

# Value Generation in Private Equity Investments

# Pilot Study on Value Drivers in 100-Day Programs

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### **1. Introduction: The current challenge in private equity**

In recent years private equity was one of the success stories in the financial world. This has been true especially for Germany whose private equity market has grown considerably as numerous international private equity companies have entered the German market. The term private equity summarizes all buyout investments which are made through funds.<sup>1</sup> In a buyout "the shares of a publicly listed corporation are bought out with debt and the firm is de-listed, becoming a private corporation owned by a limited number of outside investors and the firm's top management"<sup>2</sup>. Private equity firms usually acquire a controlling stake while the management team and employees will hold minority stakes. But the investors only cover part of the purchasing price themselves and borrow the rest from banks or raise money through bonds.<sup>3</sup> Therefore most buyouts occur in mature industries which exhibit strong and predictable cash flows to service the financing costs.<sup>4</sup> The typical investment process of a private equity company contains the following elements: raising of funds, deal generation, screening, approval and structuring, post-investment and exiting the investment via a trade sale to a strategic investor, a secondary sale to another investor or via an initial public offering; finally the capital is returned to the investors.<sup>5</sup> In the early years of private equity considerable value was generated trough genuine deal structuring encompassing the identification of undervalued companies, the timing of entry and exit and the set-up of the financial structure.<sup>6</sup> Thus extraordinarily high investment returns could be realized. As a consequence private equity companies could raise more money and set up larger funds to increase their activities significantly so that it is more difficult nowadays to find undervalued companies. Furthermore the business has professionalized and financial engineering is a well-known practice to a large number of investment houses. As a matter of fact, today only the top quartile of all private equity funds achieves extraordinary returns.<sup>7</sup> Therefore deal structuring capabilities, often referred to as passive value drivers, cannot be the main sources of value generation no longer. Instead private equity firms need to find value drivers beyond the ones described.

Under the current conditions the post-investment phase – the phase after the closure of the transaction – assumes greater importance. In this phase the investor and the management team start working together on increasing the value of the portfolio company.<sup>8</sup> The activities initiated or influenced by the investor are often summarized under the term "active value drivers". Especially the first one hundred days of this phase are crucial for setting the path for a successful investment. The structured approach of initiating the strategic repositioning of the target company and executing the most important changes necessary to enhance future earnings and cash flows is therefore often called "100-day program". Only little research has been conducted on this specific topic so far, especially none concerning the German-speaking region. Therefore, this study aims at finding out

<sup>&</sup>lt;sup>1</sup> Bance (2002): p. 2.

<sup>&</sup>lt;sup>2</sup> Liebeskind, Wiersema and Hansen (1992): p. 73.

<sup>&</sup>lt;sup>3</sup> Meier (2006): p. 15.

<sup>&</sup>lt;sup>4</sup> Kitzmann and Schierek (2004): p. 6.

<sup>&</sup>lt;sup>5</sup> Tyebjee and Bruno (1984): pp. 1052-1054; Fried and Hisrich (1988): p. 25.

<sup>&</sup>lt;sup>6</sup> Baker and Montgomery (1994).

<sup>&</sup>lt;sup>7</sup> Presentation of AXA Private Equity (2006).

<sup>&</sup>lt;sup>8</sup> Meier (2006): p. 8.

how value can be actively generated in private equity investments with special focus on the first one hundred days.

The paper is structured as follows: first the opportunities for value generation in private equity will be analyzed based on a literature review. For the reason of completeness not only active but also passive value drivers will be discussed. Based on this theoretic analysis a holistic framework of value drivers will be proposed. The aspects of the framework relevant for 100-day programs will then be evaluated by a survey among a limited number of private equity experts giving the study the character of a pilot study.

### 2. Value drivers in private equity investments: A framework

In this paper four different groups of value drivers for private equity investments are identified: multiple expansion, deleverage, earnings improvement and qualitative value drivers. They will be discussed one by one in the following sections.

### Multiple expansion

Multiple expansion (or 'financial arbitrage') describes value generation which is not related to changes of the operational or the financial performance of the portfolio company. The investor only plays a passive role and is able to generate returns through the different valuation of the company at the date of the acquisition and that of the divestment. There are five different ways to achieve value generation through multiple expansion. First, value can be created through changes in market valuation. Since the estimation of the company value at acquisition and divestment is based on public market valuation multiples, investors may benefit from changes in these multiples ('multiple riding').<sup>9</sup> Second, an investor may have private information about the portfolio company which can provide an advantage when determining the acquisition price.<sup>10</sup> Third, private equity houses usually have access to a wide network of contacts, which allows them to build up industry expertise and to collect superior market information.<sup>11</sup> This knowledge is beneficial to assess the value of certain business fields and to choose interesting investments.<sup>12</sup> Fourth, private equity investors often take advantage of their expertise and experience concerning the acquisition process. This includes the ability to identify interesting targets and manage negotiations.<sup>13</sup> Fifth, multiple expansion can be achieved by the optimization of corporate scope ('asset stripping'). This relates to the ability of private equity companies to identify and exploit the 'conglomerate discount effect', meaning that the individual parts of an unfocussed multi-unit company might be more valuable than the whole firm.<sup>14</sup> It also relates to buy-and-build strategies resulting in a higher multiple valuation through conjoining related business units. As the described multiple expansion value drivers are passive ones, they are not part of a 100-day program.

<sup>&</sup>lt;sup>9</sup> Berg and Gottschalg (2004): p. 6.

<sup>&</sup>lt;sup>10</sup> Lehn and Poulsen (1989): p. 773; Opler (1992): p. 33; Ofek (1994): p. 650.

<sup>&</sup>lt;sup>11</sup> Anders (1992): p. 82; Fox and Marcus (1992): pp. 67-68.

<sup>&</sup>lt;sup>12</sup> Berg and Gottschalg (2004): pp. 7-8.

<sup>&</sup>lt;sup>13</sup> Baker and Smith (1998); Wright and Robbie (1996).

<sup>&</sup>lt;sup>14</sup> Magowan (1989): p. 12; Singh (1990): p. 126.

#### Deleverage

Deleverage in this context relates to changes in the balance sheet put into place after a private equity transaction. The main changes are made in relation to the level of equity and debt, but working capital and capital expenditures are affected as well.

Probably the most important characteristic of private equity investments is the use of a high leverage, which may provide several opportunities for value generation. Private equity firms' market knowledge, expertise and financial engineering skills are used to find the optimal structure of equity and debt.<sup>15</sup> Due to their reputation as "good" borrowers and often strong track records, private equity investors receive better debt terms and thus reduce the cost of capital.<sup>16</sup> Furthermore, they may assist their target companies in negotiating bank loans, bond underwritings and initial public offerings.<sup>17</sup> One of the main questions is whether leverage itself generates value, as often first the disadvantages come to mind: A high debt level increases exposure to external shocks and thus to financial distress.<sup>18</sup> Furthermore the corresponding requirements and covenant issues may lead to high costs of reporting und controlling. Finally, high leverage can influence risk-averse managers' investment decisions negatively.<sup>19</sup> However, there are two strong arguments which support the view that increasing the debt level is value enhancing: the reduction of the agency cost of free cash flow and the tax shield. A high debt level causes increased interest payments which reduce the free cash flow. So managers have fewer chances to invest money in negative NPV projects, which they might want to realize in order to have more assets under control.<sup>20</sup> Obviously, debt can encourage managers more effectively to act in the interest of investors than compensation packages.<sup>21</sup> The increased interest payments lower the basis for taxation and thus also lead to a higher tax shield.<sup>22</sup> As managers profit from a low leverage, the realized debt level is commonly below the optimal one. Therefore, one can conclude that in most buyouts the pure fact of increasing the leverage yields benefits. But as the financial and the tax structure are mainly set up and fixed before the transaction takes place, they are of little relevance from the point of view of 100-day programs.

It is often observed in private equity investments that cash flows are significantly improved.<sup>23</sup> One component to increase cash flows relates to adjusting the working capital, e.g. by decreasing the receivables outstanding, increasing the payables outstanding or reducing the inventory on hand.<sup>24</sup> Empirically it could be shown that after a buyout companies on average have a significantly lower working capital compared to their respective industry peers.<sup>25</sup> As the described measures can be realized during the first 100

<sup>&</sup>lt;sup>15</sup> Anders (1992): p. 85.

<sup>&</sup>lt;sup>16</sup> Cotter and Peck (2001): p. 103; Black and Gilson (1999): p. 47.

<sup>&</sup>lt;sup>17</sup> Anders (1992): p. 85; Magowan (1989): p. 16.

<sup>&</sup>lt;sup>18</sup> Rappaport (1990): p. 97; Singh (1990): p. 126.

<sup>&</sup>lt;sup>19</sup> Myers (1984): p. 80.

<sup>&</sup>lt;sup>20</sup> Jensen (1986): pp. 323-324.

<sup>&</sup>lt;sup>21</sup> Jensen (1989a): p. 41.

<sup>&</sup>lt;sup>22</sup> Kaplan (1989): p. 630; Renneboog, Simons and Wright (2005): p. 23.

<sup>&</sup>lt;sup>23</sup> Smith (1990b).

<sup>&</sup>lt;sup>24</sup> Muscarella and Vetsuypens (1990): pp. 1411–1412; Singh (1990): pp. 125-127.

<sup>&</sup>lt;sup>25</sup> Holthausen and Larcker (1996).

days of a private equity investment, a working capital optimization after thorough analysis can be a significant source of value generation.

Another measure to increase the cash flow is related to changes in capital expenditures. The capital expenditure prior to the buyout often deviates from the optimal level, as either not all profitable investments are realized (underinvestment) or too much money is spent on unprofitable projects (overinvestment). In reality the overinvestment problem seems to be more relevant; it has been observed that target companies have significantly lower capital expenditures after a buyout.<sup>26</sup> Companies abandon their poor investment programs and dispose of underutilized assets.<sup>27</sup> The improvements in capital expenditures are driven by the tightened control of corporate spending and a better alignment of the interests of management and investors.<sup>28</sup> Nevertheless these measures should be carefully applied as short-sighted reductions of capital expenditures may be counterproductive for the long-term development of the target company.<sup>29</sup> Even though capital expenditures can be fixed to some extent when setting the business plan before closure of the transaction, there is room for adjustments and renegotiation within the first one hundred days.

#### **Earnings improvements**

Earnings improvement can be realized in two ways: reduction of the operating expenses and increase of revenues. The latter can be reached by improving the existing approach to the market, by concentrating on core activities, by organic growth or by growth through acquisitions.

A reduction of costs, especially those caused by excess overhead and inefficient operations such as slack or excess capacity, is a major concern in all buyout transactions.<sup>30</sup> Thus, in most cases margins can be substantially improved.<sup>31</sup> Shortly after the buyout management reviews the business and reduces corporate spending by initiating a series of cost reduction programs.<sup>32</sup> However, it should be noted that private equity is not only concerned with cost reduction but rather with setting the cost at an adequate level and to allocate the company's resources in a way that they can be used most efficiently and effectively. This implies e.g. downgrading non-value-adding product specifications, phasing out unprofitable products, relocating production to low cost destinations, renegotiating supplier contract or increasing plant efficiency.<sup>33</sup> Empirical research shows that this process has a positive effect on the operational performance of target companies.<sup>34</sup> So cost reduction can be a major value driver within 100-day programs.

Apart from the continuous improvement of the operational efficiency, a strong revenue growth of the portfolio company is required to achieve a successful exit.<sup>35</sup> Therefore operational improvements and product cost awareness have to be combined with the

<sup>&</sup>lt;sup>26</sup> Smith (1990a).

<sup>&</sup>lt;sup>27</sup> Phan and Hill (1995): pp. 730–735.

<sup>&</sup>lt;sup>28</sup> Magowan (1989): pp. 12-13; Jensen (1989a): p. 44.

<sup>&</sup>lt;sup>29</sup> Kohlberg Kravis Roberts & Co. (1989).

<sup>&</sup>lt;sup>30</sup> Easterwood, Seth and Singer (1989): p. 41.

<sup>&</sup>lt;sup>31</sup> Muscarella and Vetsuypens (1990): p. 1398.

<sup>&</sup>lt;sup>32</sup> Anders (1992): p. 83; Muscarella and Vetsuypens (1990): p. 1402.

<sup>&</sup>lt;sup>33</sup> Harris, Siegel and Wright (2002); Lichtenberg and Siegel (1990).

<sup>&</sup>lt;sup>34</sup> Amess (2002): pp. 314-315; Muscarella and Vetsuypens (1990): p. 1412.

<sup>&</sup>lt;sup>35</sup> Butler (2001): pp. 143-144.

generation of higher product value and innovation.<sup>36</sup> Revenue optimization relates to the improvement of the existing business. Key revenue-related variables have to be adjusted, such as pricing, customer approach, product quality, customer service or the distribution channels.<sup>37</sup> As existing competitive advantages are maintained or enhanced in revenue optimization, considerable incremental improvements are gained.<sup>38</sup> Overall the focus of the business strategy is restored and the complexity of products and markets reduced.<sup>39</sup> This is achieved by a reduced diversification of activities and an emphasis on cutting inefficient cross-subsidies.<sup>40</sup> Furthermore, performance is enhanced by setting more ambitious business plan targets, which lead to a higher effort on the revenue side.<sup>41</sup> Therefore revenue optimization of the existing business as part of a 100-day program can lead to significant value generation.

In order to achieve growth private equity investors may decide to expand the company's business scope into those areas in which distinctive competences and resources are strong compared to competitors ("organic growth").<sup>42</sup> New business opportunities can be realized by introducing new products, changing the positioning of existing products or expanding into new markets. Therefore a redefinition of key marketing strategies and the reorganization of distribution channels is necessary. Often this is supported by an increase of research and development expenditures and a substantial change in the resource base of the company.<sup>43</sup> Moreover, companies frequently are deficient in realizing growth opportunities, as an inflexible company strategy and hierarchical barriers prevent managers from decisions which might be risky and untypical of the company's policy.<sup>44</sup> So the investor can generate value already in the first one hundred days by encouraging organic growth through restoring and supporting the employees' entrepreneurial skills.<sup>45</sup>

The investor may also support the growth of its portfolio company by pursuing an external growth strategy, i.e. undertaking add-on acquisitions to the business.<sup>46</sup> The decision to grow externally is always strategically motivated. Companies may lack crucial technologies or products which they can only gain by acquiring other companies. Another motivation may be to enter new markets. Additionally, companies often use add-on acquisitions to vertically integrate and thus capitalize on synergies. "Buy and build" strategies, in which large enterprises and often market leaders are created are applicable to fragmented markets as they serve to consolidate these markets. Add-on acquisitions are especially attractive for private equity investors as they increase the speed of growth.<sup>47</sup> In fact there is often no alternative under the given time horizon of the investment. Overall the active management of external growth may have a significant impact on value generation.

<sup>&</sup>lt;sup>36</sup> Gilbert and Strebel (1987): pp. 35-36.

<sup>&</sup>lt;sup>37</sup> Berg and Gottschalg (2004): pp. 11-12.

<sup>&</sup>lt;sup>38</sup> Wright, Hoskisson and Busenitz (2001): pp. 116-117.

<sup>&</sup>lt;sup>39</sup> Seth and Easterwood (1993): p. 267.

<sup>&</sup>lt;sup>40</sup> Liebeskind, Wiersema and Hansen (1992): p. 85; Wiersema and Liebeskind (1995): p. 457.

<sup>&</sup>lt;sup>41</sup> Butler (2001): p. 143.

<sup>&</sup>lt;sup>42</sup> Seth and Easterwood (1993): p. 260.

<sup>&</sup>lt;sup>43</sup> Berg and Gottschalg (2004): pp. 11-12.

<sup>&</sup>lt;sup>44</sup> Hoskisson, Johnson and Moesel (1994): pp. 1207-1251.

<sup>&</sup>lt;sup>45</sup> Thopmson, Wright and Robbie (1992): pp. 58-69.

<sup>&</sup>lt;sup>46</sup> Wright, Hoskisson and Busenitz (2001): p. 117.

<sup>&</sup>lt;sup>47</sup> PPM Ventures London (2004).

Shortly after closure the buyout investors emphasize the refocusing of their portfolio company. It is argued in literature that block holder ownership is significantly correlated with corporate restructuring and concentration activities.<sup>48</sup> Optimization of the value chain can be achieved by in- or outsourcing as well as by divesting. Special focus is placed upon lines of business where the portfolio company has distinctive competences which are significant compared to those of the competitors. Lines of business where such distinctive competences are not present and which therefore require disproportionate managerial resources are likely to become divested.<sup>49</sup> These units are then sold to other parties that can make better use of them. The divestment can take place as "asset sale", which is the sale of a division or product line directly to another firm, as "equity carve out", by which a full or partial interest of a subsidiary is offered to the public or as "spin-off", which is a pro rata distribution of shares in a subsidiary to the existing shareholders of the parent.<sup>50</sup> Like the other three value drivers for earnings improvement the concentration on core activities can be initiated within a 100-day program and thus contribute to its value generation.

#### **Qualitative value drivers**

The category "qualitative value drivers" summarizes the aspects which have an indirect impact on earnings and cash flows, such as management and governance issues or support from third parties.

The question whether the existing management of the company bought by the private equity investor should be replaced is controversially discussed. On the one hand buyouts often lead to improvements in operational efficiency through the replacement of inefficient management teams.<sup>51</sup> The new management team normally brings in valuable competences and is able to execute change management. On the other hand changing the team may destroy existing operational routine and corporate loyalty. Therefore some investors support the existing management team instead of replacing it.<sup>52</sup> Nevertheless changes in management should at least be addressed in 100-day programs as there is substantial potential for value generation.

Mismanagement of resources often occurs in public corporations due to non-aligned goals of owners and managers.<sup>53</sup> The agency problem depends on the degree of discretion of the managers' decisions, the effectiveness of the incentive schemes and the level to which a deviation from shareholder-wealth-maximizing decisions can be observed and sanctioned.<sup>54</sup> Buyout firms, consequently, provide incentives to align the interests, especially via equity participation.<sup>55</sup> This is also referred to as the "carrot and stick mechanism".<sup>56</sup> The equity has a high upside potential and thus the manager can participate substantially in the success of his company (carrot), on the other hand through the equity a considerable part of the manager's wealth is locked in the company which leads – together

<sup>&</sup>lt;sup>48</sup> Bethel and Liebeskind (1993): p. 15.

<sup>&</sup>lt;sup>49</sup> Easterwood, Seth and Singer (1989): pp. 30-43.

<sup>&</sup>lt;sup>50</sup> Weston, Mitchell and Mulherin (2004): pp. 229-254.

<sup>&</sup>lt;sup>51</sup> Anders (1992): p. 81.

<sup>&</sup>lt;sup>52</sup> Pepiciello (2005): pp. 26-30.

<sup>&</sup>lt;sup>53</sup> Jensen and Meckling (1976): p. 317; Jensen (1989b): p. 70.

<sup>&</sup>lt;sup>54</sup> Berle and Means (1932); Fama (1980).

<sup>&</sup>lt;sup>55</sup> Jensen (1989b): p. 68.

<sup>&</sup>lt;sup>56</sup> Cotter and Peck (2001): p. 101.

with his indivisibly locked human capital – to an undiversified risk position (the stick).<sup>57</sup> So management finds itself in a new position, namely that of a co-owner. This gives them further motivation for efficiency gains, strategic moves and thus for better operating and investment decisions.<sup>58</sup> Nevertheless one also has to consider that high managerial equity participation can result in underinvestment due to managerial risk aversion and underdiversification of human capital and personal wealth.<sup>59</sup> In general one can assume that via intelligently designed management incentives value can be generated within the first one hundred days.

Public companies often have a scattered shareholding structure causing free-rider problems in terms of monitoring. The concentration of equity in the hand of the private equity firm enables closer monitoring and control and a more active representation in the board of directors.<sup>60</sup> Furthermore professional investors have advantage in controlling and monitoring due to their industry expertise and their experience gained from a large number of transactions.<sup>61</sup> Changes initiated by private equity investors often also relate to the corporate governance structure and the organizational form.<sup>62</sup> These findings indicate that by improving monitoring, controlling and organization value can be increased significantly.

Private equity investors do not restrict their role to monitoring; instead they are often very active and assist the management in strategic questions.<sup>63</sup> Senior employees of the investor are highly involved in the post-closing phase and deal partners meet on a regular basis to solve problems instantly. As the challenges of the post-closing phase are similar to that of a post-merger integration, one can assume that the two major aspects of any post-merger integration – employees and customers – have to be addressed as well.<sup>64</sup> Literature agrees that by actively planning and managing the post-closing phase significant value can be generated.

The active involvement is especially true of the so-called system integrators.<sup>65</sup> System integrators initiate and control transactions with very limited outsourcing, an approach which requires a considerable number of employees and experts. Mentoring is central to this approach. The investors help to negotiate with potential corporate customers and contribute contacts.<sup>66</sup> So-called process integrators on the other hand rely heavily on outsourcing. Management consulting firms are frequently involved to improve the portfolio company's post-acquisition operations. Process integrators make their administration as lean as possible in order to concentrate solely on investment decisions and value-adding tasks. They support the management of the acquired company with their excellent networks and their access to external resources. External support is especially used to complement management's capabilities.<sup>67</sup> Therefore leveraging the private equity

<sup>&</sup>lt;sup>57</sup> Grossman and Hart (1982).

<sup>&</sup>lt;sup>58</sup> Magowan (1989): p. 14; Easterwood, Seth and Singer (1989): p. 35.

<sup>&</sup>lt;sup>59</sup> Fama and Jensen (1983): p.

<sup>&</sup>lt;sup>60</sup> Cotter and Peck (2001): p. 130; Jensen (1989a): p. 39; Jensen (1989b): p. 67.

<sup>&</sup>lt;sup>61</sup> Cotter and Peck (2001): pp. 129-130; Loos (2005): p. 29.

<sup>&</sup>lt;sup>62</sup> Hite and Vetsuypens (1989); Singh (1990): p. 127.; Jensen (1989a): p. 44.

<sup>&</sup>lt;sup>63</sup> Jensen (1989a): pp. 36-37; Jensen (1989b): pp. 67-68.

<sup>&</sup>lt;sup>64</sup> Meier (2006): pp. 114-120.

<sup>&</sup>lt;sup>65</sup> Berg (2005): p. 113.

<sup>&</sup>lt;sup>66</sup> Kitzmann, Schierek and Voigthaus (2004): p.5.

<sup>&</sup>lt;sup>67</sup> Berg (2005): pp. 114-122.

network and expertise and the use of external support as part of the 100-day programs can lead to increasing value.

### Intermediate results

Based on a literature review twenty value drivers for private equity investments could be identified. These value drivers can be grouped into for categories: multiple expansion, de-leverage, earnings improvements and qualitative factors. A second grouping distinguishes active from passive value drivers, i.e. pre-closure value generation through structuring is distinguished from the sources of value generation within 100-day programs. Therefore the following holistic framework for value generation in private equity investments is proposed:

Pre-closure sources of value generation			Sources of value generation within 100-day programs				
Multiple expansion		Deleverage		Earnings improvement		Qualitative value drivers	
Changes in market valuation	Deal making capabilities	Optimization of financial structure	Optimization of working capital	Optimization of operating expenses	Revenue optimization	Change in top management	Management incentives
Private information	Optimization of corporate scope (asset stripping)	Optimization of tax structure	Optimization of capital expenditures	Revenue generation with new business opportunities	External growth	Improved monitoring, controlling and organization	Planning/ active management of post-closing phase
Market information				Concentration of the firm on core activities		External support/ interim management	Leverage of PE network and mentoring

Table 1: Framework for value generation in private equity investments

In the next step this theoretic framework will be assessed with regard to its practical relevance. As lined out in the introduction, the main focus of this study is put on drivers relevant in 100-day programs. Therefore the evaluation presented in the following will concentrate on these aspects.

# **3.** Evaluation of the value generation framework

The purpose of this chapter is to evaluate the proposed framework. First the research methodology used will be described. Then the results will be presented according to the three levers relevant in 100-day programs: deleverage, earnings improvement, and qualitative value drivers.

## Methodology

This article presents a pilot study. The main focus is on the development of the holistic framework for value generation in private equity. To check its consistency and to get a first

indication of the relevance of the value drivers interviews were conducted with five private equity experts, four of them private equity investors and one private equity consultant.

For the exploratory purpose of this study it is not only important to analyze the different value drivers but also to compare them across private equity houses of different sizes (big vs. small) and industry focus (mature vs. growth). Therefore, four exemplary companies were selected for telephone interviews, each representing one size/industry combination pattern: two big private equity companies were chosen as representatives of high-volume investors. Both typically invest in businesses with reported annual revenues exceeding €100 million, but they differ in their selection of portfolio companies. One focuses more on mature industries whereas the other is active in growth markets such as telecommunications and new media. The other two private equity companies are small to medium-volume investors. The one has specialized on enterprises with owner manager succession problems. Its targets are usually privately owned businesses with reported annual revenues between 00 and 00 million. The other represents the typical growth investor where investments have reported annual revenues between 00 million.

The chosen methodology of expert interviews had one major advantage over the use of questionnaires: the evaluation was interactive and so further insights into the issues could be generated, which was extremely important at this early stage of the framework development. The interview partners did not only assign predefined assessments such as 'high impact' or 'low impact' to the value drivers but could also discuss them controversially, give examples or establish links to other factors. Nevertheless it has to be admitted that it is quite difficult to receive information from private equity investors. There are several reasons why research in the field of private equity is especially difficult: first, the private equity industry is known for its restrictive information policy. As the name "private" implies, most of the deal information is kept confidential. Second, many of the current deals have not been closed yet as private equity is still a rather young industry in Germany and so it is difficult for the experts themselves to assess the different value drivers individually. Third, private equity companies are structured so lean that their employees often lack the time to get involved into research projects. However, it must be noted that this pilot study has only preliminary character and constitutes a base for further research with more in-depth evaluation. The results set forth in the following paragraphs represent the common assessment of the experts interviewed unless stated otherwise.

### **Results for "deleverage"**

Optimization of capital expenditures and working capital are considered standard levers. An active management of cash flows is crucial for the success of private equity investments and the identification of potential efficiency gains in these certain areas are important starting points. It is highly important to keep the cash flows transparent so that potential shortcomings can be identified early. Controller, treasurer and CFO have to be informed about all relevant expenditures. A daily cash status for the whole investment group may help to promote transparency of all relevant expenditures.

The optimization of working capital is one of the first measures to be executed by private equity investors. In general, the target company should have a reasonable amount of working capital. However, there is no standard way of optimizing working capital. It always depends on the initial situation of the company. According to the prevailing

strategy investment-specific measures are applied, i.e. customers are urged to pay earlier and supplier contracts are renegotiated to increase outstanding payables. This is relatively easy to realize. It was also stressed by the industry experts that an increased awareness of cash management should be achieved.

The optimization of capital expenditures mainly applies to investments in mature industry and small and medium-sized companies which tend to be over invested, exhibiting excessive capital expenditures. Often this can be observed in engineering-driven companies which have a preference for employing the latest technology although little value is added. Moreover, machinery is often not fully utilized. In such cases it makes sense to sell assets or to increase utilization via external contracting.

To sum up, our sample indicates that measures of working capital and capital expenditure optimization are regularly used in 100-day programs and have a medium impact in terms of value generation.

### **Results for "earnings improvement"**

Taking into account the limited investment horizon of private equity investors, optimization of operating expenses is a typical lever in private equity investments since these measures quickly yield positive cash flows. Measures to increase operating efficiency, i.e. to adjust costs, have a high impact on value generation and are therefore usually addressed immediately after deal closure. However, these measures need to be dealt with care to avoid mistrust and subsequent resistance on the part of other stakeholders. Standard measures include the optimization of purchasing, procurement, or administrative costs. Prior to that, however, the target needs to be analyzed in depth in order to gain an understanding of the processes and the value chain activities to identify the key areas of improvement. Especially human resource costs are addressed, making employee compensation more flexible by increasing the variable share of their income. Moreover, the number of required employees is adjusted and the possibility of outsourcing is discussed. Depending on the size of the private equity investor, cost cutting approaches differ. Large players mainly address strategic levers such as renegotiation of major supplier contracts and, in contrast to the philosophy of smaller investors, do not actively support the management in reducing operational inefficiencies. Still, the sample identified the optimization of operating expenses to be one of the key value-drivers for PE investments; it is therefore usually applied within the first 100 days.

Apart from cost reduction optimization of the company's revenues is a major value driver. It was stated that revenue optimization is a rather specific process to which no standard approach can be applied and that measures on the revenue side are more challenging and difficult to implement than levers on the cost side. One aspect is always addressed: marketing. First, knowledge about the business, the markets and the sales channels is acquired, then the existing products and markets are optimized, e. g. by changes in positioning, superior promotion, product improvements and a reduction of the complexity of the product program. In the case of an exemplary medium-sized company only limited marketing knowledge was available in the company. So the investor focused on the optimization of the marketing department, hiring new staff as well as promoting capable employees. Revenue enhancement is especially important for growth-oriented private equity firms. One investor stated that its portfolio companies were expected to grow

substantially in order to increase attractiveness to a strategic buyer as well as a financial investor, thus allowing for a positive exit. To sum up, revenue optimization has a substantial positive value impact. But there are aspects on which investors do not agree: some investors consider revenue improvement more important than cost reduction, whereas for others costs are the more important lever. The sample also showed different views on whether to start revenue optimization in the first one hundred days. Furthermore there are different opinions on whether cost and revenue optimization should be approached sequentially or simultaneously. The main argument in favor of a simultaneous approach is that revenue optimizing measures only have a mid-term impact and should be initiated as quickly as possible. Therefore 100-day programs should also include measures of revenue optimization.

Another measure on the revenue side is revenue generation with new business opportunities. Private equity investors may adjust the overall strategy of the portfolio company and are therefore able to take advantage of new growth possibilities. Organic growth may be achieved by introducing new products, repositioning existing products or expanding into new markets. Investors usually evaluate all three opportunities; the choice among them usually depends on the specific investment and especially on the phase of lifecycle of the portfolio company. The investors who were interviewed also supported the findings from literature that restoring the entrepreneurial spirit within a company is important, especially as it can remove impediments to growth. Thus the company can address new opportunities that could formerly not be achieved due to missing capabilities, corporate culture, bureaucracy, and leadership style. This could be shown in the cases of family-owned businesses with leadership succession problems, since these companies appear to be highly dependent on the management philosophy of their owners. Once started organic growth contributes considerably to the overall value generation. Particularly the expansion into new markets and the product portfolio diversification were stated to have a high impact on value generation. But some private equity investors also stated that revenue measures for achieving organic growth require thorough preparation since possible opportunities need to be carefully evaluated. So measures for organic growth are often initiated only after the first 100 days and capitalize in the long run. Therefore these measure are of minor importance for the 100-day program.

External growth, i.e. growth via the acquisition of other companies, can be an important lever to widen the strategic scope such as know-how, products and regions. They are rarely used just to increase utilization of assets. A representative large private equity investor prefers market leaders as portfolio companies; if this still has to be created – which often is the case – the goal can only be achieved by acquisition due to the short investment horizon. Apart from the creation of a market leader acquisitions are also conducted to realize synergies. However, synergies of add-on acquisitions must be carefully evaluated, as in practice they are sometimes overestimated. The private equity investors interviewed were quite skeptical concerning the synergy potential. Add-on acquisitions should always be strategically motivated and long-term oriented to increase attractiveness of the investment for a secondary buyout. When measuring the success of an add-on acquisition, one has to distinguish between strategic and financial success. With respect to strategy a representative small investor noted that, although all of his add-on acquisitions had been financially successful, only 50% had also been strategically after the acquisition, but not

necessarily within the first one hundred days. These findings confirm the theoretical indications that external growth is important in order to generate value.

Private equity investors believe that many companies are trapped within their current strategy. Based on their external perspective, they can identify these companies and support them in adjusting the strategy. The core task of private equity investors is to identify the value-enhancing parts of a business. Thereby the value chain of the portfolio company is optimized. Non-value-adding activities are either outsourced or divested, which restores the focus on the core business. Consequently underperforming products are phased out. It was stated that the divesture itself does not add considerable value, but rather the effect it has on the overall performance of the remaining activities. Management can then relocate the released resources to the core business. In secondary leveraged buyouts divestitures are not common as these companies have already been focused. Our sample indicates that changes of the organizational structure as well as optimization of processes are common measures of restoring corporate focus. Organizational changes are addressed within the first one hundred days whereas process improvements are typically started at a later stage. So the concentration on core activities is a medium-impact value driver within 100-day programs.

### **Results for "qualitative value drivers"**

Private equity investors tend to exchange some or all of the management after acquisition. According to the investors interviewed there are hardly any transactions in which no changes in the top management are made. The majority of the management team is already fixed at the closure of a deal as it is determined in the due diligence process. However, some of the management might also be exchanged at a later stage, e.g. during the 100-day program. Sometimes members of the private equity firm even work in management positions of the target company for a couple of months until the position is filled permanently. The positions most often replaced are those of the CEO and CFO. The CFO position is frequently changed due to the covenant requirements by banks which demand a CFO with sufficient experience. The main reason for the change in top management is that the quality of the old management is considered inadequate. Often the old management is not able to handle the fast changing market environment. Furthermore they sometimes oppose a value-maximizing strategy for private reasons. By definition, the change of top management positions occurs in succession situations. In these cases the previous owner is replaced by a professional management. The previous owner gets thorough attention in these situations as his personal traits are often reflected in the company. Psychological aspects also have to be considered, e.g. in small enterprises with regional ties "saving the face" of the previous owner might be an important issue. In general, replacing management is highly sensitive as the post-closure phase is usually characterized by uncertainties and concerns about the future within the acquired organization. A change in top management by the private equity firm can have signalling effects that either build or destroy mutual trust. None of the private equity firms indicated, however, that new management destroyed existing operational routine and corporate loyalty. These practical findings seem to confirm the theoretical opinion that the value-adding competences of the new management outweight possible drawbacks. Thus it is an important value-driver.

Private equity investors always give incentives to the management of the acquired company and consider this to be value enhancing. Management incentives in companies

held by private equity investors are generally substantially higher than those in other companies. Private equity investors argue that those who have a significant influence on the success of a company should directly participate in its success; thus agency conflicts dwindle. The incentive packages usually include different components such as equity participation or a steep bonus system. Participation in the acquiring firm's equity can amount to as much as 80% of total management compensation. Managers are either given the equity or have to buy in. In the latter case they regularly receive the shares at a discounted price. One of the large private equity firm offers compensation contracts where the variable income equals the fixed income when the agreed-upon goals are met, and surpasses the fixed income if the target values are exceeded. Another private equity firm active in acquiring small and medium-sized companies prefers bonus systems for their managers because they want to keep the compensation package as simple as possible. They argue that new, often internally promoted managers find it difficult to cope with their new responsibilities. Equity participation is therefore not demanded and the final bonus, which relates to the return at exit, is considered to be a sufficient incentive. In general an incentive system should be transparent and simple so that managers know how they can influence their own income. As discussed in literature, equity participation and other management incentives are used to resolve principal agent issues. They are therefore an important value driver in the 100-day programs.

Private equity firms always focus on the improvement of monitoring and controlling systems as a consequence of the lending banks' demand for tight covenants control. Controlling is highly important in order to be able to identify possible problems early enough and initiate the required adjustments. However, most of the controlling systems used in the portfolio companies before the buyout do not meet the requirements of covenants as they often do not allow a forecast of key performance indicators. Investors therefore need to monitor whether their measures are actually applied and yield the expected results. In addition to this, the investor tries to create an increased cash awareness among the employees of the acquired company. Although all the investors interviewed state that reporting and controlling improves after the acquisition the impact on value creation is ambiguous; some private equity companies do not believe that a better controlling system is a significant competitive advantage. Changes in the organization are rarely made by the private equity investor directly. Private equity firms rather define goals and key performance indicators, which lead to the appropriate organizational changes.

Private equity investors pursue an active management strategy. They mainly do so via the steering committee and the board; they normally do not influence operations directly. Private equity investors rather issue milestones for operational improvements to the management and advise them strategically on issues that have a long-term effect on the value of the investment, e.g. when it comes to acquisitions, pricing decisions or the launch of new products. The degree of involvement, however, heavily depends on the individual philosophy of the private equity investor. Private equity firms specializing on turnaround situations for example get actively involved in operations and install interim managers. Generally the degree of involvement is higher during the first 100 days when meetings are held twice or three times a week in order to get a better feeling for the way the management works. At a later stage of the investment the frequency of meetings are also relevant for the private equity investors, as they have to understand where value is

generated in the acquired company. This has become more relevant over the past ten years, since the private equity industry has transformed from a financial engineering business to a more operative one. The purpose of private equity today is active shareholding and not passively waiting to see what will happen to an investment. However one private equity investor illustrated the relation between his firm and the acquired company as not being a "debating club". This indicates that in the end control is still in the hands of those who bear the risks, i.e. the private equity firm. Our sample indicates that investors get involved in the crucial questions and decisions, especially shortly after the transaction. Therefore the active planning of the post-closing phase can be considered a significant value driver and is one of the major aspects of 100-day programs.

Private equity firms generally use a high level of external support. This is in part simply due to the fact that in every buyout the private equity firm needs a statement from external consultants verifying whether the investment risk is reasonable. This statement is required by the lending banks in order to fix the covenants. As private equity firms are lean organizations, they lack the manpower to analyze the situation of markets during the tight time frame of a buyout; but speed is crucial in private equity investments. Therefore consultants are often hired. Strategy consultants prepare and advise on strategic decisions which are then taken by the private equity firm and the management of the company. Some private equity firms, however, claim that they mostly rely on their own expertise on strategic matters as they believe their capabilities in that field to be better. These private equity firms rather employ the expertise of process consultancies on the operational side of the business. Large private equity firms also make use of human resource consultants in the early stages of the investment cycle in order to conduct a review of the existing management. Smaller private equity firms work with additional external support such as executive search or use external support for specific expertise such as controlling, technology or IT. To sum up, the private equity houses interviewed rely on consultants for a number of specially assigned tasks. So external support can be attributed a more than average impact.

To find external support, private equity companies can also make use of their network. In general private equity companies – at least according to their statements – do not believe that their network is of great significance with respect to the operations of the acquired company. One private equity firm even says that the importance of the private equity network is heavily overvalued. In their opinion the network can only be of high importance with respect to deal sourcing and financing. The negotiation power is therefore normally limited to structuring the buyout. Private equity firms use their network in the first 100 days when human resource issues arise, e.g. when a new management is needed. The private equity network can also help to identify appropriate add-on acquisition objects and ease the expansion into new markets and countries. Knowledge spillovers between portfolio companies, however, hardly occur. So the networks of private equity companies only have a minor impact on value generation.

### Intermediate results

The industry experts interviewed have supported the value driver framework as presented in Table 1. All proposed value drivers are used, no crucial drivers are missing. It was also confirmed that value can actively be generated within 100-day programs via deleverage, earnings improvements and qualitative value drivers. Multiple expansion and financial engineering do not belong to 100-day programs. Of course the importance of the value drivers varies. According to our data sample the optimization of operating expenses and an active management of the post-closing phase have the highest impact on value generation. Very high significance can also be attributed to revenue optimization as well as to changing top management, improving management incentives and using external support. The network of the private equity firm on the other hand seems to be of rather low importance. Table 2 summarizes the key findings on the relevance of each value driver within 100-day programs.



Table 2: Relevance of value drivers in private equity investments

# 4. Conclusion

This study identifies value drivers in private equity investments and thus contributes to the understanding of value generation in this business segment. The experts confirmed that there has been a shift from passive to active value drivers. In the recent past multiple expansion was definitely value-enhancing, but currently this approach is less beneficial as targets are perceived as expensive and target pricing is competitive. Financial engineering still is a value driver but it is regarded as a standard measure with only limited room for differentiation. The decreasing importance of multiple expansion and financial engineering on the one hand and the value enhancing effects of the more active value drivers on the other hand lead to an increasing importance of active management. Therefore 100-day programs are commonly used today. The importance of 100-day programs was confirmed by all investors. They contribute significantly to the overall value generation in private equity investments. Due to an increased competitive situation in the private equity market they will further gain importance in the future. But like private equity investments in general 100-day programs can hardly be standardized. Our interview partners underlined that the measures applied very much depend on the individual investment. Nevertheless a

first assessment of the value generation potential of the different active value drivers within 100-day programs was made.

The pilot study is of interest for both academics and professionals. On the academic side it serves as a starting point for further research. The proposed framework and its underlying value drivers can be tested statistically in order to confirm the preliminary findings of the expert evaluation. For professionals the paper concisely describes one of the most important phases of a private equity transaction. The identified value drivers and their respective impact provide ideas on how the current practice of 100-day programs could be enhanced and in which direction these programs should be developed.

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