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Leipzig Graduate School of Management

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# Performance over the CEO Lifecycle

## – A differentiated analysis of short and long tenured CEOs –

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# Performance over the CEO Lifecycle

## – A differentiated analysis of short and long tenured CEOs –

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# ABSTRACT

In extending leader life cycle theory (Hambrick & Fukutomi, 1991) we examine the relationship between CEO tenure and company performance. We show that a uniform leader life cycle as proposed by previous research does not exist. Rather, based on arguments from institutional theory and circulation of power theory we point to the relevance of power dynamics for the relationship between CEO tenure and performance. We show that distinct leader life cycles result for CEOs with long tenure and CEOs with short tenure. Specifically, for long-tenured CEOs we find a slow increase in performance during the early tenure which then increases strongly and later declines again, whereas the life cycle of short-tenured CEOs is characterized by strong performance increases during the early tenure followed by a sharp decline. Moreover we find evidence that a longer CEO tenure leads to higher overall firm performance.

# INTRODUCTION

In this paper, we address the question, how the performance of companies develops over the tenure of the CEO. This question is at the core of leader life cycle theory developed by Hambrick and Fukutomi (1991). They proposed an inverted curvilinear relationship between the tenure of a CEO and company performance and distinguished five phases which a CEO typically goes through during his tenure in office. Empirical studies support this view (Miller & Shamsie, 2001; Giambatista, 2004; Henderson, Miller & Hambrick, 2006). In this context, studies normally find the optimal CEO tenure to lie between 9 and 14 years (Oesterle, 1999; Shen & Cannella, 2002).

In spite of these empirical results, a decrease of CEO tenures can be observed in corporate practice. A study by Booz & Co., for example, has shown that the average tenure of European CEOs has declined to 5.7 years (Karlsson, Neilson & Webster, 2008). As a reason for these shorter tenures, researcher note that many boards of directors have become more critical concerning the performance of the CEOs which they select, i.e. they demand positive performance effects immediately after a new CEO has taken office and are prepared to replace a CEO more quickly (Lucier, Wheeler & Habbel, 2007).

These developments in corporate practice give reason to believe that a uniform leader life cycle theory as proposed by Hambrick and Fukutomi (1991) does not exist. Rather, we argue that a differentiated analysis of leader life cycles is necessary and that for CEOs with different tenures in office different types of life cycles exist. We also argue that a longer CEO tenure leads to higher overall firm performance.

Leader life cycle theory has been introduced by Hambrick and Fukutomi (1991), who proposed an inverted curvilinear relationship between a CEO's tenure in office and company performance. Overall, they distinguished five phases in a CEO's tenure which they named 'response to mandate', 'experimentation', 'selection of an enduring theme', 'convergence', and 'dysfunction'.

Hambrick and Fukutomi (1991) assumed that the first phases of a CEO's tenure are characterized by performance gains mainly through learning, openness and high task interest. In later stages of a CEO's tenure, i.e. after approximately six years, however, performance is likely to decrease as the CEO's commitment to an obsolete paradigm increases and the use of information sources as well as the task interest decreases (Hambrick, Geletkancz & Fredrickson, 1993).

In principle, the argumentation of leader life cycle theory is similar to that of institutional theory (Pfeffer, 1981; Meyer & Rowan, 1977). Pfeffer (1981) has developed a model of the institutionalization and perpetuation of CEO power which assumes that a CEO's power increases over his tenure because of three main effects – the commitment to a once chosen course of action, the institutionalization of beliefs and practices, and the establishment of a growing network of contacts. Meyer and Rowan (1977) have shown that this institutionalization has one the one hand a positive effect on performance resulting from increased legitimacy and on the other hand a negative effect that reflects inefficiencies as a consequence of sticking to obsolete rules. Overall, institutional theory – like leader life cycle theory – proposes an inverted curvilinear relationship between the tenure of a CEO and performance.

Ocasio (1994) has developed an alternative view of how a CEO's power in organizations develops over his tenure. He termed this view 'cirulation of power' perspective. According to this perspective, a CEO's power does not automatically increase with his tenure. Rather, the circulation of power perspective assumes that the position of a CEO is constantly challenged by powerful boards or by rivals. Thus, it is likely, that as a consequence of changes in the organization's environment or poor performance, a CEO's capabilities are put into question by members of the board or rivals which in turn can lead to the CEO's early replacement.

Empirical studies have yielded simultaneous support for the argumentation of both, institutional theory as well as the circulation of power perspective (Ocasio, 1999; Ocasio, 1994). These findings are in line with observations in corporate practice, where long-tenured as well as short-tenured CEOs can be found, resulting in an average tenure of 5.7 years in Europe (Karlsson, Neilson & Webster, 2008).

In this paper we build on these theoretical arguments as well as empirical observations. We argue that no single leader life cycle as proposed by Hambrick and Fukutomi (1991) exists, but rather that CEOs with long and short tenures respectively have different leader life cycles. On the basis of a sample of 174 CEOs in Germany's 83 largest companies for an overall number of 1,281 years we show that CEOs with short tenures achieve performance increases earlier, but that CEOs with longer tenure reach a higher overall performance level.

With our study, we contribute to leader life cycle research by distinguishing different types of life cycles and by comparing their performance effects. In accordance with the call for more international research (Crossland & Hambrick, 2007), we additionally transfer leader life cycle theory to a German context, thus extending upper echelons research to a new geographical setting.

## THEORY AND HYPOTHESES

In the discussion on organizational effects of executive succession a significant body of research deals with the question of how the new CEO influences performance (Finkelstein, Hambrick, & Canella, 2009; Giambatista, Rowe, & Diaz, 2005; Kesner & Sebora, 1994). Despite the large number of studies in this field, one major criticism of succession-performance research regularly appears: Studies in the field only offer a 'temporal snapshot' of the performance impact of a succession event as they solely focus on the performance effects in the first years of a new CEO's tenure (e.g. Davidson, Nemec, Worrell, & Lin, 2002; Helfat & Bailey, 2005; Huson, Malatesta, & Parrino, 2004; Karaevli, 2007; Rhim, Peluchette, & Song, 2006). Performance effects over the full tenure of a new CEO, however, have rarely been investigated.

A first step towards closing this research gap was done by Eitzen and Yetman (1972). In a large sample of college basketball coaches they found that the relationship between coaching tenure and team performance is curvilinear. First, a team's success increased with coaching tenure, but after a certain period – on average 13 years – team performance declines again.

Surprisingly, Eitzen and Yetman (1972) did not put very much effort into interpreting their results. Thus, Hambrick and Fukutomi (1991) built on Eitzen's and Yetman's (1972) major findings and developed leader life cycle theory. Their central hypothesis suggests that over his tenure in office a CEO goes through a life cycle consisting of five seasons, in each of which he shows distinct behavior patterns. Hambrick and Fukutomi (1991) call these five seasons 'response to mandate', 'experimentation', 'selection of an enduring theme', 'convergence' and 'dysfunction'.

When entering the new position, a CEO generally devotes himself to 'responding to the mandate', i.e. to trying hard to meet the expectations that the board or the predecessor have implicitly or explicitly expressed (Vancil, 1987). Particularly, the CEO strives to demonstrate

efficacy in order to prove that his nomination was the right choice and in order to build legitimacy. The following ‘experimentation’ season is characterized by intensive learning. During this season, the CEO tries out new approaches for leading the company in order to establish ‘the tone for his tenure’ (Miller & Shamsie, 2001). In the third stage, the ‘selection of an enduring theme’, the CEO has found this ‘tone’ and selects a specific paradigm, i.e. a belief system about how the company should be run, which guides his further tenure. In the subsequent ‘congruence’ phase the CEO then takes more incremental measures to strengthen the selected route. Finally, Hambrick and Fukutomi (1991) distinguish a season which they call ‘dysfunction’. In this season, CEOs typically have reached a very strong power position but simultaneously start to lack the excitement for their job. Instead of taking new initiatives, CEOs tend to concentrate more on the ceremonial aspects of their job in this season (Romanelli & Tushman, 1988).

Hambrick and Fukutomi (1991) argue that an inverted curvilinear relationship exists between these five seasons of a CEO’s tenure and firm performance. They base their argumentation concerning the performance impact of tenure on inverse influence of learning and adaptation. On the one hand, learning, i.e. increasing task knowledge leads to positive performance effects on a diminishing scale particularly in the first two seasons. These positive effects are, however, outweighed over time by progressively increasing costs of a mismatch between the paradigm which the CEO has selected and environmental conditions (Henderson, Miller & Hambrick, 2006).

The leader life cycle theory has received support in three empirical studies (Miller & Shamsie, 2001; Giambatista, 2004; Henderson, Miller & Hambrick, 2006). Nevertheless, the results of these studies raise the question if a uniform leader life cycle as proposed by Hambrick and Fukutomi (1991) acutally exists. Henderson, Miller and Hambrick (2006), for example, found

different durations of CEO tenures in dynamic and stable industries. Karlsson, Neilson and Webster (2008) even reported very diverse tenures of CEOs within the same industries. Finally, research rooted in institutional theory has shown that the tenure of a CEO is not only shaped by his individual capacity for learning and adaptation, but that other stakeholders and particularly the power relationships between these stakeholders play an important role (e.g. Ocasio, 1994).

Hambrick and Fukutomi (1991) also acknowledge the exceptional relevance of CEO power for the development of a leader life cycle. They do not consider, however, the power of other important stakeholders, as the board or the top management team, and the effects that the power of these stakeholders might have on the CEO. As a matter of fact, two important theories on the development of power positions in companies have been developed in management research. These two theories are institutional theory and circulation of power theory (Pfeffer, 1981; Ocasio, 1994). Both theories consider different aspects of a CEO's power position and come to different conclusions regarding the effect of power relations on CEO tenure and firm performance. In empirical studies, both theories have received simultaneous support (e.g. Ocasio, 1999; Ocasio, 1994). These theoretical and empirical findings have led us to believe that no uniform leader life cycle as proposed by Hambrick and Fukutomi (1991) exists. This reasoning is reflected in hypothesis 1:

> *Hypothesis 1: A general inverted curvilinear relationship between CEO tenure and company performance cannot be observed.*

Rather, we believe that following the argumentation of institutional theory and circulation of power theory respectively, two different leader life cycles result. From an institutional perspective, CEOs develop their power positions over time as their relationships, actions and beliefs become 'rules' that are not put into question by other organization members anymore.

Pfeffer (1981) describes this ‘institutionalization of power’ as the result of three interrelated processes in companies. As part of the first process the CEO establishes certain courses of action, e.g. certain strategic moves, and a specific belief system, e.g. concerning the importance of shareholder value creation. Because of escalating commitment, the CEO continues to feel bound to the actions and beliefs which he once set (Staw, 1976). In a parallel process, all other members of the organization start to associate these courses of action and belief systems with the CEO. Thus, over time, the CEO’s actions and beliefs become guidelines for the future development of the company that are not questioned anymore (Zucker, 1977). Finally, the CEO uses this legitimacy to further strengthen his power position by growing his network and expanding his resources. Overall, this leads to a perpetuation of power. As a result of this ‘institutionalization’, a CEO strenghtens his power position with every year that he stays in office, e.g. by influencing new board appointments in a way that supporters are brought to power. Consequently, the odds of being replaced decrease over time (Pfeffer, 1981).

Regarding the performance implications of institutionalization, Meyer and Rowan (1977) empirically found positive as well as negative effects. With growing institutionalization, a company enjoys a higher degree of legitimacy in its environment. This legitimacy brings advantages regarding the access to resources, to new customers or to investors, since trust in the organization increases. On the other hand, companies with a high degree of institutionalization tend to implement and stick to inefficient rules which in turn has a negative impact on performance. Combined, these effects result in an inverted curvilinear relationship between the degree of institutionalization – which increases with CEO’s tenure – and company performance. While the institutionalization of the CEOs power in the beginning of his tenure leads to an increase in performance, at a certain time in his career the negative effects prevail and performance decreases again. Overall, the argumentation of institutional theory closely resembles that of leader life cycle theory.

As time is of central importance for the development and perpetuation of power, the reasoning of both, institutional as well as life cycle theories, only holds true in the case of rather long CEO tenures. Hence, in this study we expect life cycles of long-tenured CEOs to reflect the argumentation of institutional and leader life cycle theories. This means that in the first years of a CEO's tenure we assume performance to rise slowly as power and legitimacy are on a low level and the CEO is still learning (Gabarro, 1987). After the CEO has established a power base, however, we expect strong performance increases resulting from the selection of a clear paradigm and growing legitimacy. As long-tenured CEOs tend to stick to outdated routines, we assume that after a certain time performance will decrease again. This reasoning is reflected in hypothesis 2:

> *Hypothesis 2: For long-tenured CEOs an inverted curvilinear relationship between CEO tenure and company performance can be observed which is characterized by a slow increase in performance during the early tenure which then increases strongly and later declines again.*

Ocasio (1994) has developed an alternative view of how a CEO's power in organizations develops over his tenure. He termed this view 'cirulation of power' perspective. According to this perspective, a CEO's power does not automatically increase with his tenure. Rather, the circulation of power perspective assumes that the position of a CEO is constantly challenged by powerful boards or by rivals. Thus, it is likely, that as a consequence of changes in the organization's environment or poor performance, a CEO's capabilities are put into question by members of the board or rivals which in turn might lead to the CEO's early replacement. Frederickson, Hambrick and Baumrin (1988) support this view in their model of CEO dismissal. They suggest four forces which lead to CEO firings: Board's expectation and attribution, board's allegiance and values, availability of alternatives and the incumbent's power. Unlike prior

research results (McEachern, 1975; James & Soref, 1981; Salancik & Pfeffer, 1980), Frederickson, Hambrick and Baumrin (1988) do not primarily see bad performance as the initial trigger of short tenures, but rather trace this back to high board power and limited CEO power.

This argumentation of the circulation of power perspectives has direct implications for CEO tenures and for the design of their life cycle. While long-tenured CEOs are given the leeway to develop their power positions over time, short-tenured CEOs lack this legitimacy and face constant struggles. Thus, we assume that in the response to mandate season at the beginning of a CEO's tenure extremely high board pressure results in above-average workload, motivation and commitment of the new CEO. In the short run, this behavior leads to strong performance improvements. But soon afterwards this "straw fire" extinguishes as problems caused by lacking legitimacy and support damage the CEO's position. As a reaction to external pressure, the CEO has to keep the experimentation phase short or omit it completely. The lack of experimentation might then lead to a premature and unreflected selection of an enduring theme. At this point the "vicious circle" of wrong decisions, declining performance and escalating power struggles takes its course until the CEO leaves office or is – as in many cases – dismissed (Hambrick & D'Aveni, 1992). This reasoning is reflected in hypothesis 3:

> *Hypothesis 3a: For short-tenured CEOs an inverted curvilinear relationship between CEO tenure and company performance can be observed which is characterized by strong performance increases during the early tenure followed by a sharp decline.*
>
> *Hypothesis 3b: The number of CEO firings among short-tenured CEOs is higher than that among long-tenured CEOs.*

# METHOD

## Sample and data

We based our study on a sample of 174 CEOs who were in office in Germany's 83 largest publicly listed companies over a time period from 1990-2007. The tenure of the included CEOs varies between 2 and 14 years. Thus our sample comprises an overall number of 1,281 years. We specifically selected a German sample as there is no study investigating the CEO's life cycle for European countries so far. Most research regarding the role and influence of CEOs has rather focused on Anglo-American CEOs. Consequently, scholars have called for more research on the international transferability of upper echelons research (Crossland & Hambrick, 2007). We thus believe that by studying performance effects over the tenure of German CEOs we can contribute to the advancement of this research stream.

For the purpose of sample selection, we compiled a listing of Germany's largest publicly listed companies. We chose publicly listed companies because a public listing in most cases ensures sufficient data access. Eighty companies are listed in the main German stock market indices DAX and MDAX. These 80 companies as well as not-listed Top500 companies formed the basis for selecting our sample. From this sample all firms belonging to the financial services sector were excluded, as they are not comparable to other industries. In the 83 remaining companies, we identified 174 CEOs who were in office between 1990 and 2007. For data collection we used the databases Munzinger Online, Who is Who and Osiris as well as the annual reports of the companies in the sample.

## Dependent variable

*Firm performance***.** We measured company performance using accounting-based performance indicators (Shen & Canella, 2002). We computed return on assets (ROA) for each year of the

tenure of a CEO ($t_0$-$t_n$). While accounting-based performance measures have some disadvantages, return on assets (ROA) is a commonly used measure in management research (Bigley & Wiersema, 2002; Guthrie & Datta, 1998; Michel & Hambrick, 1992) and specifically in upper echelons research (Karaevli, 2007; Helfat & Bailey, 2005; Shen & Canella, 2002). Its main advantage is that the necessary accounting data is publicly available. To eliminate for effects from varying corporate tax rates in Germany, earnings be-fore tax (EBT) was used in the calculations.

**Independent Variable**

*CEO Tenure*: To measure CEO tenure, we counted the years that a chief executive had been in office and created a dummy variable for each single year of the CEOs' tenures. The tenures in the sample ranged for 2 years to a maximum of 14 years. For assessing a curvilinear relationship between tenure and firm performance we also created a squared term of CEO's overall tenure. In order to differentiate between short- and long-tenured CEOs, we took the current European average tenure of 5.7 years in office as landmark. CEOs with more than 6 years in office we considered as long-tenured, those with less than 5 years we considered as short-tenured.

**Control Variables**

We used company age, company size, pre-performance and board experience as control variables. Previous research on executive succession has constantly identified the role of organizational age and organizational size on performance. Therefore, we included both variables to assess the controls.

*Company size* was measured as the logarithm of the firm's total sales for each year; using logarithm seemed appropriate due to the fact that differences in size become less relevant the larger the company is (Thomas & Ramaswamy, 1996; Datta & Guthrie, 1994).

*Company age* was measured as the difference of the single year of the tenure and the year of incorporation. Once more logarithmic values were used, because the difference in age becomes less relevant as it increases (Wiersema & Bantel, 1992).

*Pre-performance*: Pre-performance was measured as average ROA prior of the respective year. We computed the average return on assets (ROA) for the three previous years ($t_{m-1}$–$t_{m-3}$) of the respective year a CEO is in office ($t_m$).

The variable pre-performance is of particular importance as it increases $R^2$ in regression. It lowers the degree of not controlled and auto correlating influences. But most importantly, it generates a failure probability for current performance and slows out the differences (or not existing relationship) between performance and tenure relationships by testing performance beyond expectations linked with previous performance.

*Board experience*: We computed board experience as years a CEO spent as a member of the top management team prior to becoming CEO. As executives evolve in their level of task knowledge, an executive with former experience in a board may not have the same knowledge deficits as someone without this background (Wanous, 1980). Hence, we included board experience to prevent an unwarranted empirical relationship between tenure and performance.

## RESULTS

Table 1 reports the means, standard deviations and correlations for all variables used in this study.

**Table 1: Means, standard deviations and correlations**

| Variable | Mean | s.d. | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|
| 1. Performance | 3,09 | 5,49 | | | | | | |
| 2. Tenure | 3,93 | 3,29 | ,106*** | | | | | |
| 3. Tenure squared | 76,75 | 67,16 | ,092** | ,936*** | | | | |
| 4. Pre performance | 2,99 | 4,11 | ,531*** | ,155*** | ,147*** | | | |
| 5. Company age | 4,37 | 0,84 | -,070* | ,109*** | ,103*** | -,064* | | |
| 6. Company size | 6,68 | 0,66 | -,080** | ,109*** | ,092** | -,085** | ,097** | |
| 7. Board Experience | 0,86 | 1,23 | ,104** | ,069* | ,076* | ,192*** | ,213*** | ,144*** |

* p < .05
** p < .01
*** p < . 001

In order to test for a general curvilinear relationship (H1) between CEO tenure and performance, we first conducted OLS regression analyses over the whole sample. Table 2 shows the results for this analysis with ROA as dependent variable. Model 1 includes only the control variables. In model 2 we then added tenure as well as tenure squared. For a general curvilinear effect of tenure on performance the correlation coefficient of tenure squared should be negative while the coefficient of tenure should be positive. Despite the right general direction of effects, none of the coefficients are significant. Therefore hypothesis 1 is supported. A general curvilinear relationship between tenure and performance for all CEOs in the sample does not exist.

**Table 2: Results of hierarchical analyses for firm performance**

| Variables | Model 1 | Model 2 |
|---|---|---|
| **Controls** | | |
| Pre-performance | .51*** | .50*** |
| Company age | .00 | -.00 |
| Comany size | -.03 | -.04 |
| Board Experience | .02 | .02 |
| **Main effects** | | |
| Tenure | | .14[t] |
| Tenure quadriert | | -.10 |
| F | 92,23*** | 62,39*** |
| $R^2$ | .27 | .27 |
| N | 1,268 | 1,268 |

t p < .10
* p < .05
** p < .01
*** p < . 001

**Table 3: Results of hierarchical analyses for firm performance – long-tenure**

| Variables | Model 1 | Model 2 | Model 3 (year 1-5) | Model 4 (years 6-7) | Model 5 (years 8-10) |
|---|---|---|---|---|---|
| **Controls** | | | | | |
| Pre-performance | .61*** | .59*** | .61*** | .60*** | .62*** |
| Company age | -.01 | -.01 | -.01 | -.01 | -.00 |
| Comany size | -.06 | -.07* | -.06 | -.06[t] | -.01 |
| Board Experience | .00 | .00 | .00 | .01 | .01 |
| **Main effects** | | | | | |
| Tenure | | .34** | .00 | .11** | -.06[t] |
| Tenure quadriert | | -.27** | | | |
| F | 85,52*** | 60,4*** | 68,30*** | 71.67*** | 69.20*** |
| $R^2$ | .38 | .40 | .38 | .39 | .39 |
| N | 695 | 695 | 320 | 128 | 130 |

t p < .10
* p < .05
** p < .01
*** p < . 001

**Table 4: Results of hierarchical analyses for firm performance – short-tenure**

| Variables | Model 1 | Model 2 | Model 3 (years 1-2) | Model 4 (years 3-4) |
|---|---|---|---|---|
| **Controls** | | | | |
| Pre-performance | .55*** | .61*** | .57*** | .57*** |
| Company age | .04 | .08 | .07 | .06 |
| Company size | .05 | .06 | .05 | .06 |
| Board Experience | -.02 | -.04 | -.03 | -.03 |
| **Main effects** | | | | |
| Tenure | | .54** | .18** | -.19** |
| Tenure quadriert | | -.75*** | | |
| F | 18,86*** | 17,82*** | 17.34*** | 17.64*** |
| $R^2$ | .30 | .38 | .33 | .33 |
| N | 258 | 258 | 122 | 75 |

p < .10
* p < .05
** p < .01
*** p < . 001

To test for two separate lifecycles we computed different regression models for both, short-tenured as well as long-tenured CEOs. The results of the regression analysis for long-tenured CEOs are reported in table 3. Model 1 includes only the control variables. In model 2 we added the main effect of CEO tenure. Hence it is the most general test of the relationship between tenure and firm performance. In order to support the overall curve progression of long-tenured CEO life cycles, year effects were estimated in models 3-5. In a first step all observations were transformed into a dummy term for the nth year. In the second step, due to the low number of observations, years showing a similar slope before and after the turning point were summarized. Model 3 includes years 1-5, model 4 includes years 6-7 and model 5 includes years 8-10. Years 11 to 16 were excluded to avoid outlier effects.

Beside model 3, all models are significant ($p < .001$) and explain between 38 and 40 percent of the variance in absolute firm performance. Results hardly change across the various model specifications suggesting that our findings can be regarded as quite robust. Additional tests show that the requirements of homoscedasticity and normal distribution were met for all three models and that no collinearity or autocorrelation was observed.

The negative correlation coefficient of tenure squared (b=-.27, pb.01) and the positive coefficient of tenure (b=.34, pb.01) support the assumption of a curvilinear relationship between tenure and performance in the case of long-tenured executives. Our results also verify the performance increase until year 7 (model 4, $p < .001$) and the following performance decrease (model 5, $p < .1$). Model 3 illustrates the volatile start of long-tenured CEOs, as no clear performance progression appears. Thus, the findings support our suggested hypothesis 2.

Like for long-tenured CEOs, we also ran regressions to verify the existence of short-.tenured CEO life cycles. To test hypothesis 3a, we estimated the same set of regression models. Hypothesis 3a proposes that the performance increases during the first years before a sharp decline will follow. Table 4 shows the results of regression analyses for the variable ‘absolute performance’. While model 1 includes only the control variables, model 2 additionally displays the main effect of tenure on performance. All models possess significance ($p < .001$) and explain between 30 and 38 percent of the variance in absolute firm performance during the time a CEO holds his position. In addition to the main effects, the influence of the three control variables is as follows. Pre-succession performance has a positive and significant effect on post-succession performance, while the other control variables have no significant effect on firm performance.

The negative correlation coefficient of tenure squared (b=-.75, pb.01) and the positive coefficient of tenure (b=.54, pb.01) support the assumption of a curvilinear relationship between tenure and performance in the case of long-tenured executives. A significant curvilinear relationship

between tenure and performance was supported (coefficient of tenure positive significant while coefficient of tenure squared negative significant). To support the expected curve progression in detail, model 3 summarizes the yearly effects of year 1 and 2, while model 4 includes years 3 and 4. As proposed, a positive significant performance effect was found for years 1 and 2 ($p < .001$). Also the negative relationship between years 3 and 4 and performance could be supported ($p < .001$). Hence, hypotheses 3a was confirmed regarding the suggested curve progression.

**Table 5:**

**Means of performance across tenure, long-tenured CEOs, and short-tenured CEOs**

| *All CEOs* | | | | *Long-tenured CEOs* | | | | *Short-tenured CEOs* | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Year of tenure | N | M | SD | Year of tenure | N | M | SD | Year of tenure | N | M | SD |
| 0 | 174 | 1,86 | 5,63 | 0 | 64 | 2,06 | 6,32 | 0 | 61 | 2,06 | 5,47 |
| 1 | 174 | 2,35 | 5,57 | 1 | 64 | 1,94 | 5,19 | 1 | 61 | 3,16 | 4,57 |
| 2 | 174 | 3,62 | 5,84 | 2 | 64 | 3,24 | 3,80 | 2 | 61 | 3,49 | 7,48 |
| 3 | 160 | 3,16 | 4,09 | 3 | 64 | 3,15 | 3,59 | 3 | 47 | 2,96 | 4,67 |
| 4 | 141 | 2,62 | 6,82 | 4 | 64 | 3,29 | 3,79 | 4 | 28 | -.64 | 13,01 |
| 5 | 112 | 3,37 | 4,04 | 5 | 64 | 3,38 | 4,26 | | | | |
| 6 | 89 | 3,60 | 5,39 | 6 | 64 | 4,07 | 5,80 | | | | |
| 7 | 64 | 4,28 | 6,82 | 7 | 64 | 4,28 | 6,82 | | | | |
| 8 | 57 | 4,03 | 4,38 | 8 | 57 | 4,03 | 4,38 | | | | |
| 9 | 43 | 3,20 | 5,15 | 9 | 43 | 3,20 | 5,15 | | | | |
| 10 | 30 | 2,69 | 4,80 | 10 | 30 | 2,69 | 4,80 | | | | |
| 11 | 22 | 4,15 | 3,59 | 11 | 22 | 4,15 | 3,59 | | | | |
| 12 | 16 | 4,72 | 5,50 | 12 | 16 | 4,72 | 5,50 | | | | |
| 13 | 12 | 3,46 | 5,75 | 13 | 12 | 3,46 | 5,75 | | | | |

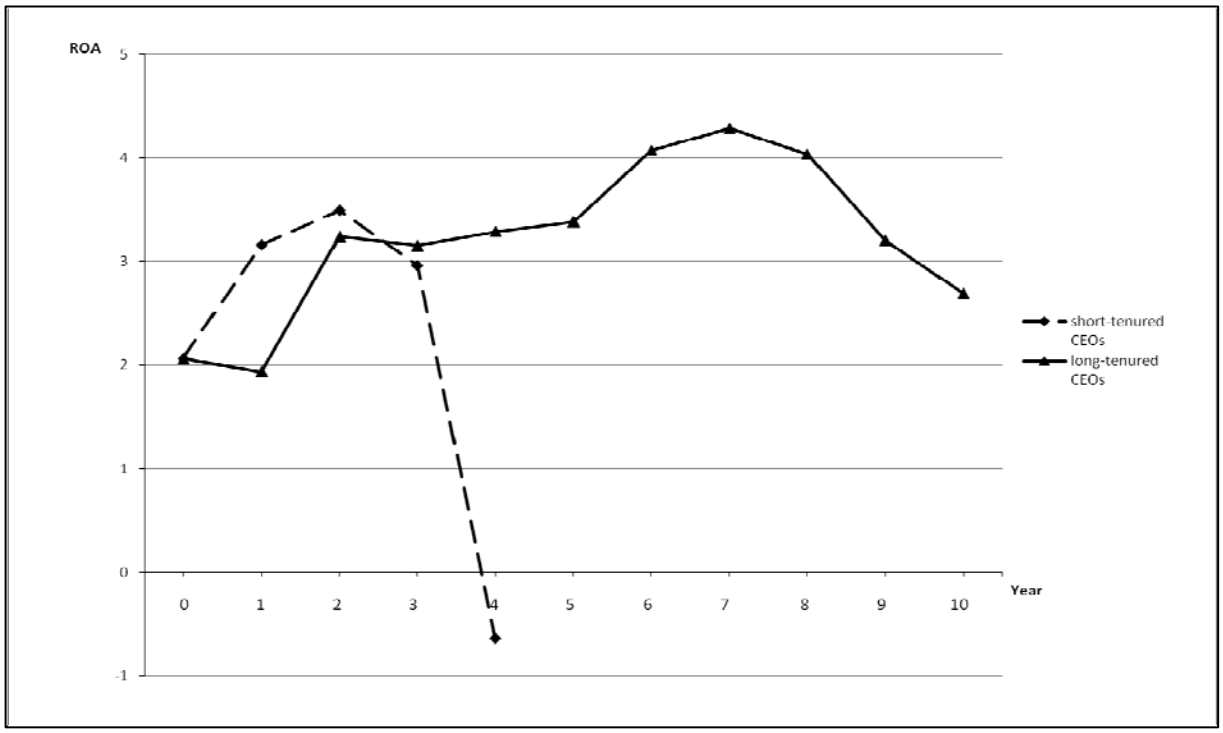


**Figure 1: Plot of CEO tenure and firm performance**

Hypotheses 2 and 3a are displayed in the diagram in figure 1. We also calculated means for performance across tenure (table 5). As it is apparent from figure 1 the performance curve of a long-tenured CEO is characterized by a continuous performance growth from year 2. During year 7, long-tenured CEOs achieve their highest performance level. A short-tenured CEO reaches his performance peak in year 3, after that a sharp decline follows.

The development of performance means for both cases suggests that long-tenured managers outperform their short-serving colleagues in the long run. To validate this, a t-test was conducted for both samples for the first 4 years in office. Additionally, we tested whether significant differences appeared between the two curve peaks. In all cases, t-values were significant ($p < .001$).

To test hypothesis 3b we calculated a dismissal quote for each year of a CEO's tenure. During the first three years we found a low dismissal rate, but the following year showed a noticeable increase of the rate. In confirmation of hypothesis 3b the highest amount of dismissals occured during years 4 and 5. After the fifth year there is a sharp decline of dismissals in our sample. The dismissal rate was calculates as quotient of number of dismissals and number of CEOs in the respective year.

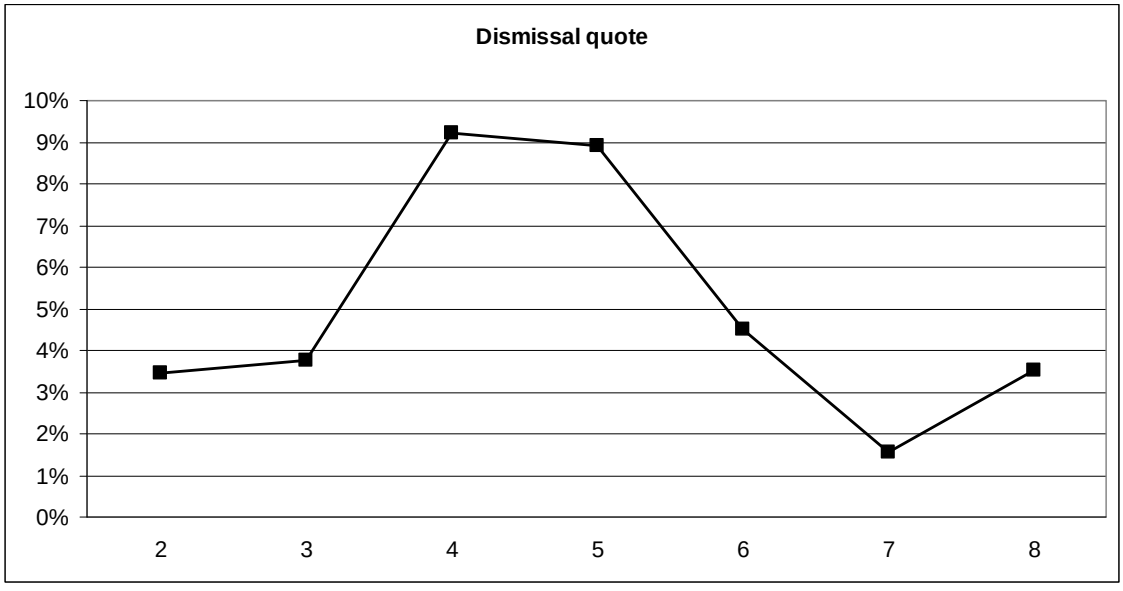


**Figure 2: Dismissal quote of CEOs**

## DISCUSSION AND INTERPRETATION

Building on leader life cycle theory (Hambrick & Fukotomi, 1991), we examined the relationship between CEO tenure and performance for German CEOs. For short-tenured and for long-tenured CEOs respectively, we found an inverted curvilinear relationship between the tenure of a CEO and company performance.

In general, our results are in line with earlier research on the leader life cycle (Hambrick & Fukotomi, 1991; Miller & Shamsie, 2001; Giambatista, 2004; Henderson, Miller & Hambrick, 2006). Unlike past research in the field, however, we did not find a uniform leader life cycle. Rather the results of our study draw a more differentiated picture of CEO life cycles. Specifically, we found that CEOs with long and short tenures possess different leader life cycles.

This finding, however, does not completely contradict earlier research in this field. Other studies indicate support for these findings as well. Henderson, Miller and Hambrick (2006), for example, found two different life cycles for CEOs working in dynamic and stable industries respectively. In Giambatista's (2004) life cycle analysis of basketball coaches in the United States, the development of sample means showed a clear performance dip at about medium tenure. Nevertheless, our study is the first one that explicitly differentiated between long- and short-tenured CEOs and found distinct life cycles for both groups. Furthermore, this is the first study that explicitly examined the role of power dynamics on the leader life cycle.

The specific results concerning life cycles of long- and short-tenured CEOs reflect and confirm our hypotheses. For long-tenured CEOs we found evidence that supports the view of institutional theory. In the first years of a CEO's tenure performance rose slowly. After CEOs had established their power base, performance increased resulting from higher legitimacy. In accordance with the assumption that long-tenured CEOs tend to stick to outdated routines, we found that after a certain time performance decreased again.

Unlike prior research (Katz, 1982; Giambatista, 2004), we found no significant performance dip in year four. In our case a minor performance decline is found in year three of the lifecycle of long-tenured CEOs. From year two to year four, the sample means show a certain performance stagnation. Hambrick and Fukutomi (1991) mention that in executive life cycle stages variations are possible. Indeed, especially the second stage, experimentation of managers, might not implicitly lead to increased performance. After his response to mandate, which is associated with performance increases and growing power, the manager has the possibility of testing different approaches and methods. Our results show that long-tenured CEOs make extensive use of this experimentation stage. This pays off in form of increasing performance after year 6.

Like in the case of long-tenured CEOs, our hypothesis of an independent lifecycle could also be confirmed for short-tenured CEOs. As we assumed, CEOs in highly demanding environments delivered exceptional performance at the beginning of their tenure followed by a strong decline. Nevertheless, in our case the decline, especially from year three to year four, is exceptionally strong. None of the previous studies found such a negative tendency at the end of a CEO tenure (e.g. Henderson, Miller & Hambrick, 2006; Giambatista, 2004; Miller & Shamsie, 2001). Thus, a more differentiated analysis of short tenures seems necessary, particularly since in corporate practice a tendency towards shorter CEO tenures can be observed (Karlsson, Neilson & Webster, 2008).

Finally, we found that in general, a longer CEO tenure leads to higher firm performance. Although in the first two years short-tenured CEOs outperform their longer tenured counterparts, in the long run CEOs, who are given more time to develop their paradigms and gain legitimacy, have a more positive influence on performance. With regard to the huge losses which we observed at the end of a short-term tenure, companies should aim at keeping their CEOs for a longer time period.

In spite of our innovative findings, our study has a few limitations. We acknowledge, for example, that further organizational as well as CEO characteristics may influence the relationship between CEO tenure and performance. Hence, future researchers should work to imply other promising moderating variables in their model. Moreover, we have addressed the importance of context by incorporating the role of pre-performance for leader life cycles. Beside pre-performance especially industry dynamics determine organizational environment. While this issue is of special interest, e.g. with regard to performance pressure, we regret that we could not address it due to data limitations.

Finally, the core outcome of the investigation was the discovery of long- and short-tenured CEO lifecycles based on arguments from institutional and circulation of power perspective. As both theories address the question of power distribution in firms, the inclusion of more variables which reflect power in companies would have been useful to support our assumptions about power struggles and perpetuation of power.

## CONCLUSION

Overall, the results of our study show that leader life cycle theory as proposed by Hambrick and Fukutomi (1991) is a highly relevant perspective in upper echelons research. Nevertheless, our study has also indicated that a uniform leader life cycle across CEOs from different companies and industries does not exist. Rather, we have shown that power relationships play an important role in determining the exact shape of a leader life cycle. Surprisingly, the influence of power dynamics on performance over the tenure of a CEO has hardly been researched in the past. Thus, a further and more fine-grained analysis of the effects of different aspects of CEO and board power on performance over a CEO's life cycle seems necessary.

Furthermore, leader life cycle theory can also be extended in other directions. Among other things, the role of stable as well as dynamic industries, of specific demographic characteristics of the CEO and of managerial discretion deserve further attention (Hambrick & Fukutomi, 1991; Henderson, Miller & Hambrick, 2006).

Finally, our study shows that findings in the area of leader life cycle theory that – so far – have only been derived for U.S. companies are generally transferable to other geographical settings such as Europe or, more specifically, Germany. Nevertheless, our study has also made it clear that the results may differ in the detail. Thus, it seems desirable to further expand comparative analyses of CEOs and their effects on companies in different countries.

Besides avenues for further research, our study also offers some implications for corporate practice. Specifically, our results indicate that boards can make a difference in their work with a new CEO. Although high pressure and power struggles lead to short-term performance increases quickly after the succession event, in the long run this approach does not pay off. With reduced pressure and lower performance expectations during the early tenure, boards can help their new CEOs to get better acquainted to the demands of the new job, to develop the confidence for

considering innovative ways of leading the company and, in the end, to find an appropriate long-term strategy for the company. Over the long run, this lays the basis for continuous performance improvements.

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