding personnel matters (Aguilera & Jackson 2003, p. 457). In the Burger King context, new managers that entered Burger King in the post-acquisition phase were likely less committed and attached to employees, as they were not "dependent on firm-specific relationships" (Aguilera & Jackson 2003, p. 458). Since monetary incentives are attached to corporate global goals, they might facilitate making unpopular decisions in order to stick to the budget. On this note, the given bonus structure is strongly related to the financial orientation of managers. Through the application of "management by objectives", each person is evaluated according to around 10 different *Key Performance Indicators* (KPIs), which are very specific to the respective area and

[94] Interview: Tim Brueggemann (2015).
[95] http://www.businessinsider.com/3g-capital-jorge-lemann-2015-8.
[96] The information is specific to employees in the corporate headquarter in Miami. It is likely that the compensation does not apply for support functions in the HQ as well as restaurant personnel.
[97] Interview: Tim Brueggemann (2015).

role of the job. These KPIs are tremendously important for the bonus payment, as the compliance to reaching these objectives in the end defines the amount of bonus that is paid out. In turn, there are so called global targets, whereas each individual contributes, by reaching his or her individual KPIs. This way, each individual accounts for a valuable piece of the overall value creation puzzle. Therefore, the bonus has a significant motivational effect on everyone in the firm, even on lower management positions[98]. As the bonus is already paid for entry positions as for instance analysts, the former effects do not only apply for management positions, but also include the labor dimension of Aguilera & Jackson's (2003) model. As previously noted it might turn employee retention less portable and more firm specific, as bonuses are usually paid out only once a year.

Lastly, it is worth looking at an element that is not explicitly included in the governance framework of Aguilera & Jackson's (2003), namely the board of directors. Cornelli et al. (2013) investigate boards monitoring activity on CEOs and whether this leads to improved performance. The authors regard incentivizing and monitoring of management, as the main tasks of the board[99]. By having a majority stake in the portfolio company, thereby actively controlling the board, and having access to soft information about board performance and being able to leverage that information, is likely to be an important factor in the context of 3G Capital's acquisition of Burger King.

[98] Interview: Tim Brueggemann (2015).
[99] Whereas it shoud not be forgotten that board members at Burger King are also incentivized.

7 Discussion and conclusion

7.1 Value creation in the Burger King buyout

Comparing the generated IRR of the Burger King investment (101,06%) with the typical IRR goal for successful deals of private equity firms, which lie between 40% and 50%, is a first strong indicator for value creation in the Burger King deal. A current empirical study by Lopez-de-Silianes et al. (2015), which analyzes round 7.500 private equity investments worldwide, shows that these claims are in praxis rather wishful thinking, and only represent a minority, since only 1 out of 4 deals achieved an IRR exceeding 50%. Besides, comparing the derived results, with the original model of Achleitner et al. (2010), shows that the created value in the Burger King deal is substantially larger than the average in the respective sample. Whereas the money multiple, adds up to 3,5 in the original study, Burger King already achieved a money multiple of 7,12 during the first three years of the 3G Capital ownership. By going one step further and comparing the generated IRR in the Burger King buyout of 101,06% with the IRR that the McDonald's Corporation (5,92%), Burger King's biggest competitor, achieved in the same time period, further emphasizes the strong financial results that have been achieved at Burger King. There is a strong possibility that these results are different when comparing the IRR and different value levers with a broader peer group[100].

The presented Burger King buyout, is an example for positive value creation and is in line with most authors of the literature review, who claim that private equity investments create value. In this sense, the previously presented numbers, support the initial assumption that the Burger King deal created significant value for its shareholders, and therefore serves as a good example to assess the individual levers that were driving the creation of value[101]. Yet, further research is necessary to fully grasp the creation of value on the level of investors (LPs), who provide capital for private equity funds. An extension of the model provided by Achleitner et al. (2010) that accounts for the fees that are paid to GPs is thereby desirable in future research[102]. The following discussion will further critically discuss the dynamics behind the primary levers and subsequently debate the two most important secondary levers in the Burger King deal.

[100] Future research in this field is desirable, that possibly accounts for a larger set/sample of competitors.
[101] This paper does not provide empirical support for the general hypothesis, that private equity creates value. By applying the previously introduced methodology, it is solely shown how value can be assessed and how this can be composed into several drivers.
[102] Note that this is not an easy task, as most private equity firms do not have the obligation nor incentives to fully reveal their encountered fees.

7.2 Discussion of direct drivers

Looking at Figure 3[103], which depicts the composition of the IRR, gives a first indication that value creation in private equity might hardly be explainable through only one driver. Comparing the effect of the value drivers relatively, shows that there is not one driver that explains the absolute majority of created value. In contrast to (Achleitner et al. 2010) who explain 32% by leverage[104], this paper found a slightly lower proportion in the Burger King deal, where the effect of leverage accounts for roughly 29%. Instead, in the example of Burger King, the most dominant driver on a relative basis, is the multiple effect, which accounts for 32,47%. This is 14,47 percentage points higher than in the original model. Surprisingly, the two operational improvement drivers in the previous analysis are both relatively lower, compared to the average findings of the Achleitner et al. (2010) model. Whereas, the original framework found that EBITDA improvements were the second strongest driver, accounting for almost 31%, the case of Burger King explained only around 17% with the enhancement of EBITDA within the three years holding period. To sum up, Figure 5 summarizes the differences between the respective relative value contribution of each driver, between Burger King and the sample average of Achleitner et al. (2010).

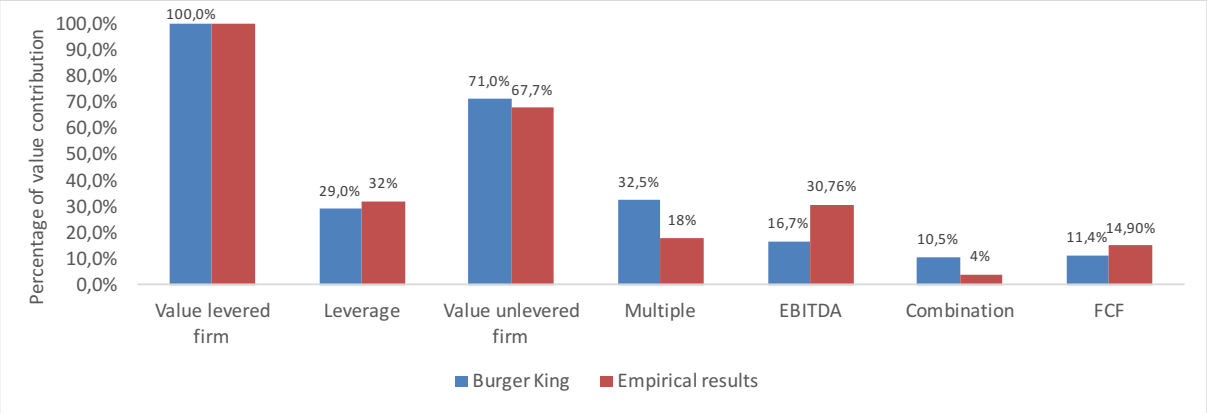


Figure 5: Relative value contribution of value drivers (Burger King vs. Achleitner 2010)

Despite the concerns of some authors, who only regard the improvement in operating performance as a driver of value creation (Bergström et al. 2007), the formerly analyzed case study, gives an indication that the effect of leverage contributed to an increase in equity value and firm value respectively. Controversially to common literature on secondary buyouts (SBO), as for example Achleitner & Figge (2014), who propose that value creation in SBOs is mainly

[103] In chapter 5.2.4 Relative importance of drivers.
[104] Note that leverage accounts for an even larger proportion in large transactions (>100 m€). The relative effect of leverage in comparison to other drivers is approximately 38% of the overall value creation (Capital Dynamics & Achleitner 2009).

driven by leverage, here leverage seems to play an important, yet secondary role, as it accounts for only 29% of the IRR. Furthermore, it is important to note that these results only measure the impact of tax shields on firm value, while neglecting the potential importance that derive from managerial objectives of debt, which lower the flexibility of management and therefore potentially increase the organizational efficiency (Jensen 1986). Even though debt might lead to a more efficient use of cash flows, thereby lowering potential agency costs, the optimal choice of capital[105] might create another potential agency problem, whereas an overly levered capital structure could adversely affect the investors of the fund (LPs). Ignoring the aforementioned factors might pose a possible limitation on the quantitative model. Nevertheless, this paper discusses the behavioral effect in the context of secondary levers as a part of corporate governance. To sum up, it can be referred back to the first proposition and said that leverage is an important direct value driver in the Burger King buyout. The argument, higher interest tax shields are neutralized by higher costs of debt, which some authors pose on leverage (e.g. Long and Ravenscraft (1993) and Samdani, Butler et al. (2001), cited after Loos 2005), can therefore be neglected for the Burger King buyout[106].

On a relative basis, the multiple effect has the strongest impact on value creation. This is partly contradicting the initial expectation that the operational improvement effect has the strongest impact on value creation. However, given the various possible explanations for the multiple effect[107], it is unclear which of the explaining factors have higher weight. Besides, it is likely that the multiple effect already includes future improvements in operating performance. The comparison with McDonald's suggests that the contribution of increased market multiples is rather low, since the multiple effect for Burger King's major competitor only accounts for approximately 1% of value creation. It is therefore likely that as previously supposed, optimized corporate scope and higher future expected cash flows[108] play a major role in explaining the multiple effect. This in turn might pronounce the added value that 3G Capital contributed as a private equity investor[109].

[105] Note that the capital structure is assumed to vary within the holding period of the private equity firm.
[106] This can be related to several factors, as for instance financial engineering skills of 3G Capital, in order to finding the best debt/equity ratio. Or also favorable terms and conditions that PE firms receive on the debt market as they are repeat buyers (Berg & Gottschalg 2005).
[107] As depicted in Appendix 4, i.e. *market valuation*, *deal-making capabilities*, *optimized corporate scope*, etc.
[108] Cf. Achleitner et al. (2010, p. 21) who propose that "the higher multiple at exit could be an indication oft he improved future prospects fort he company".
[109] It has to be noted that the former analysis does not show that the multiple effect is significantly higher in private equity investments compared to public firms (due to the simple comparison with McDonald's).

Moreover, it is suggested that future research splits the multiple effect into extrinsic and intrinsic factors. Extrinsic factors are according to the definition of Berg & Gottschalg (2005) attributable to the influence of the PE firm, whereas intrinsic factors would have also appeared in the firm, without the investment of the buyout firm. Changes in market valuations are for instance intrinsic, as they would have also appeared without the active participation of the private equity firm[110]. A suggested modification to the Achleitner et al. (2010) model is to calculate a second version of the multiple effect, using the multiple of the peer group[111]. On the one hand, the difference of the EV increase from the unlevered Burger King multiple (13,86) to the unlevered peer group or competitor multiple (McDonald's: 10,34) is then illustrating the value that is attributable to specific skills or competences of Burger King and 3G Capital. On the other hand, applying the unlevered peer group multiple, depicts the part of the multiple effect that it is attributable to changes in market multiples. Applying these changes might turn the quantitative model into a better forecast model instead of "only" analyzing past performance. When applying this amendment, 33,75% of the multiple effect are attributable to changes in market valuation, whereas 66,25% are subject to all other changes, as illustrated in Appendix 15[112]. Increased future prospects of Burger King seem to be the strongest factors for the higher multiple of Burger King. Yet, future research is necessary to verify these hypotheses[113].

Henceforth, this paper views the multiple effect as a direct driver, since the improvements do not seem to be purely luck but in parts are attributable to skill and competence of the private equity firm. Consequently, Proposition 2 can be confirmed as the multiple effect generates value. An extension to the model of Berg & Gottschalk (2005) is the suggestion that financial arbitrage (the multiple effect) can be in parts regarded as a value creating driver. Thereby the question if financial arbitrage should be denoted as value capturing or creating is subject to individual definition, whereas the contextualization of Berg & Gottschalg (2005) that the multiple effect does not directly increase the financial results of a firm, is acknowledged[114].

---

[110] A synonymous but reverse argumentation would be that a change in market valuation is an exogenous factors, whereas an optimized corporate scope is endogenous and subject to the skill and know-how in the portfolio company, that has probably partially been transferred from the buyout firm.

[111] It hast o be taken into account, that this also has to be the unlevered EV/EBITDA multiple. In the McDonald example the EV/EBITDA multiple is 10,34 for the unlevered firm and 13,53 for the levered firm.

[112] Here the market multiple is only calculated by taking the unlevered EV/EBITDA multiple of McDonald's. Further improvements of this suggestion should rather consider a wider peer group.

[113] This is for instance feasible when applying the Achleitner et al. (2010) model to the whole peer group. Comparing these results to Burger King might present more representative results.

[114] For instance, in opposition to the operational improvement effect.

Comparing the operational improvement effect of Burger King to the empirical results, derived by Achleitner et al. (2010) showed that operational improvement was relatively smaller in the Burger King deal, whereas it strongly exceeded the average empirical results of the study, as depicted in Appendix 16. Besides, the results were compared to Burger King's strongest competitor, McDonald's, where both operational improvement effects, were lower in terms of money multiple as depicted in Appendix 14. The comparison with McDonald's supports the results of Cressy et al. (2007), who found that "operating profitability of companies backed by PE firms was greater than that of comparable non-buyout companies" (Cressy et al. 2007, p.19). The authors also found that industry specialization is a differential factor in private equity investments that constitutes a competitive advantage. 3G Capital's sector expertise in the food & beverage industry, as well as it's focus on *operational excellence*[115] can be a possible explanation for a competitive advantage that constitutes the superior results compared to other transactions (Cf. Cressy et al. 2007).

Both, the comparison with McDonald's as well as benchmarking the operating profitability results with the empirical results of Achleitner et al. (2010), indicate that the operational results at Burger King are not random and attributable to certain skills or capabilities that 3G Capital transferred to the firm. Based on the indirect drivers that support the direct ones, this thesis qualitatively showed that these results are to a certain degree attributable to the participation and support of 3G Capital. Therefore, it can be concluded that the results seem to be extrinsic to Burger King (cf. Berg & Gottschalg 2005). Moreover, Loos (2005, p.20) defines support from the private equity investor as improving "resource efficiency" or "resource redeployment". By contributing knowledge and expertise, 3G Capital contributed to the positive development of it's portfolio company. Yet, only based on the Burger King example and comparing it to one competitor and other PE transactions it cannot be statistically proven that the superior results are only attributable to 3G Capital[116]. In order to make a more accurate statement, future research might address the operational improvement approach of 3G Capital, by analyzing a broader set of portfolio companies and comparing them respectively with their peer group.

Opposed to the findings of Bonini (2012), who provide statistical evidence that SBOs do not significantly improve operational performance, this paper showed that the Burger King deal

[115] 3G Capital (2015): Company website.
[116] The qualitative analysis of Burger King before the buyout suggest that Burger King did not possess any sustainable competitive advantage over it's competitors.

generated substantial amount of value through operational improvement and other levers that are not related to leverage. Therefore Proposition 3: Value is created through improved operations is confirmed, through both EBITDA improvements and the cash flow effect, whereas EBITDA improvements are solely achieved through an enhanced EBITDA margin. Although, future enhancements through revenue are likely, so far in the considered holding period, sales were declining and therefore not positively contributing to value creation. In turn, the cash flow effect also contributed to operational value creation, first of all through dividend payments and second of all through debt repayments. These debt repayments do not increase the enterprise value, but rather increase the relative weight of equity. Since the cash flow is derived and dependent from different factors as EBITDA, working capital, CAPEX and also tax and interest payments, the effect measured through the Achleitner et al. (2010) model can not purely be attributable to improved asset utilization and is therefore not mutually exclusive to other factors. In the ideal case it would only include changes to the FCF, after the EBITDA in the Profit & Loss (P&L) statement. To correctly measure the effect that was previously described in the literature review it should in theory only rely on asset related measures as changes in working capital, depreciation and CAPEX. Therefore, this paper proposed two alternative ways to measure the cash flow effect. Further research might account for the applicability and validity of these two alternatives.

Another interesting field for future research is the analysis of the investment strategy of 3G Capital, which would have extended the scope of this paper. It is thereby interesting to investigate if 3G Capital with the follow-up acquisition of Tim Horton's intended to pursue a so-called "buy-and-build" strategy (Cf. Loos 2005). After analyzing the Burger King deal it is assumed that the long-term approach of 3G Capital includes future acquisitions[117]. These acquisitions enable the realization of synergies after improvements through first further cost reductions and second organic top-line growth are already utilized and not able to provide the demanded future improvements on a stand-alone basis[118].

Finally, once more it has to be stressed that the aforementioned different drivers are not mutually exclusive, but rather interrelated. Since this paper only analyzes the first three years of 3G Capital's involvement at Burger King it is very likely that the whole operational

[117] Future research might address this approach and analyze it from a strategic perspective. My assumption is that 3G Capital is optimizing its portfolio companies first internally and as further improvements are not feasible anymore, they continue buying related firms, in order to improving the new company and to aim for synergies.
[118] Note that the acquisition of Heinz provides a similar pattern where first costs were reduced, second sales were spurred and third Kraft was acquired and merged with Heinz. A similar strategy is visible at ABInbev which is partly controlled by affiliates of 3G Capital.

improvement potential has not yet been exploited. Therefore, it is likely that the multiple effect already accounts for and anticipates future improvements in EBITDA and cash flows. Moreover, referring back to Jensen (1986) leverage is likely to have a positive behavioral effect on operating performance.

7.3 Discussion of indirect drivers

The two identified main indirect drivers, corporate governance and management incentives, are both important to explain value creation in the Burger King deal. Whereas they are not quantitatively verifiable, their existence is in parts likely to explain the results of the former direct drivers. The analysis of these drivers are consistent with former research, which found that corporate governance and incentives are a possible explanation for success in private equity investments. The fact that shareholders of Burger King are at the same time the ones that are responsible for managing the company, provides strong incentives to aim for maximizing firm value, which is why *Proposition 4: Indirect drivers play a role in explaining value creation in leveraged buyouts*, is supported (Cf. Cornelli & Karakas 2008). Both incentives, as well as corporate governance are thereby relevant to explain value creation. On the one hand since both reduce agency cost. On the other hand, incentives may increase employee motivation and changes in corporate governance may support active board involvement (Cf. Kaplan & Strömberg 2009).

As formerly stated in the literature review, private equity firms often redesign the structure of corporate governance, which may change the dynamics of agency costs (Kaplan 1989b). Since 3G Capital owns more than 70% of the stocks, Burger King is a "controlled company" constituted under the rules of the New York Stock Exchange, which exempts the firm from a variety of corporate governance requirements. Therefore, the majority of the board members does not consist of independent directors. Besides the company does neither have to have a "corporate governance and nominating committee" nor a "compensation committee", which provides more freedom and flexibility to both Burger King's board and management as well as it's controlling shareholder 3G Capital[119]. In accordance with Cornelli & Karakaş (2008) one might therefore question if firms as Burger King, which are controlled by private equity firms actually need a board of directors. This claim gets even more relevant while questioning the main task of the board of directors, which is to ensure that management acts in the best interest of it's shareholders (Cornelli et al. 2013). The question if less necessity for board control on

[119] Burger King: Annual report (2013).

management frees capacities of directors to focus on strategic topics (for instance, future follow-up acquisitions) is left for future research.

In general, and especially in the case of Burger King, the private equity fund 3G Capital is providing the majority of the board members and has completely changed the composition of the board, starting after the successful acquisition. Daniel Schwartz is therefore not only the CEO of the company, but also a director at the controlling shareholder 3G Capital. Due to the affiliation of management and ownership[120], concentrated ownership but also powerful incentives, the supervision role of the board to make sure that management acts is the best interest is becoming obsolete. Yet, this does not mean that the board is redundant, but rather the opposite as the board of Burger King becomes an advisor instead of a supervisor, which is comparable to the thoughts of Cornelli & Karakas (2008). Other papers argue that an "unsufficient representation of independent directors" can be dangerous and lead to failure of monitoring management sufficiently (Desender et al. 2013, p. 824). This may jeopardize the anticipated positive effect of private equity firms on governance. Yet, as management and shareholders are closely affiliated at Burger King, control plays a less important role. In turn the concerns of Desender et al. (2013) can be disregarded.

Ultimately it is the corporate governance framework that provides the direction for the company, whereas incentives impact the alignment of interests between management and shareholders. Both of the indirect drivers contribute to reduce the loss of value through agency costs. Beyond that, incentives also positively contribute to value creation by motivating management and employees (Cf. Easterwood et al. 1989). As incentives allow the distribution of profits between shareholders and management, the negative "wealth consequences of managerial decisions" are internalized, which "can enhance the productivity of the firm" (Lehn & Poulsen 1989, p. 773). Although, the motivational aspect of incentives is not quantitatively provable, the interview with one of Burger King's employees revealed that the bonus provides strong incentives to stick to individual budgets, which contributes to overall cost reduction and value creation at the firm level. Finally, Loos (2005) compares the corporate governance transformation in buyouts to start-up firms, as management is incentivized with shares. In the Burger King example governance does not only change the remuneration and equity

[120] 3G Capital uses an internal talent pool to occupy management positions. Management and board positions are usually staffed with either direct partners of 3G Capital or other people that have proven themselves in current or former portfolio companies (Interview with Tim Brueggemann 2015). Before Daniel Schwartz, another partner of 3G Capital, Bernardo Hees, was the CEO of Burger King. He left Burger King in 2013 to pursue the CEO position at Heinz.

participation of managers and employees, but also changes the organizational culture, for example through the reduced spending behavior of employees[121]. This might also be related to the motivational efficiency impact of high debt levels (Cf. Jensen 1986).

7.4 Concluding remarks

The first contribution of this paper towards existing theory of value creation in private equity is the provision of a comprehensive and well structured literature review. The literature review summarizes empirical and qualitative findings and includes traditional as well as up-to-date papers that deal with the respective topic. Furthermore, this paper contributes to academic literature by applying a specific empirical value creation model to a single firm. Whereas the direct drivers show how value has been created, the following debate about indirect drivers allows to understand the specific dynamics that are changing in the buyout context. Thereafter both incentives and corporate governance appear to strongly contribute towards value creation. Furthermore, this thesis clears the way to use the analyzed model as a forecasting tool, whereas the original model only analyzed a sample of transactions that were previously already divested. An opportunity for future research is to apply the model on a wider selection of companies, as this paper only analyzed one company and one single industry. The analysis of the acquisition of Burger King in particular, reveals several new areas for future research. On a general basis it raises the question if private equity can be seen as a superior organizational form, in the sense of a "corporate headquarters" as presumed many years ago by Jensen (1889). A suggestion for future research is to revisit the past statement of Jensen (1989) in today's business context. Moreover, future research might address the applicability and function of individual management tools that are leveraged at Burger King, as for instance zero-based-budgeting as a budgeting tool and pay-for-performance remuneration schemes.

Next to the contribution to academia, the thesis also contributes valuable insights to managerial practices. Given the substantial value creation in the Burger King deal across all kinds of direct drivers, 3G Capital's acquisition of Burger King is a useful case to analyze value creation in private equity. It is thereby especially interesting how other private equity firms but also public firms can learn from the given value improvements at Burger King. Even though, Lopez-de-Silanes et al. (2015) state that actions and competences of private equity firms do not appear to be easily repeatable or scalable, the detailed analysis of indirect drivers facilitates to understand how value can be created. These findings might therefore allow also public firms to apply some

[121] Interview: Tim Brueggemann (2015).

of the previously mentioned corporate governance and incentive concepts, and therefore also accelerate value creation in other firms. Finally, private equity firms may apply the provided extension of the Achleitner et al. (2010) model and therefore more accurately forecast and assess value creation in their investments.

8 Bibliography

8.1 Academic references

Acharya, V. V., Gottschalg, O. F., Hahn, M., & Kehoe, C. (2013). Corporate governance and value creation: Evidence from private equity. Review of Financial Studies, 26(2), 368-402.

Achleitner, A., Betzer, A., & Gider, J. (2010). Do Corporate Governance Motives Drive Hedge Fund and Private Equity Fund Activities? Ann-Kristin Achleitner, André Betzer and Jasmin Gider Corporate Governance Motives. European Financial Management, 16(5), 805-828.

Achleitner, A. K., Braun, R., Engel, N., Figge, C., & Tappeiner, F. (2010). Value creation drivers in private equity buyouts: Empirical evidence from Europe. The Journal of Private Equity, 13(2), 17-27.

Achleitner, A. K., Braun, R., & Engel, N. (2011). Value creation and pricing in buyouts: Empirical evidence from Europe and North America. Review of Financial Economics, 20(4), 146-161.

Achleitner, A. K., & Figge, C. (2014). Private equity lemons? Evidence on value creation in secondary buyouts. European Financial Management, 20(2), 406-433.

Adams, R. B., Hermalin, B. E., & Weisbach, M. S. (2010). The Role of Boards of Directors in Corporate Governance: A Conceptual Framework and Survey. Journal Of Economic Literature, 48(1), 58-107.

Aguilera, R. V., & Jackson, G. (2003). THE CROSS-NATIONAL DIVERSITY OF CORPORATE GOVERNANCE: DIMENSIONS AND DETERMINANTS. Academy Of Management Review, 28(3), 447-465

Arcot, S., Fluck, Z., Gaspar, J. M., & Hege, U. (2015). Fund managers under pressure: Rationale and determinants of secondary buyouts. Journal of Financial Economics, 115(1), 102-135.

AXELSON, U, JENKINSON, T, STRÖMBERG, P, & WEISBACH, M 2013, 'Borrow Cheap, Buy High? The Determinants of Leverage and Pricing in Buyouts', Journal Of Finance, 68, 6, pp. 2223-2267, Business Source Complete, EBSCOhost, viewed 23 October 2015.

Bargeron, L. L., Schlingemann, F. P., Stulz, R. M., & Zutter, C. J. (2008). Why do private acquirers pay so little compared to public acquirers?. Journal of Financial Economics, 89(3), 375-390.

Berg, A., & Gottschalg, O. F. (2005). Understanding value generation in buyouts. Journal of Restructuring Finance, 2(01), 9-37.

Bergström, C., Grubb, M., & Jonsson, S. (2007). The operating impact of buyouts in Sweden: A study of value creation. The journal of Private equity, 11(1), 22-39.

Capron, L., & Guillén, M. (2009). National corporate governance institutions and post-acquisition target reorganization. Strategic Management Journal, 30(8), 803-833.

Cornelli, F., & Karakaş, O. (2008, March). Private equity and corporate governance: Do

LBOs have more effective boards? In AFA 2009 San Francisco Meetings Paper.

Cressy, R., Munari, F., & Malipiero, A. (2007). Playing to their strengths? Evidence that specialization in the private equity industry confers competitive advantage. Journal of Corporate Finance, 13(4), 647-669.

Cumming, D., Siegel, D. S., & Wright, M. (2007). Private equity, leveraged buyouts and governance. Journal of Corporate Finance, 13(4), 439-460.

Damodaran, A. (2012). Investment valuation: Tools and techniques for determining the value of any asset (Vol. 666). John Wiley & Sons.

Desender, K. A., Aguilera, R. V., Crespi, R., & GarcÍa-cestona, M. (2013). When does ownership matter? Board characteristics and behavior. Strategic Management Journal, 34(7), 823-842. doi:10.1002/smj.2046

Easterwood, J. C., Seth, A., & Singer, R. F. (1989). The Impact of Leveraged Buyouts on Strategic Direction. California Management Review, 32(1), 30-43.

EDGERTON, J 2012, 'Agency Problems in Public Firms: Evidence from Corporate Jets in Leveraged Buyouts', Journal Of Finance, 67, 6, pp. 2187-2213, Business Source Complete, EBSCOhost, viewed 23 October 2015.

Guo, S., Hotchkiss, E. S., & Song, W. (2011). Do buyouts (still) create value?. The Journal of Finance, 66(2), 479-517.

Harris, R. S., Jenkinson, T., & Kaplan, S. N. (2014). Private equity performance: What do we know?. The Journal of Finance, 69(5), 1851-1882.

Holthausen, R. W., & Larcker, D. F. (1996). The financial performance of reverse leveraged buyouts. Journal of Financial Economics, 42(3), 293-332.

Jensen, M. C. (1986). Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. American Economic Review, 76(2), 323.

Jensen, M. C. (1997). Eclipse of the public corporation. Harvard Business Review (Sept.-Oct. 1989), revised.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of financial economics, 3(4), 305-360.

JUREK, J. W., & STAFFORD, E. (2015). The Cost of Capital for Alternative Investments. Journal of Finance, 70(5), 2185-2226. doi:10.1111/jofi.12269

Kaplan, S. (1989). Management buyouts: Evidence on taxes as a source of value. Journal of Finance, 611-632.

Kaplan, S. (1989). The effects of management buyouts on operating performance and value. Journal of financial economics, 24(2), 217-254.

Kaplan, S. N., & Schoar, A. (2005). Private equity performance: Returns, persistence, and capital flows. The Journal of Finance, 60(4), 1791-1823.

Lehn, K., & Poulsen, A. (1989). Free Cash Flow and Stockholder Gains in Going Private Transactions. Journal of Finance, 771-787.

Lichtenberg, F. R., & Siegel, D. (1990). The effects of leveraged buyouts on productivity and related aspects of firm behavior. Journal of Financial Economics, 27(1), 165-194.

Loos, N., Hilb, M., Bernet, B., Gottschalg, O., & Zollo, M. (2007). Value creation in

leveraged buyouts: analysis of factors driving private equity investment performance. Springer Science & Business Media.

Lopez-de-Silanes, F., Phalippou, L., & Gottschalg, O. (2015). Giants at the Gate: Investment Returns and Diseconomies of Scale in Private Equity. Journal of Financial & Quantitative Analysis, 50(3), 377-411. doi:10.1017/S0022109015000113

Masulis, R. W., & Thomas, R. S. (2009). Does Private Equity Create Wealth? The Effects of Private Equity and Derivatives on Corporate Governance. University of Chicago Law Review, 76(1), 219-259.

Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. The American economic review, 261-297.

Muscarella, C. J., & Vetsuypens, M. R. (1990). Efficiency and organizational structure: a study of reverse LBOs. The Journal of Finance, 45(5), 1389-1413.

Myers, S. C. (2001). Capital structure. Journal of Economic perspectives, 81-102.

Nikoskelainen, E., & Wright, M. (2007). The impact of corporate governance mechanisms on value increase in leveraged buyouts. Journal of Corporate Finance, 13(4), 511-537.

Phalippou, L., & Gottschalg, O. (2009). The performance of private equity funds. Review of Financial Studies, 22(4), 1747-1776.

Pindur, D. (2009). Value creation in successful LBOs. Springer Science & Business Media.

Ravenscraft, D. J., & Scherer, F. M. (2011). Mergers, sell-offs, and economic efficiency. Brookings Institution Press.

Rediker, K. J., & Seth, A. (1995). Boards of directors and substitution effects of alternative governance mechanisms. Strategic Management Journal, 16(2), 85-99.

Samdani, G. S., Butler, P., & McNish, R. (2001). The alchemy of leveraged buyouts. Value Creation: Strategies for the Chemical Industry, 93-107.

Seth, A., & Easterwood, J. (1993). Strategic redirection in large management buyouts: The evidence from post-buyout restructuring activity. Strategic Management Journal, 14(4), 251-273.

Shimizu, K., Hitt, M. A., Vaidyanath, D., & Pisano, V. (2004). Theoretical foundations of cross-border mergers and acquisitions: A review of current research and recommendations for the future. Journal of International Management, 10(3), 307-353.

Smith, A. J. (1990). Corporate ownership structure and performance: The case of management buyouts. Journal of financial Economics, 27(1), 143-164.

Sorensen, M., Wang, N., & Yang, J. (2014). Valuing Private Equity. Review of Financial Studies, 27(7), 1977-2021.

Stein, J. C. (2005). Why are Most Funds Open-End? Competition and the Limits of Arbitrage. The Quarterly journal of economics, 120(1), 247-272.

Watts, R. L., & Zimmerman, J. L. (1990). Positive Accounting Theory: A Ten Year Perspective. Accounting Review, 65(1), 131-156.

Williamson, O. E. (1988). Corporate finance and corporate governance. The Journal of Finance, 43(3), 567-591.

8.2 Other references

3G Capital. (2015). About the company, accessible at: http://www.3g-capital.com/bkw.html.

About money. (2010). History of Burger King, accessible at: http://franchises.about.com/od/mostpopularfranchises/a/history-of-burger-king.html.

Achleitner & Capital Dynamics. (2009). Wertsteigerungshebel in Private Equity-Transaktionen (Zürich, November 2009), available at: http://www.seca.ch/items/14665/1032/1597436185/Wertsteigerungshebel_in_PE_zurich.pdf.

Achleitner & Capital Dynamics. (2009). Value Creation in Private Equity, available at: https://www.altassets.net/pdfs/capitaldynamics_valuecreationinpe.pdf.

Altassets. (2010). TPG, Bain, Goldman exit Burger King as 3G pays $4bn, accessible at: http://franchises.about.com/od/mostpopularfranchises/a/history-of-burger-king.html.

Bloomberg. (2015). Company Overview of 3G Capital, Inc. accessible at: http://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=23471434.

Bloomberg. (2015). Financial Statement Analysis of Burger King and peer group, accessible via Bloomberg terminal.

Burger King. (2010). Press Release - 3G Capital Completes Acquisition of Burger King Holdings, Inc.

Burger King. (2013). Burger King Worldwide Annual Report (2013).

Burger King. (2013). Burger King Worldwide Reports: Fourth Quarter and Full Year 2013 Results.

Business Insider. (2012). Bill Ackman's Special Purpose Entity Finally Makes Its Move, accessible at: http://www.businessinsider.com/a-publicly-traded-company-started-by-hedge-fund-titan-bill-ackman-bought-a-huge-stake-in-burger-king-2012-4.

Carlyle Group. (2015). Company website: Our business – industry expertise, viewed at https://www.carlyle.com/our-business/industry-expertise.

Clayton, Dubilier & Rice. (2015). Company website: Firm profile, viewed at http://www.cdr-inc.com/about/firm_history.php.

Heinz Group. (2015). Press release, accessible at: http://news.heinz.com/press-release/finance/hj-heinz-company-and-kraft-foods-group-sign-definitive-merger-agreement-form-k.

Investopedia. (2015). Accessible at: http://www.investopedia.com/terms/p/privateequity.asp

Morgan Stanley. (2009). Operational improvement: The key to value creation in private equity

NY Times. (2012). Accessible at: http://www.nytimes.com/2012/06/23/opinion/nocera-burger-king-the-cash-cow.html?_r=0.

Pwc. (2012). How US private equity compensates management through the investment lifecycle, available at: https://www.pwc.com/us/en/hr-management/assets/pwc-how-us-private-equaty-compansates-management.pdf.

Reuters. (2010). Burger King agrees to $3.3 billion sale to 3G Capital, accessible at:

http://www.reuters.com/article/2010/09/02/us-burgerking-idUSTRE6801CB20100902.

Reuters (2015). Avaliable at: http://www.reuters.com/article/2015/07/02/us-kraft-heinz-idUSKCN0PC2K520150702.

The Street. (2014). http://www.thestreet.com/story/12856055/1/how-burger-kings-brilliant-brazilian-billionaire-turned-12b-into-22b.html.

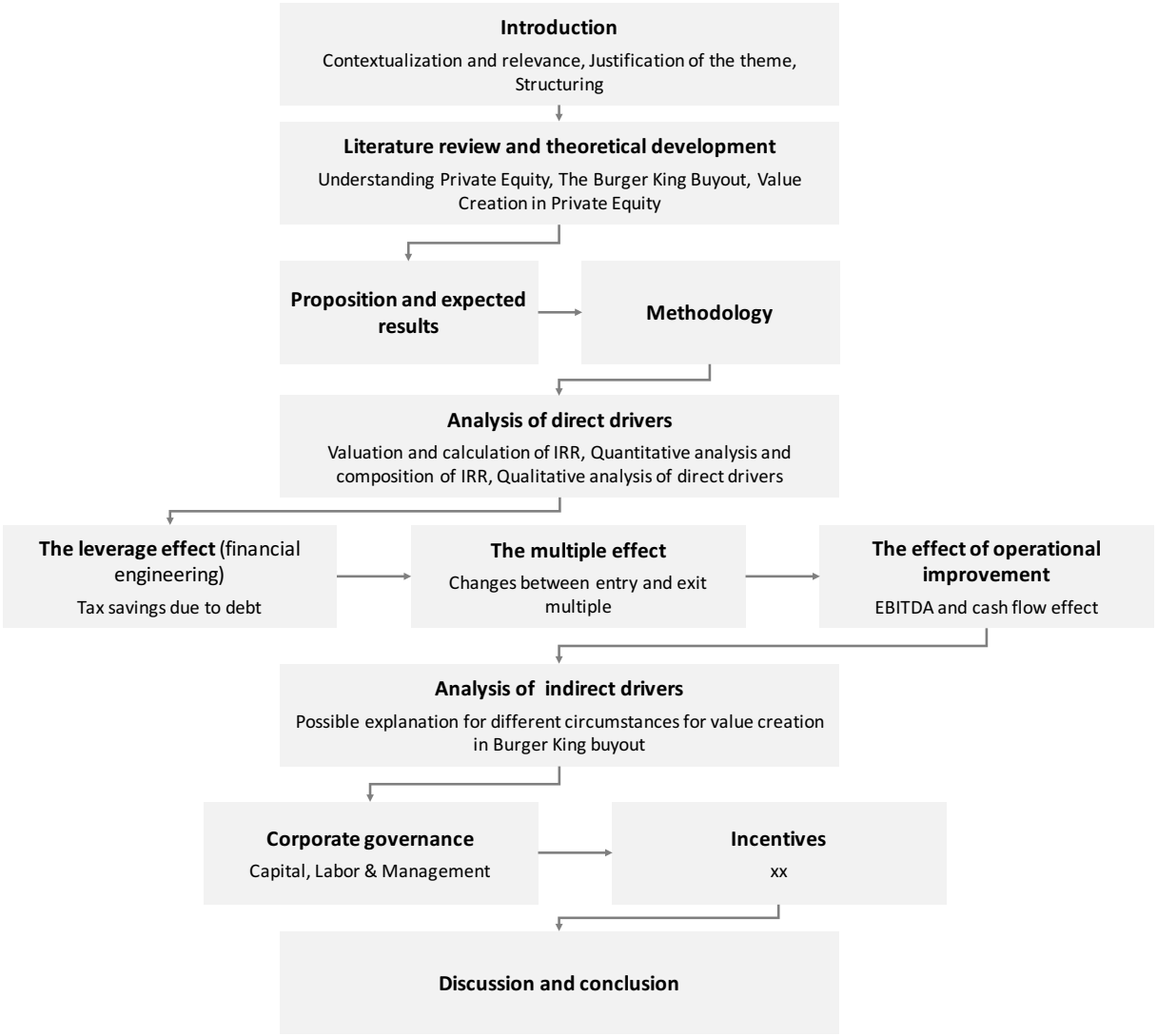
The Wall Street Journal. (2012). Burger King Returns to Public Market on NYSE, accessible at: http://www.wsj.com/articles/SB10001424052702304898704577478421173743002.

Thomson Reuters (2014): Mergers & Acquisitions Review – Full Year 2014.

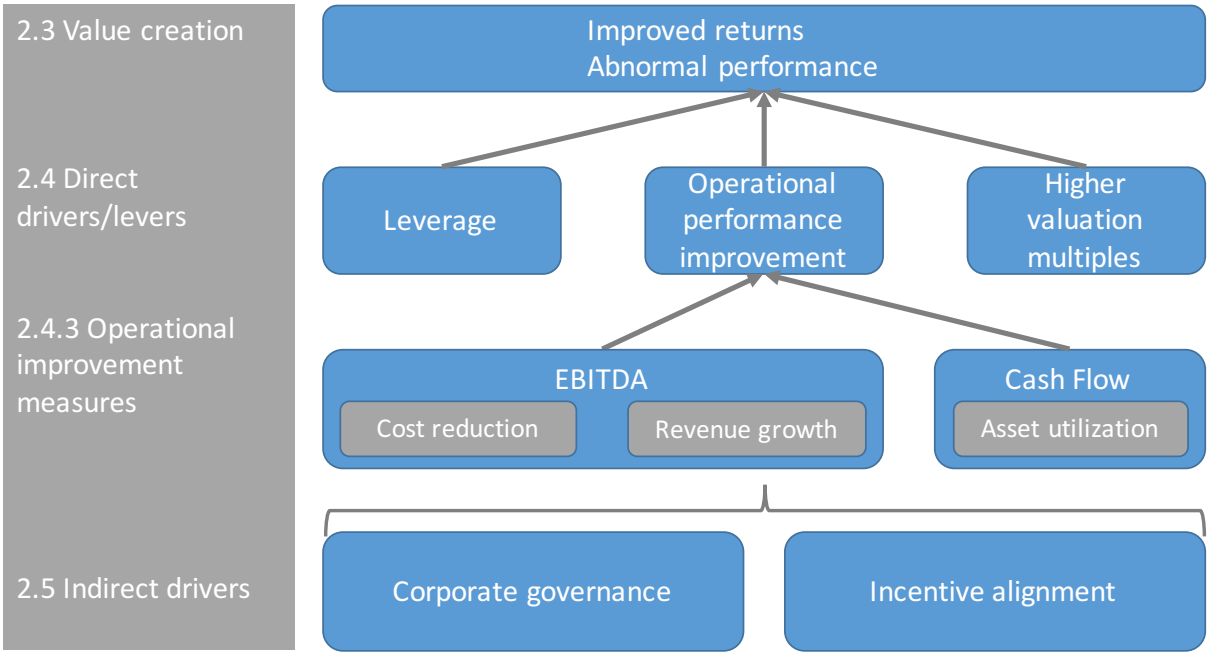
Thomson Reuters (2015). Mergers & Acquisitions Review – First Half 2015.

9 Appendices

Appendix 1: Structure of the paper, Source: Own illustration

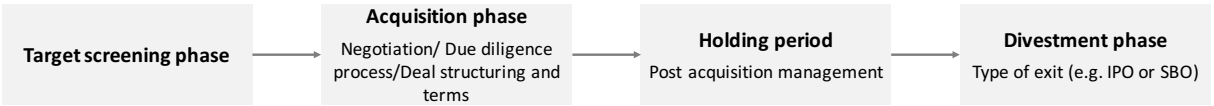


Appendix 2: Structure of the literature review and the subsequent analysis



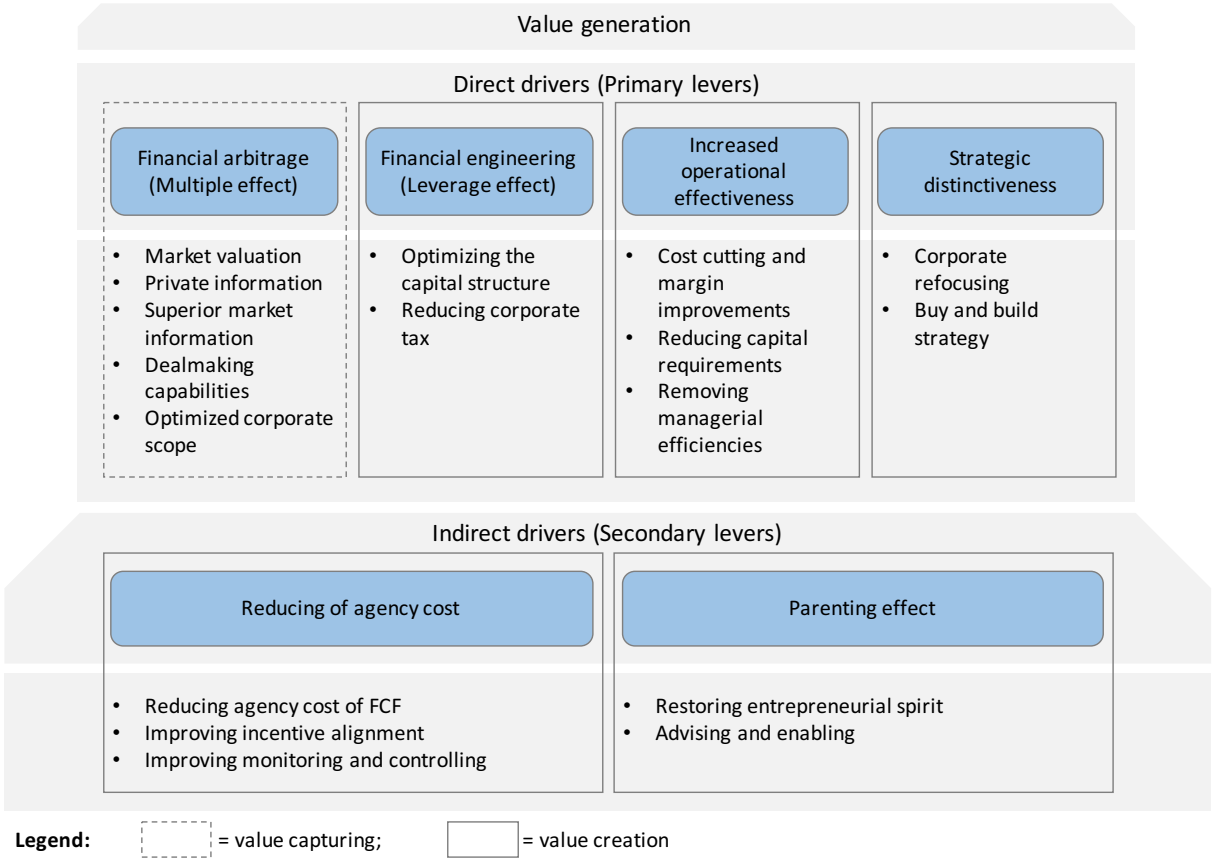
Source: Own contribution in accordance with Achleitner et al. (2010) and Loos (2005)

Appendix 3: Overview of the main steps in a buyout process



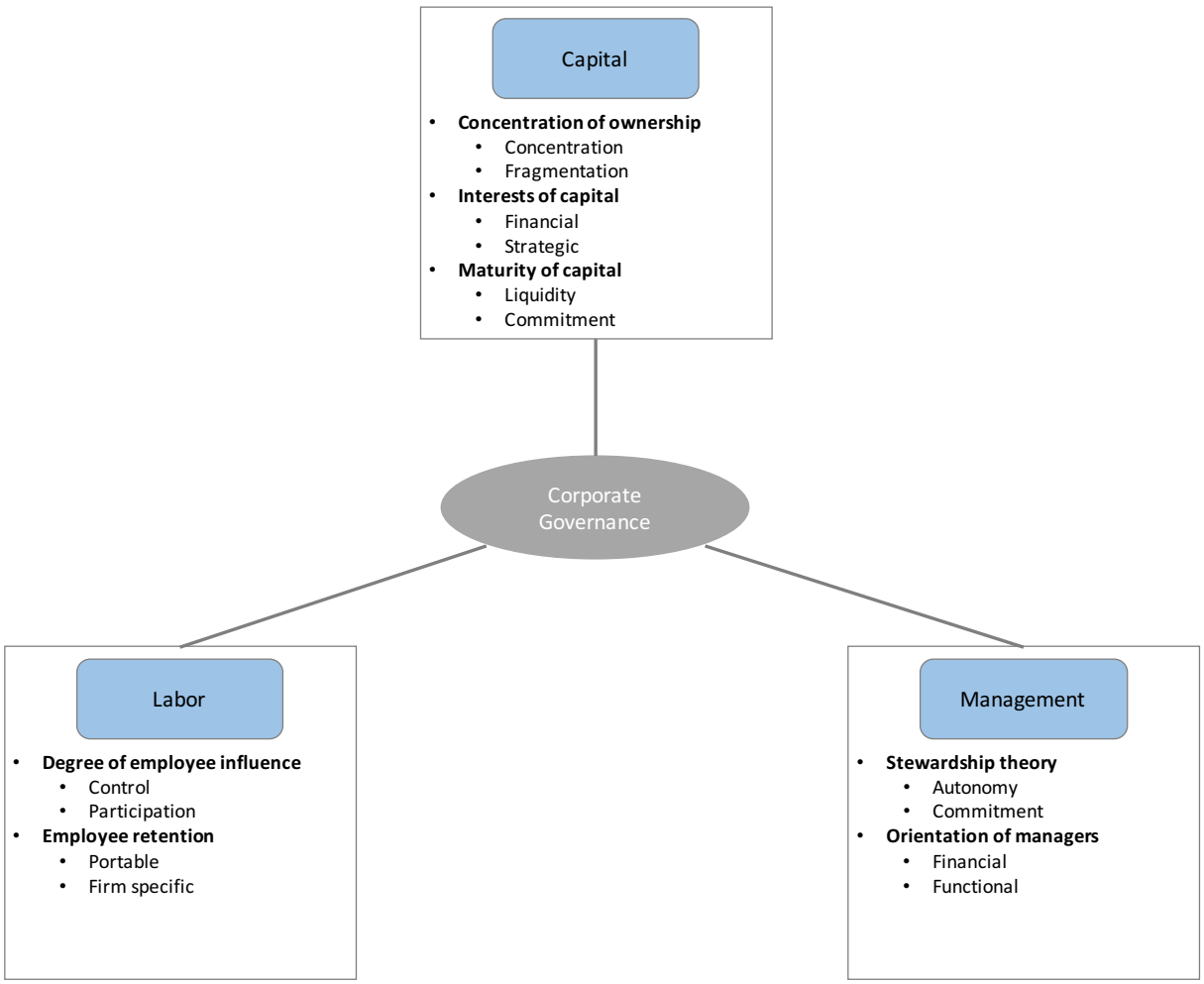
Source: Own contribution, in accordance with Berg & Gottschalg (2005) and Loos (2005)

Appendix 4: Value generation in LBOs after Berg & Gottschalg (2005)



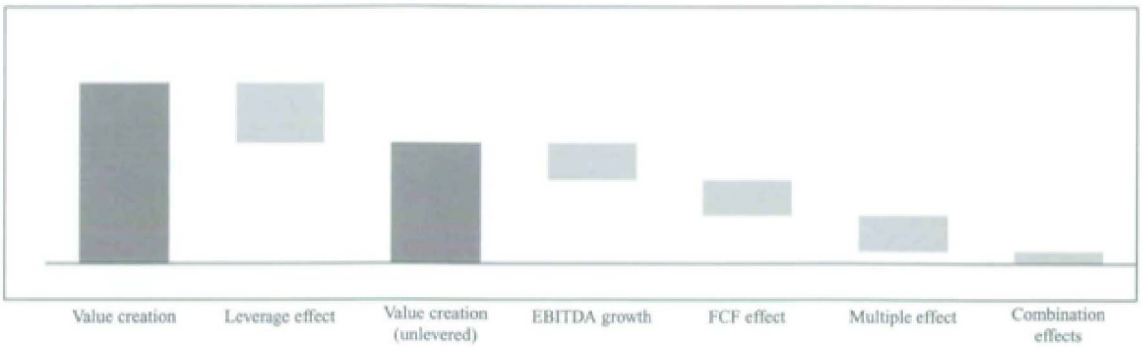
Source: Own contribution according to Berg & Gottschalg (2005)

Appendix 5: Dimensions of corporate governance

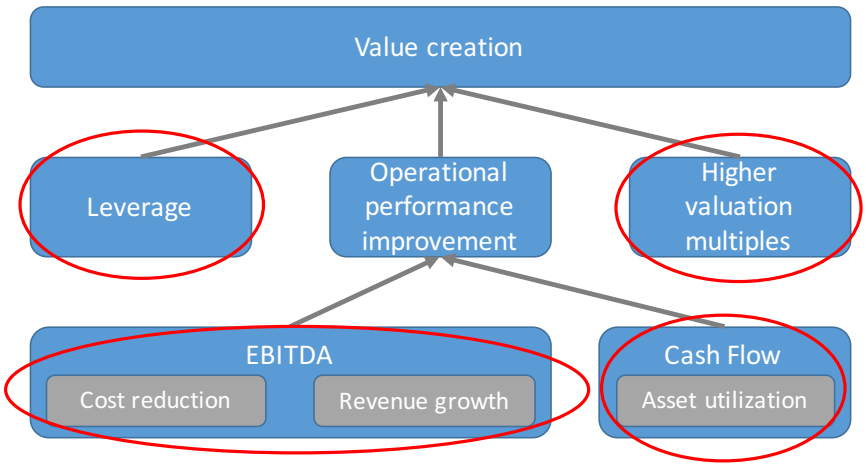


Source: slightly adjusted from Aguilera & Jackson (2003)

Appendix 6: Representation of the main results of the study of Achleitner et al. (2010)



Appendix 7: Highlight of the drivers that are covered by the Achleitner model



Appendix 8: Peer group selection, multiples and Beta calculation

	EV/EBITDA	Raw beta	Adj Beta	COMMENTS
YUM! BRANDS INC	12,17	0,78	0,85	
WENDY'S CO/THE	9,95	0,74	0,83	
JACK IN THE BOX INC	11,80	0,53	0,69	
POPEYES LOUISIANA KITCHEN IN	16,41	0,53	0,69	
MCDONALD'S CORP	13,53	0,51	0,68	Adjusted Beta = (2/3*Raw Beta + (1/3) *1)
SONIC CORP	10,59	0,82	0,88	
PAPA JOHN'S INTL INC	14,15	0,55	0,70	
DOMINO'S PIZZA INC	16,68	0,63	0,75	
Average	**13,16**	**0,64**	**0,76**	

Source: Bloomberg 2015

Appendix 9: Sales forecast as the basis for the DCF valuation

Sales forecast

Sales (in $ million)

	2009A	2010A	2011A	2012A	2013A	2014F	2015F	2016F	2017F	2018F
Total revenue	**2.537**	**2.502**	**2.340**	**1.971**	**1.146**	**1.200,1**	**1.240,4**	**1.282,4**	**1.325,9**	**1.371,2**
YoY growth		**-1,4%**	**-6,5%**	**-15,8%**	**-41,8%**	4,69%	3,36%	3,38%	3,40%	3,41%
Franchise and property revenues	657	663	701	802	923,6	976,3	1.015,5	1.056,3	1.098,7	1.142,9
YoY growth		*1%*	*6%*	*14%*	*15%*	5,70%	4,02%	4,02%	4,02%	4,02%
Company restaurant revenues	1.881	1.839	1.639	1.169	222,7	223,8	224,9	226,1	227,2	228,3
YoY		-2%	-11%	-29%	-81%	0,50%	0,50%	0,50%	0,50%	0,50%

Source: Annual report 2013, Bloomberg 2015

ast sales growth not representative, as business model changed significantly after the 3G Capital take over

Number of restaurants forecast

	2009A	2010A	2011A	2012A	2013A	2014F	2015F	2016F	2017F	2018F
Number of restaurants	**12.078**	**12.251**	**12.512**	**12.997**	**13.667**	**14.372,0**	**14.873,2**	**15.391,9**	**15.928,8**	**16.484,5**
YoY growth		**1,4%**	**2,1%**	**3,9%**	**5,2%**	*5,2%*	*3,5%*	*3,5%*	*3,5%*	*3,5%*
Franchise owned	10.656	10.907	11.217	12.579	13.615,0	14.320,0	14.821,2	15.339,9	15.876,8	16.432,5
YoY growth		*2%*	*3%*	*12%*	*8%*	*5,2%*	*3,5%*	*3,5%*	*3,5%*	*3,5%*
Company rowned	1.422	1.344	1.295	418	52,0	52,0	52,0	52,0	52,0	52,0
YoY growth		-5%	-4%	-68%	-88%	*0,0%*	*0,0%*	*0,0%*	*0,0%*	*0,0%*

Source: Statista 2015

Volume forecast

Volume forecast

	2009A	2010A	2011A	2012A	2013A	2014F	2015F	2016F	2017F	2018F
Total										
YoY growth						**0,5%**	**0,5%**	**0,5%**	**0,5%**	**0,5%**
Franchise owned										
YoY growth						0,5%	0,5%	0,5%	0,5%	0,5%
Company rowned										
YoY growth						0,5%	0,5%	0,5%	0,5%	0,5%

Appendix 10: Cost of equity and WACC calculation

	Values	Notes
rf	2,331%	US-Treasury 10 years November 2015
Beta	0,76	Peer group Beta
MRP	6,12%	Damodaran value
Re	**6,97%**	value used

	Value	Comment
D/V	0,2739	2013 is used, V is different as is we are here adding E+D, ignoring excess cash
E/V	0,7261	2013 is used, V is different as is we are here adding E+D, ignoring excess cash
Rd	6,00%	Terms on the B-/Caa1 transaction were finalized at 6% (1)
Rd_levered	4,50%	
Re	6,97%	see Damoraran approach
WACC	**6,29%**	WACC Includes interest tax shield

(1) Source: http://www.highyieldbond.com/burger-king-2-25b-7-5-year-high-yield-bonds-b-caa1-price-to-yield-6/

Since the peer group Beta is based on a value from November 2015, market risk premium and risk-free rate are also 2015 values

Appendix 11: Enterprise Value of Burger King between 2009 and 2013

Enterprise Value of Burger King Holdings Inc. & Burger King Worldwide Inc.

In $US million	FY 2009 30/06/09	FY 10 (Half) 30/06/10	FY 2010 2010-12-31	FY 2011 2011-12-31	FY 2012 2012-12-31	FY 2013 2013-12-31
Market Capitalization	**2.327,9**	**2.287,1**	**n/a**	**n/a**	**5.757,9**	**8.050,4**
- Cash & Equivalents	121,7	187,6	207,0	459,0	546,7	786,9
+ Preferred Equity	0,0	0,0	0,0	0,0	0,0	0,0
+ Minority Interest	0,0	0,0	0,0	0,0	0,0	0,0
+ Total Debt	888,9	826,3	2.792,1	3.139,2	3.049,3	3.037,0
Enterprise Value	**3.095,1**	**2.925,8**	**n/a**	**n/a**	**8.260,5**	**10.300,5**

Source: Bloomberg 2015

The enterprise value us calculated by using market capitalization, debt and excess cash

Appendix 12: Subdrivers of the operational improvement effect

	Entry	Exit	Difference	Effect
Sales	2.502	1146,3	-1.356	-2.055,36
Margin	18%	51%	34%	7.157,01
Combination				-3.878,26
EBITDA	444,60	588,00	143	1.223,38

Calculation of the split between sales, margin and combination effect

Appendix 13: Proposition of alternative methods to assess the cash flow effect

DCF - valuation

Cash Flow statement

		2010A	2011A	2012A	2013A	2014F	2015F	2016F	2017F	2018F	TV
	EBIT	**333**	**362,5**	**417,7**	**522,2**	**606**	**672**	**713**	**755**	**799**	
-	Tax on EBIT (T x EBIT)	83	91	104	131	151	168	178	189	200	
=	**NOPLAT**	**250**	**272**	**313**	**392**	**454**	**504**	**535**	**567**	**600**	
+	Depreciation	49	136	114	66	**69**	**72**	**74**	**77**	**79**	
-	d Investment in Working Capital	-58	127	-151	-93	7	5	5	5	5	
-	Capital Expenditures	150	82	70	26	56	58	60	62	65	

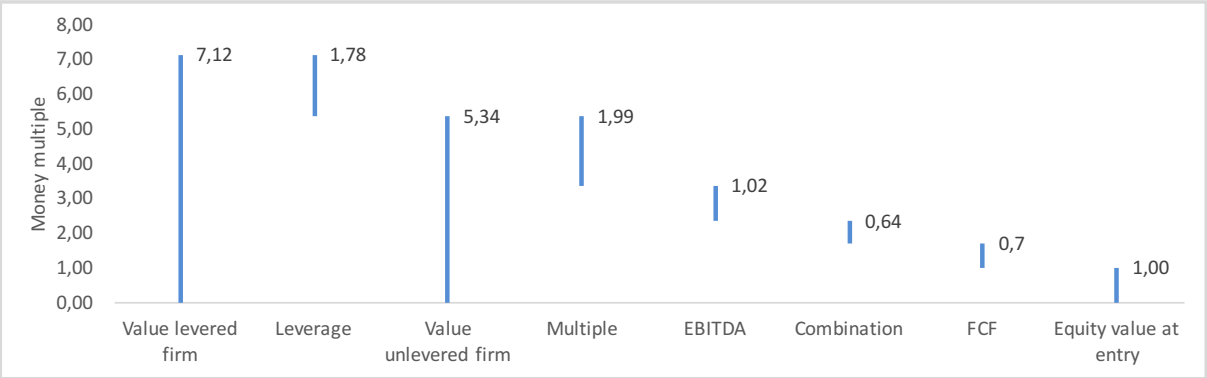
Cash flow to the firm (1)		**-73**	**195**	**133**	**6**	**9**	**9**	**9**	**10**	**211**
PV FCFF					**6**	**8**	**7**	**7**	**7**	
PV Terminal value					**155**					
Enterprise Value					**198**					

(1): only accounting for depreciation, NWC and CAPEX

Method 1 (Past perspective)	**256**	Sum of realized cash flows during holding period
Method 2 (Future perspective)	**198**	Calculating the EV (1)

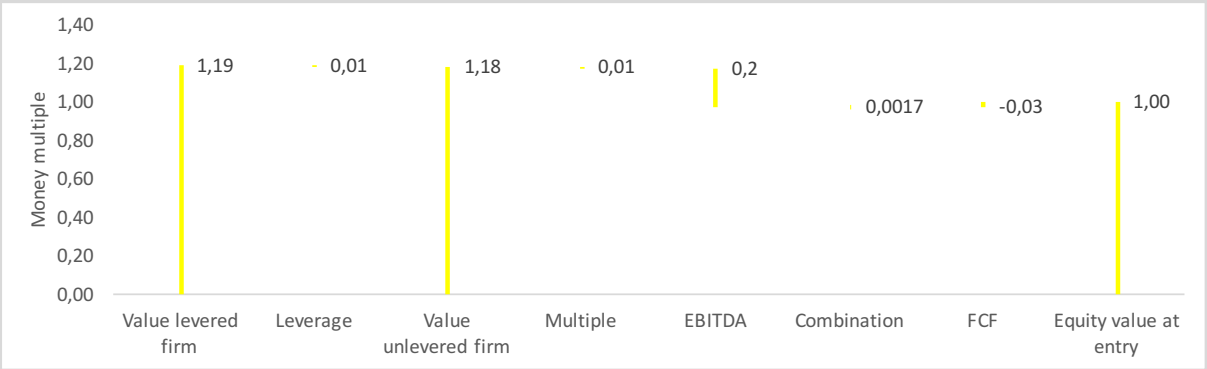
Appendix 14: Times money multiple of Burger King and McDonald's

Burger King value creation drivers (Money multiple)



Source: own calculation

McDonald's value creation drivers (Money multiple)



Source: own calculation

Appendix 15: Extension to the multiple effect applied to Burger King and McDonalds's,

Burger King

EBITDA at entry	**444,60**
EV AT entry	**3.793**
EV/EBITDA	**8,53**

EBITDA at exit 2013	**588,00**
EV at exit	**8.169,68**
EV/EBITDA	**13,89**

McDonald's

EV/EBITDA	**10,34**

Overall

EV increase total	**2384,28**

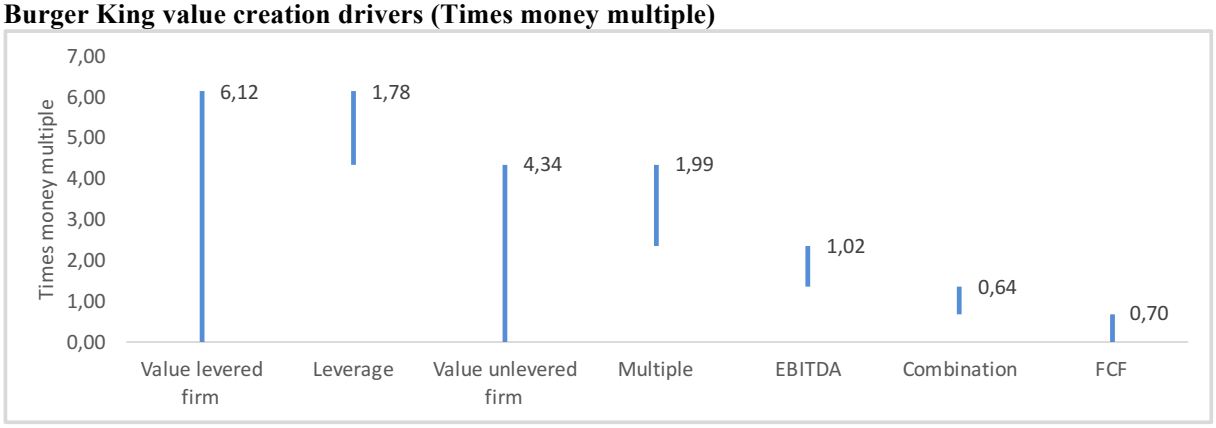
EV increase total	**804,61**

	Other	**Market changes**
% of Multiple effect	***66,25%***	***33,75%***

Source: Own contribution

Appendix 16: Times money multiple of Burger King vs. Achleitner et al. (2010)

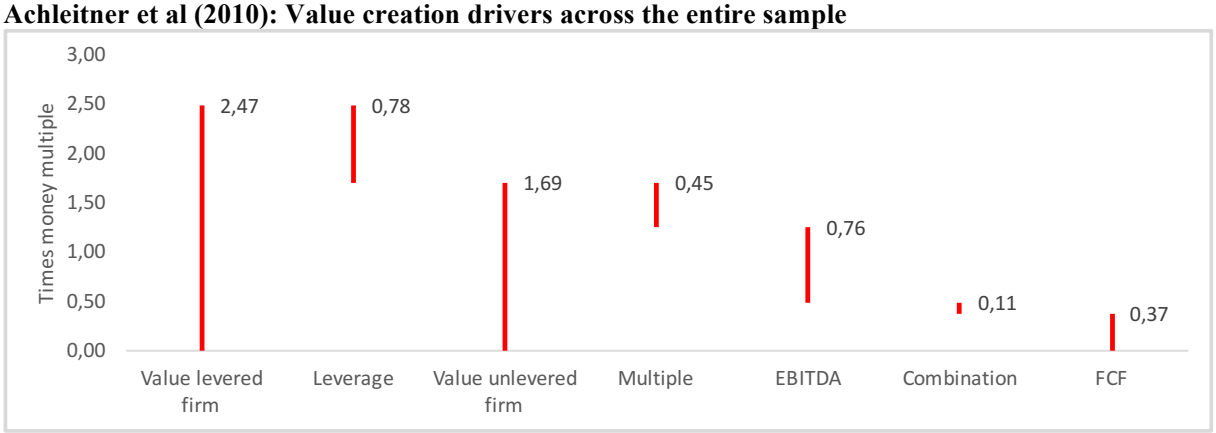
Burger King value creation drivers (Times money multiple)



Source: own calculation

*The rationale behind the times money multiple is the following. Overall cash flows at the divestment stage are accounting for around $8.542 million which also includes the initial investment of $1.200 million. The times money multiple reflects the added value that is achieved, therefore calculating the difference of $8.542 million and $1.200 million yields in $7.342 million. This can be calculated with the times money multiple (6,12 * 1200).*

Achleitner et al (2010): Value creation drivers across the entire sample



Source: Achleitner et al. (2010)

Appendix 17: Interview with Tim Bruggemann, conducted via skype on November 29th 2015

Qualitative interpretation of direct drivers

1) As previously explained, this thesis assesses different drivers of value creation. Which of the following drivers is likely to have a role in the Burger King buyout?

   - *I am not an expert with the effect of leverage and multiple effect*
   - *Operational improvement is very likely to have the strongest impact. One major contribution towards the improvement at the operational level is ZBB (Zero based budgeting). Therefore, Burger King saves millions of dollars annually und can thereby annually achieve an EBITDA growth of around 12% to 15% next to the top line revenue growth*

2) How can you increase value through EBITDA improvements? What are the relevant factors?
   - *First of all, the culture and human capital factor at Burger King. People are from the same sort and are generally very motivated, it is a fast pace environment*
   - *You are not stopped by internal walls or hit your head on walls like in other big corporations, through hierarchic structures*
   - *The working is not even as in consulting but more likely comparable to a Start-Up, we have very flat hierarchies, even as an analyst when you have an idea you can get directly go to the board and bring up your idea directly without any barriers*
   - *Communication and the structure is very open, and this is also meant like this, there are no barriers like you have to ask for an appointment, you just walk to the C-suite (CFO, CEO, etc), they also have a open desk, and you can directly talk to them in the open space or in an extra room*
   - *Yet, the people that are working there are similar to people who work in management consultancies with many "all-rounders"*
   - *My fear of leaving consulting and moving towards corporate was accompanied by the fear of hitting against walls, but this is not at all the case at Burger King, everything is directed towards efficiency*
   - *The people are very young and flexible, also older employees who were there before the take over are keeping up and motivated for change*

3) You said that the EBITDA margin was growing by 10-12% annually on average. My question now is if the cost saving potential is already "harvested" until 2013 or are there still further improvements possible?
   - *No I wouldn't say that the saving potential is already over. There is still further potential, not only with the synergy potential that emerges with the merger with Tim Hortons, but also on a stand-alone basis. Not only through cost savings but also through growth on the top line.*
   - *The difference here to other PE firms, is the careful consideration to do both, to grow on the top line, but also to exploit on the cost side, but by no means on a short sided way*
   - *In terms of cost cutting, Burger King and 3G thereby put a lot of effort on long-term sustainability. We can not only save cost or skip investment since they do not just want to cut cost and keep revenue constant. Instead the plan is to do both simultaneously in*

a sustainable way, and therefore you can achieve the EBITDA growth that we can currently see in the financials of Burger King

Explanation for value creation and indirect drivers

4) Is there a 3G method that might also be comparable to other deals? In the Kraft & Heinz deal there seems to be a similar approach?
   - *Yes, there is a similar pattern, in the first years they saved costs through ZBB both with Burger King as well as with Heinz, and in the following years they try to further increase revenue in a sustainable long-term form*
   - *The long term investment horizon allows a culture that is promoting to act in the best interest for the company instead of aiming at short-term earnings*
   - *Everything that helps in short-term and harms in long-term will be avoided*

5) How does Zero based budgeting work at Burger King?
   - *Zero based budgeting at Burger King is less a budgeting tool but more a philosophy*
   - *If you look at zero based budgeting it is not the budgeting process that is behind it. You rather have to look at the philosophy behind it and everything that comes along with it*
   - *What comes along with it is for example the compliance to the budgets, the economy in employee's mindset*
   - *Each year each department or cost center has to define from 0 what kind of expenses it will have, thereby everyone has to plan in detail what he will spend, for example for travelling. On this basis the budgets are defined, relatively independent from the former year*
   - *Then it is important that everyone is responsible for sticking to its own budget*
   - *IF you do not stick to it, it will reduce your bonus*
   - *There is also a global budget, which is the sum of all the individual budgets and the global goal is to reduce the global budget year by year, for instance it was $100 million in the former year, then in the next year it is cut by $10 million, so everyone needs to deal with 10% less. Thereby everyone has to see how to cut its budget*
   - *It is not only how you build this budget and on what it is composed of, at Burger King it is rather a culture and way of thinking to treat money as if it were your own money*
   - *So if you are for example travelling, you might take a hotel that is a bit cheaper, or just do a trip if you actually think it adds value. Thereby it prevents situations where an employee wants to reach his frequent traveler status at the end of the year and is therefore doing more trips*
   - *With ZBB this does not happen, since it is a culture, the other employees also see when you "waste money", and this might have a negative tone*

6) How are incentives used, do they play a role in compensating employees at Burger King?
   - *It depends on the level for instance as analyst (15%), manager (30%), director (40%) vice president (70%). So you get your basis salary and then up to 15 , 30 or 70 as variable pay*
   - *This can get up to 100% to 200% for the management level,*
   - *I would say that the variable pay/bonus has a huge motivational effect on everyone, also on the lower levels, when you get 30% as a manager on top of your salary this is still huge*
   - *You can thereby incentivize and motivate the people*

- *In this sense our MBOs (Management by Objective) come in play*
- *Thereby we have firm wide objectives, which then are broke down to the different management levels and functions.*
- *You have goals in your area that you can directly influence, which are then rolled up to the global goals.*
- *For your bonus structure you thereby have your 10 own KPIs, that are important for the area where you work, this can for instance be projects or other simple measures*
- *So everyone is working towards this individual goals, and have responsibility*
- *In general, I would say that everyone has a critical function in the overall system, there is no function that is redundant*
- *With the variable pay you make sure that everyone is aiming at reaching their own goals and thereby contributing to the overall goals, the overall goal is in general a firm wide EBITDA,*
- *To reach this EBITDA there are many different elevating screws*
- *Depending on the function, a finance guy might have goals that are more directed towards cost reduction, whereas a sales person is more responsible for increasing the top line*
- *All these different parts have to come together to reach the overall goal, everyone and everything is thereby important*

7) Academic research has shown that private equity has an impact on the principal agent theory, whereas governance and incentives come into play. How are both concepts applied at Burger King?
   - *We have to be careful here, the governance does not mean that you are all the time controlled*
   - *You are responsible for what you do and people assume that you know what you are doing and that you work responsibly. At the end of the year the results count, if you do not reach your goal at the end of the year, we have to understand what went wrong*
   - *But here also comes recruiting into play, since it is important for us to hire the right people, and talent management is a high priority you cannot forget the governance but you don't need a governance function since everyone is looking for himself and his environment and therefore make sure to do the right thing*
   - *But this is also possible here since we are very lean and slim structured, so that we do not have 100 thousands of people.*
   - *In Miami we are not even 300 people, inclusive the support functions, this is not a "corporate beast ", where you need a whole institution to control the people*
   - *Since everyone has his clear tasks and own responsibility you are rather controlled by the person you are reporting to*

8) Did many people directly come from 3G or were rather external people hired after the acquisition in 2010?

   - *Some people are actually directly coming from 3G, as for example our CEO Daniel Schwartz*
   - *But the most of the people come from the 3G Capital network, which means that they are not directly 3G Capital employees but rather people from their network*
   - *Since many young people came and a lot of "fresh blood" came into the company there is an incredible dynamic, however there was also a lot of specific know-how that is lost*

- *We have a very steep learning curve, which means that after 2 years you can by far not reach the full potential that is achievable on the operational improvement side*
- *In year 1 you start cutting costs, but in the coming years when the new staff build their own know-how, then everything is getting even better and more efficient*
- *The continuous improvement is also achieved by the goal setting structure, where Management by Objectives is used. This means that your goals are higher each year. Even if the goals seem initially not reachable, you have to find a creative way to reach them*
- *Basically the goals are way to high and in the beginning of the year it really seems impossible*
- *So you have to think deeply how to achieve those goals. Therefore, we guarantee continuous improvement while always challenging the "Status-quo". The aforementioned MBO also guarantee that each employee is challenging himself continuously, and the current status*
- *On this note we try to avoid routine and always develop. Everything what we do is aiming towards creating value*
- *Due to the flat hierarchies and many personal changes we create permanent change*
- *If you arrive at the point where you perfectly know your role you will be promoted to a new role. Often you are even promoted before, if you are ready. The idea here is that you are promoted when you have the potential to do the new role, not when you are are ready to do the role. This means that you are always growing into your role. When you have a new role, you have to grow there again, (this not necessarily always comes with a promotion, roles are also changed without)*
- *This means in the new role that you do new mistakes and have to learn. But this is done on purpose to make sure that no routines are build. What stays are best practices of a role that are then distributed to the new person that is taking the role. Therefore we avoid the formation of bad habits*
- *Part of the culture is that you have many generalists, of course also some specialists, whom we urgently need in some functions, but the most part are generalists*
- *Due to the different backgrounds of the people, often completely different industries new opportunities emerge, as for instance in a situation where people find: "Look we did this before in another project, lets see if this is also applicable here".*
- *This in a sense is related to the Start-Up culture that we have*
- *I am at Burger King since approximately 2,5 years and already in my third role, which always came along with a promotion (yet this might not be the case for everyone)*

9) What is the recruiting scheme of 3G Capital, is this specific?

- *Our idea is that we generally do not hire people with knowledge, but rather people with potential*
- *This way we hire people that we can form and that are dynamic and aiming for change, instead of always just following old processes and habits*

10) What is the background of the people? Are many like you coming from consulting companies?

- *No, most of the people are not direct hires like me. The biggest part of people is coming to us through our undergraduate or MBA programs*

- *It is a pyramid, you have many fast promotions, but up there the air is getting thinner, that is why we need to fill the pyramid at the analyst level*

11) Regarding corporate governance, what do you think is the impact of the board at Burger King? Does the fact that most of the board members are from 3G Capital or affiliates play a role?
    - *Of course it helps that 3G Capital is the main investor, therefore we have a lot of freedom*
    - *Also given that the other investors are mainly affiliates of 3G or at least people that believe in the 3G culture and philosophy*
    - *This is why you have a lot of freedom and not the corporate governance claw that means you always have to justify things*
    - *A lot of freedom is given to employees, and it is okey if it doesn't work immediately.*
    - *However, this does not mean we have a free pass. If the results are not there, this can be an absolutely tough environment. If results are not there, pressure on managers and employees is very high*
    - *This pressure can for example come from the board, especially, Alex Behring, an extreme clever guy, who is also managing partner at 3G. He is the one that is setting the tone. Moreover, he is extremely demanding and when there is need for change he sets the tone. For example when we had a good year, he is coming to say " good guys, this year was a great year, but lets not rest on these results and further go on, next year your targets are 50% higher.*
    - *Alex Behring is the one that is bringing the pressure from top to down through the organization*
    - *Since the board is very 3G heavy, you have more the pressure to live this 3G culture. But it is not the case that the board is questioned or something like this. Everyone that is behind the board is "board in" – they believe in this culture and philosophy*
    - *Alex Behring has for example the "C suite" below him and that report to him. But you can say that he is always informed and knows what is going on*
    - *He is also involved in other 3G Capital owned firms, but he is spending a lot of time, with the individual companies and also the respective markets.*
    - *He is the one that is setting the tone in the board, and that directly influences our "C suite. He has a big interest to see that the company is running well, and for example Daniel Schwartz is one of his direct protégés. Behring also took Daniel to Burger King, first as a CFO and later made him CEO after the former CEO Bernardo went to Heinz.*
    - *But this is part of the game, that talents that proved themselves to be are in an emergency promoted*[122] *to leading positions, but this way it is ensured that things work as it is intended by 3G Capital*

[122] This comes from the German translation and is inspired by the former comment that people with potential are promoted before they are ready, which is why they are frequently overwhelmed