UNDERSTANDING CULTURAL INFLUENCE
ON PERCEPTIONS OF TARGET-BASED PAY:

INSIGHTS FROM

A MULTI-NATIONAL SME

Tracy C. Dathe

A thesis submitted to
The University of Gloucestershire
in accordance with the requirements of the degree of
Doctor of Business Administration
in the Faculty of Business, Education & Professional Studies

February 2014
I declare that the work in this thesis was carried out in accordance with the regulations of the University of Gloucestershire and is original except where indicated by specific reference in the text. No part of the thesis has been submitted as part of any other academic award. The thesis has not been presented to any other education institution in the United Kingdom or overseas.

Any views expressed in the thesis are those of the author and in no way represent those of the University.

Signed ....................................................... Date: 25th Feb. 2014.

Tracy C. Dathe
ABSTRACT

This thesis examines cultural influences on employees’ perceptions of target-based pay. As the positive effect of this instrument can only be expected when the employees perceive individual benefits, this research focuses specifically on cultural influences on employees’ perceptions of target-based pay.

Based on the findings of the literature review, the influence factors on employees’ perceptions of target-based pay, as defined by previous researchers, were mapped with Hofstede’s VSM framework. During the verification of the findings of the literature review, through discussions with a practitioner expert panel, a further cultural factor “general pay perception” was added to the original form of Hofstede’s model.

A survey was then designed to examine the influence of the cultural factors on the employees’ perceptions of target-based pay in a multi-national manufacturing SME with subsidiaries in Germany, the Czech Republic and China.

The data were initially explored by means of a factor analysis, which refined the survey scale into a 6-dimensional structure detailing the cultural factors at play. These 6 dimensions were in line with the extended VSM framework determined previously in this study. This framework, with its underlying attributes, was employed as an assessment instrument of the cultural influence on perceptions of target-based pay in further research round. The reliability and validity of the assessment instrument was successfully tested and subsequently the results were verified and validated through panel discussions. The survey data were also explored in two comparison studies using descriptive statistics: one focusing on cross-country comparison and the other on organisational position comparison.

This research makes a contribution to knowledge by developing a methodology for the study of cultural influence on perceptions of target-based pay and by providing valuable real-world data for future research. The theoretical understanding based on the findings of this study also contributes to the effective administration of target-based pay in practice.

Keywords: target-based pay, pay for performance, cultural influence, culture, SMEs
This professional doctorate study has been a thorny journey all along. It would have been impossible to accomplish this assignment without the support of those around me.

First and foremost, I would like to thank Bob Greenwood and Jasim Al-Ali for being my supervisors and mentors at the University of Gloucestershire. Without their constructive critiques, this thesis would not have been the same. Bob, thank you for your critiques and recommendations. Jasim, thank you for your valuable advice and guidance. I would also like to thank my examiners Dr. Ivana Adamson and Dr. Ali Malik for their time and willingness to engage with my work. Furthermore, I would like to thank the German Office and the administration team of the University of Gloucestershire for their efforts in the previous years.

Second, I would like to thank my employer Erich Jaeger GmbH & Co. KG for the support of my professional research. Especially, I would like to thank the colleagues in Germany, the Czech Republic and China who readily shared their insightful knowledge and experience with me throughout my research work, for the time they have taken for the interviews and intensive discussions. My special thanks to Wolfgang Wiese for impressing me with his passion for his lifework; to Wang Yinhua for his frankness and the insightful discussions; to Holger Wagner for sharing his expertise in layout design of the questionnaire; to Michael Kress, Derek Schwung, Mathilde Pierre and Javier Rodriguez for proof-reading my thesis with the scientific consciousness.

Last but not least, I would like to thank my family for all the love and support. Isabel, I hope you, too, will master the assignments in life with the same endurance. I wish you a happy future as much as any mother could do. Thank you, Silvio, for giving me the opportunity to comprehend the world beyond my little world. Thank you, Yueyue, for being with me in your thoughts at all times. Thanks to my parents Yuxian and Yun for raising me to never give up. Thanks to my family in Chemnitz, to Ursula, Rainer, Margot, Dietmar, Erika and Gerhard for giving me another home where I belong. Finally, René, thank you for showing me what life is really about. Thank you for your angel’s patience and unconditional love. Thank you.

Tracy C. Dathe
# CONTENT

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABREVIATIONS</td>
<td>8</td>
</tr>
<tr>
<td>FIGURES AND TABLES</td>
<td>9</td>
</tr>
<tr>
<td>1  INTRODUCTION</td>
<td>12</td>
</tr>
<tr>
<td>1.1 RESEARCH BACKGROUND</td>
<td>12</td>
</tr>
<tr>
<td>1.2 RESEARCH FOCUS</td>
<td>14</td>
</tr>
<tr>
<td>1.3 RESEARCH AIM AND DEMARCATION</td>
<td>15</td>
</tr>
<tr>
<td>1.4 ORGANISATION OF THESIS</td>
<td>18</td>
</tr>
<tr>
<td>PART I LITERATURE REVIEW AND RESEARCH METHODOLOGY</td>
<td>20</td>
</tr>
<tr>
<td>2  LITERATURE REVIEW</td>
<td>21</td>
</tr>
<tr>
<td>2.1 PERCEPTIONS OF TARGET-BASED PAY</td>
<td>21</td>
</tr>
<tr>
<td>2.1.1 ADVANTAGES AND DISADVANTAGES OF TBP</td>
<td>21</td>
</tr>
<tr>
<td>2.1.2 VARIANT FORMS OF TBP</td>
<td>24</td>
</tr>
<tr>
<td>2.1.3 INFLUENCE FACTORS ON PERCEPTIONS OF TBP</td>
<td>27</td>
</tr>
<tr>
<td>2.2 CULTURAL INFLUENCE ON PERCEPTIONS OF TARGET-BASED PAY</td>
<td>31</td>
</tr>
<tr>
<td>2.3 HOFSTEDE’S VALUE SURVEY MODEL (VSM)</td>
<td>33</td>
</tr>
<tr>
<td>2.4 MAPPING INFLUENCE FACTORS IN VSM FRAMEWORK</td>
<td>37</td>
</tr>
<tr>
<td>2.5 EXPERT VIEW ON CULTURAL INFLUENCE ON TBP PERCEPTIONS</td>
<td>40</td>
</tr>
<tr>
<td>2.6 CONCLUSIONS</td>
<td>49</td>
</tr>
<tr>
<td>3  RESEARCH DESIGN</td>
<td>53</td>
</tr>
<tr>
<td>3.1 RESEARCH PHILOSOPHY</td>
<td>53</td>
</tr>
<tr>
<td>3.2 RESEARCH METHODOLOGY</td>
<td>54</td>
</tr>
<tr>
<td>3.3 CONCEPT OF CASE STUDY</td>
<td>55</td>
</tr>
<tr>
<td>3.4 RESEARCH HYPOTHESES</td>
<td>57</td>
</tr>
<tr>
<td>3.5 PROCESS OF LITERATURE REVIEW</td>
<td>72</td>
</tr>
<tr>
<td>3.5.1 CONCEPT OF SYSTEMATIC LITERATURE REVIEW</td>
<td>73</td>
</tr>
<tr>
<td>3.5.2 INFLUENCE FACTORS ON PERCEPTION OF TBP</td>
<td>74</td>
</tr>
<tr>
<td>3.5.2.1 SEARCH STRATEGY</td>
<td>74</td>
</tr>
<tr>
<td>3.5.2.2 SEARCH RESULTS AND DATA SYNTHESIS</td>
<td>78</td>
</tr>
<tr>
<td>ABBREVIATIONS</td>
<td>EXPLANATION</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
</tr>
<tr>
<td>CEE</td>
<td>Central and East Europe</td>
</tr>
<tr>
<td>CFO</td>
<td>Chief Financial Officer</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>HR</td>
<td>Human Resource</td>
</tr>
<tr>
<td>HRM</td>
<td>Human Resource Management</td>
</tr>
<tr>
<td>MNE</td>
<td>Multi-National Enterprise</td>
</tr>
<tr>
<td>PBP</td>
<td>Performance-Based Pay</td>
</tr>
<tr>
<td>PBR</td>
<td>Performance-Based Reward</td>
</tr>
<tr>
<td>PFP</td>
<td>Pay for Performance</td>
</tr>
<tr>
<td>SME</td>
<td>Small and Medium-sized Enterprises</td>
</tr>
<tr>
<td>TBP</td>
<td>Target-Based Pay</td>
</tr>
<tr>
<td>VSM</td>
<td>Hofstede’s Value Survey Model</td>
</tr>
</tbody>
</table>
FIGURES AND TABLES

Figure 1-1 Organisation of thesis ........................................................................................................ 19
Figure 2-1 Hofstede’s Value Survey Model (as defined by Hofstede (2007)) ................................. 34
Figure 2-2 TBP influence factors in Hofstede’s VSM framework ...................................................... 40
Figure 2-3 Extended VSM (defined by Hofstede (2007)) ................................................................. 48
Figure 3-1 Case study design: research steps ....................................................................................... 57
Figure 3-2 Aims of research hypotheses ........................................................................................... 72
Figure 3-3 Chain of evidence in case study (compare with Yin, 2009:123) ........................................ 90

Table 2-1 Variant forms of target-based pay ......................................................................................... 27
Table 2-2 Main Influencing factors for perceptions of target-based pay ........................................... 31
Table 2-3 TBP influence factors vs. dimensions in Hofstede’s VSM .................................................. 39
Table 3-1 Details of research Hypotheses .......................................................................................... 71
Table 3-2 Inclusion / exclusion criteria – perceptions of target-based pay ......................................... 77
Table 3-3 Inclusion / exclusion criteria – cultural influence on management ..................................... 80
Table 3-4 Case study tactics for four design tests (Yin, 2009: 41, with modifications) .................... 92
Table 3-5 Research schedule .............................................................................................................. 94
Table 4-1 Measures for general pay perception .................................................................................. 99
Table 4-2 Measures for cultural influence ......................................................................................... 102
Table 4-3 Measures for perceptions of target-based pay ................................................................. 102
Table 4-4 Survey participation – divided by country and gender ..................................................... 105
Table 4-5 Survey participation – divided by country and position .................................................... 106
Table 4-6 Rotated factor matrix: result of factor analysis ................................................................. 109
Table 4-7 Dimensions of factor analysis and their underlying attributes ......................................... 109
Table 4-8 Labelling factor 1 of factor analysis ................................................................................... 110
Table 4-9  Labelling factor 2 of factor analysis .............................................................. 110
Table 4-10 Labelling factor 3 of factor analysis .............................................................. 111
Table 4-11 Labelling factor 4 of factor analysis .............................................................. 112
Table 4-12 Labelling factor 5 of factor analysis .............................................................. 112
Table 4-13 Overview of cultural factors with their underlying attributes ...................... 113
Table 4-14 Reliability coefficient (Cronbach’s alpha) of cultural factors ......................... 114
Table 4-15 Pearson’s correlation for all attributes of cultural factors ............................ 115
Table 4-16 Simple regression analyses with dependent variable V44 ........................... 117
Table 4-17 Simple regression analyses with dependent variable V46 ........................... 117
Table 4-18 Influence of cultural factors on target-based pay – Pearson’s correlation ...... 119
Table 4-19 Empirical evidence for Hypotheses 1 & 2 .................................................... 124
Table 4-20 Panel verification of Hypotheses 1 & 2 ........................................................ 130
Table 5-1 Cross-country comparison data – individualism vs. collectivism ................. 132
Table 5-2 Cross-country comparison data – power distance ....................................... 133
Table 5-3 Cross-country comparison data – uncertainty avoidance ............................. 135
Table 5-4 Cross-country comparison data – masculinity vs. femininity ....................... 137
Table 5-5 Cross-country comparison data – long-term vs. short-term orientation ........ 139
Table 5-6 Cross-country comparison data - general pay perception ............................. 141
Table 5-7 Cross-country comparison data – perception of target-based pay .............. 142
Table 5-8 Cross-country comparison data: summary .................................................... 144
Table 5-9 Cross-country comparison data: ranking ....................................................... 153
Table 6-1 Organisational position comparison – individualism vs. collectivism .......... 157
Table 6-2 Organisational position comparison – power distance ................................ 158
Table 6-3 Organisational position comparison – uncertainty avoidance .................... 159
Table 6-4 Organisational position comparison – masculinity vs. femininity .............. 161
Table 6-5 Organisational position comparison – long-term orientation ..................... 162
Table 6-6 Organisational position comparison -general pay perception ....................... 164
Table 6-7 Organisational position comparison – perceptions of target-based pay ....... 165
Table 6-8  Organisational position comparison: summary ................................................................. 167
Table 6-9  Organisational position comparison: ranking ............................................................... 177

Box 1  Summary of thesis introduction ......................................................................................... 19
Box 2  Summary of literature review ............................................................................................. 52
Box 3  Summary of research design ............................................................................................... 95
Box 4  Summary of data collection and data verification .............................................................. 130
Box 5  Summary of cross-country comparison .............................................................................. 155
Box 6  Summary of organisational position comparison ............................................................... 179
Box 7  Summary of discussions of findings and implications ....................................................... 196
Box 8  Summary of conclusions .................................................................................................... 205
1 INTRODUCTION

This chapter begins with an introduction of the research background, followed by the research focus. Next, the research objectives and research questions are defined with demarcation of the research area. Finally, the introduction is closed with an overview of the organisation of this thesis.

1.1 RESEARCH BACKGROUND

The world we are living in has been changing rapidly in the last three decades: the demolition of the Berlin Wall, followed by the disbandment of the Warsaw Pact, marked the start of the enormous changes in the Eastern European countries. At the same time, the “Open Door Campaign” of China’s new leader Deng Xiaoping had just begun to take fruition.

The political reforms inevitably led to rapid reform of the economic systems. The old centrally planned economies were transformed into market economies in large leaps. The management executives in the transitional economies soon faced a great challenge from the new economical orders, for which they lacked of both experience and understanding (Adamson, 1999). To fill this knowledge gap, they introduced the existing management principles from the western countries (Milikić, Janićijević & Petković, 2008; Jing & Jin Nam, 2010). International co-operations further sped up this process, since overseas headquarters were often interested in reinforcing the consistency of company policies, regardless of the cultural environment (Onyemah, Rouziès & Panagopoulos, 2010; Rosenzweig & Nohria, 1994).

Empirical evidence from the last decades now shows that management techniques from the West have achieved great success in some areas, whereas the results have been ambiguous or modest elsewhere (Milikić, Janićijević & Petković, 2008; Jing & Jin Nam, 2010). Researchers are eager to find out why the same management principles have sometimes led to different results, as this knowledge is expected to improve management practice for the future. One of the
most prominent theories for the research hereby is Hofstede’s Value Survey Model (VSM) for the study on cultural values.

Hofstede points out that since management is always about people, it is also about the culture that they live in. Hofstede defines culture as “the collective programming of the mind which distinguishes the members of one group or category of people from another” (Hofstede, 2007). Already in the early 1980’s, Hofstede constructed his famous framework Value Survey Model (VSM) to describe how cultural factors influence the results of practical application of management principles (Hofstede, 1983). Today, Hofstede’s theory finds wide application in the academic world. Over time, some weaknesses of the model have been criticized and efforts have been made to extend or improve this model. However, the overall methodology of the model remains unchallenged.

Target-based pay (TBP) is a popular HR instrument aiming to improve individual performance. With the aid of Hofstede’s Model, researchers attempt to explore the link between cultural characteristics and the effects of target-based pay. Some recent studies relate positive effect of TBP to certain settings of the cultural characteristics, e.g. high individualism, low power distance, low uncertainty acceptance and high masculinity (Muduli, 2011; Lertxundi & Landeta, 2011). These findings are again contradicted by other researchers with the arguments, for example, collectivism presumably boosts teamwork and therefore should have a positive effect on performance (Eby et al., 2000; Kirkman & Shapiro, 2001; Steensma et al., 2000); strong uncertainty avoidance leads to target orientation, therefore should strengthen the effect of TBP (Schmidt, 2007: 47). Till now, the empirical evidence is still not sufficient enough for a general consensus as to how each cultural dimension influences individual perceptions of target-based pay.

This thesis intends to contribute to the research of cultural influence on perceptions of target-based pay by raising, exploring and verifying contemporary empirical evidence in a multinational SME. As this thesis proceeds, the connection between cultural factors and the employees’ perceptions of target-based pay will be addressed in a clear and meaningful way.
1.2 RESEARCH FOCUS

Target-based pay (TBP, also termed by some authors as: merit pay, performance-based pay PBP, performance-based reward PBR, pay for performance PFP etc.) has long become one of the key instruments of human resource management (HRM) worldwide. Advocates of target-based pay - academics and practitioners alike - believe, by linking the compensation with the targets, the employees will be directed to a desired behaviour from which the company benefits (Stajkovic & Luthans, 2001; Bandiera, Barankay & Rasul, 2007).

As the positive effect of this instrument can only be expected when the employees perceive individual benefits (Rehu, Lusk & Wolff, 2005), this research focuses specifically on cultural influences on employees’ perceptions of target-based pay.

Previous empirical studies have mainly been conducted as regional or cross-cultural studies based on national cultures. These findings clearly indicate that different cultural environments may cause different reactions towards the identical reward system (Fong & Shaffer, 2003; Hui, Triandis & Yee, 1991). Furthermore, the majority of past research on target-based pay has been conducted at a managerial level or among a special group of employees, e.g. sales people, knowledge workers, etc. which may not be representative for the entire workforce. Thus, for a better understanding of the impact of such HRM instruments on the organisation’s performance, analysis also needs to base on all hierarchical levels of organisational positions.

This thesis examines the cultural influence on employees’ perceptions of target-based pay by means of a case study. The case study is conducted in a cross-cultural manufacturing SME in the automotive industry, at its German headquarter, as well as the subsidiaries in the Czech Republic and in China. To be more particular, this thesis intends to assess cultural influence on perceptions of target-based pay based on the national cultures and the organisational positions.
1.3 RESEARCH AIM AND DEMARCATION

The aim of this research as described in the previous section may be translated into the following objectives:

**Research objectives**

RO 1 To identify cultural factors that influence perceptions of target-based pay

RO2 To seek empirical evidence for causal relationship between cultural factors and perceptions of target-based pay

RO3 To evaluate employee perceptions on target-based pay in a cross-cultural company

**Research questions**

Focusing on the manufacturing industry in a multi-cultural environment, this research shall address the following questions:

RQ 1 *What are the cultural factors that influence perceptions of target-based pay?*

RQ 2 *Why are these cultural factors an important influence on the perceptions of target-based pay?*

RQ 3 *How do these cultural factors influence perceptions of target-based pay?*

Answering the research questions will involve the following steps. First, dimensions of cultural factors and perception of target-based pay are to be captured in an appropriate framework. Second, the causal relationship between cultural factors and perceptions of target-based pay is to be verified and validated. Third, perceptions of target-based pay of employees from different cultural backgrounds are to be captured and analysed.

**Demarcation**
The main reasons for focusing the research effort of this thesis on the SME in the automotive industry with cultural background in Germany, the Czech Republic and China are as follows.

First, the automotive industry is one of the most important industry sectors in the world economy. Due to the nature of target-based pay, it is expected that this type of incentive has a strong influence in the labour-intensive business organisations. Thus, manufacturing companies in the automotive industry appear attractive to this research due to the commonly high labour intensity and the importance of this industry sector.

Second, with their large number of businesses and employees, small and medium-sized enterprises or SMEs are the backbone of almost every national economy throughout the world. Despite the long history of research in the terrain of management accounting, there are rather limited contributions to the management techniques for SMEs. Previous studies have been largely conducted in the environment of big-scale business. Some of the reasons for this lack of research are costs, lack of expertise of accountants in common practice and lack of research opportunities in SMEs (Nandan, 2010). Yet, SMEs are not just downsized big-scale businesses, but sometimes have rules of their own. They often benefit from their abilities to utilize the “niche opportunities” and to be flexible enough to quickly adjust to changes in the economic conditions (Mitchel & Reid, 2000).

Subsequently, each of the chosen national cultures of Germany, the Czech Republic and China for the cross-country comparison is highly interesting in its unique way.

As one of the world’s leading national economies, the German culture has a significant influence on the global market. Although the western industrial countries are believed to share many cultural values, Germany has its unique accent, for example its high uncertainty avoidance (Hofstede, 2001: 87, 151, 215; Portz & Lere, 2010). According to Hofstede’s previous survey data, the German (Federal Republic) culture is described as moderate in individualism, small in power distance, relatively high in uncertainty avoidance and relatively high in masculinity (Hofstede, 1980). Interestingly, Hofstede found out in an empirical study spanning seventeen nations that Germany’s value priority profile was almost the opposite of the
international average (Hofstede, 2009). However, empirical cultural studies from Germany are still rather limited.

Due to a similar path in recent history, the Central and Eastern European (CEE) countries are often clustered as one group in the studies on national cultures. After the transformation from communism to democracy and through the integration into the EU, the Czech Republic was further harmonized with Western European social standards, including collective bargaining through the Trade Unions, minimum wages, labour protection legislations etc. (Stockhammer & Onaran, 2009; Dragomir, 2003; Kuchar, 2002). There are relatively few studies exploring how the dramatic changes in the national politics penetrate the culture on an individual level. Empirical findings from the Czech Republic will contribute to the comprehension of contemporary development of the transitional economies in the CEE countries.

In its thousands of years of history, China has developed a completely different set of cultural values. Exotic concepts like “face” have long intrigued many researchers (Zhai, 2004; Ho, 1976; Coggin & Coggin, 2001). Since the communists took office in 1949, China underwent dramatic ideological changes caused by a series of political movements, e.g. the Great Leap Forward, the Cultural Revolution, the “Open-Door Policy”, etc. With Deng Xiaoping’s reform in the late 1970s’, China gradually reinstalled the free market economy. After decades of suffering from a centrally planned economy, the Chinese people embraced enthusiastically the economical reform and the dizzily fast growth of the national economy has been globally unrivalled since then. Accompanying the fast economic development is a dramatic change of social values. The old order of “Tie Fan Wan” (iron rice bowl, meaning guaranteed employment at state-own enterprises) was replaced by “Xiang Qian Kan” (looking forwards to money, meaning total orientation on monetary values). Meanwhile, China has earned the reputation of “the new capitalism”. Understanding the fast-changing culture is both fascinating and challenging.

The characteristics of the Chinese culture in the contemporary time are often described as low in individualism, high in power distance, low in uncertainty avoidance, high in masculinity and high in long-term orientation (Hofstede, 2007; Shi & Wang, 2011). However, the Chinese
culture has been observed with dramatic changes in the last two decades (Jing & Jin Nam, 2010). This thesis intends to capture the current status of the Chinese culture through the empirical study.

In addition to national cultures, pay perceptions are influenced by a multitude of further factors, including industrial sectors, educational background (Magda et al., 2011) and origin of the entrepreneur (Moritz, 2011; Torrisi et al., 2008), etc. This research intends to study the cultural differences with the focus on the national cultures, as well as on the different groups of organisational positions.

### 1.4 ORGANISATION OF THESIS

Whereas Chapter 1 provides an introduction of this thesis, including research objectives and research questions, the remainder of this paper is divided in three parts. First, Part I is dedicated to a literature review on cultural influence on perceptions of target-based pay (Chapter 2) and the research design (Chapter 3). Next, Part II focuses on the research findings and the verification of results. This includes the documentation of the data collection process, the verification and validation of research results (Chapter 4), and subsequently, the findings of the cross-country comparison (Chapter 5) and the comparison of organisational positions (Chapter 6). Next, in Part III the essential findings of the literature review and the findings of the empirical research are verified through discussions with an expert panel consisting of practitioners in the observed organisation. Based on the results of the discussions, implications of the research findings are highlighted (Chapter 7). Finally, the conclusions of this research are drawn (Chapter 8).
Figure 1-1       Organisation of thesis

Summarizing Chapter 1, this thesis aims to contribute to the research of cultural influence on perceptions of target-based pay by raising, exploring and verifying contemporary empirical evidence.

This research intends to be conducted as a case study in a multi-national manufacturing SME in the automotive industry, with its headquarter in Germany and two main subsidiaries in the Czech Republic and China. The research is based on two comparison studies, with one focusing on the national cultures and the other on the different groups of organisational positions.

Following the outline of the organisation of this thesis, Part I of this thesis will provide a thorough overview of available pertinent literature on cultural influence on perceptions of target-based pay, as well as an overview of the research methodology of this thesis.
PART I  LITERATURE REVIEW AND RESEARCH METHODOLOGY

As introduced in Section 1.4, Part I provides an overview of the relevant literature on cultural influence on perceptions of target-based pay, as well as details of the research methodology.

Chapter 2 focuses on the literature review, while Chapter 3 describes the research methodology and methods, sketching the outline of Part II of this thesis.
2 LITERATURE REVIEW

The literature review in this chapter provides background information on the research objectives and is carried out as a 2-step systematic literature review.

In the first step of the systematic literature review, Section 2.1 focuses on influence factors on perceptions of target-based pay. In the next step, Section 2.2 attends to cultural influence on perceptions of target-based pay. Section 2.3 highlights Hofstede’s Value Survey Model (VSM) for the measurement of cultural values. Subsequently, in Section 2.4 the influence factors on perceptions of target-based pay are mapped with the framework of VSM. Finally, the literature review is verified and validated in Sections 2.5 against feedbacks of the expert panel through discussions held in early summer 2013.

2.1 PERCEPTIONS OF TARGET-BASED PAY

As a result of the search strategy of the systematic literature review, 127 selected citations were examined to identify the research trends in target-based reward system.

To answer the research questions, the following dimensions for the research on target-based pay were defined for the synthesis of the retrieved citations:

- Advantages and disadvantages of TBP;
- Variant forms of TBP;
- Influencing factors on perceptions of TBP.

2.1.1 ADVANTAGES AND DISADVANTAGES OF TBP

Among the 61 relevant disseminations, 47 authors relate target-based pay to positive impacts, while 15 authors express concerns or even rejection of this rewarding method (among those, one author confirms the motivational effect and at the same time warns that target-based pay may produce undesired results).
Target-based pay has long become a widespread employee motivational tool. It finds application among some of the world-leading companies, e.g. Microsoft, Hewlett Packard, Fujitsu (Shaw, 2004; Kochan, 2004; Haylat, 2008). The target-based pay is believed to lead to a high performance corporate culture (Budden, 2003).

The majority of empirical studies indicate that target-based incentive pay has improved the performance of the employees in various geographical regions (John et al., 2012; Ho et al., 2009; Jeffrey & Adomdza, 2011, Kuesel, 2004). Occasionally, however, observations show that the positive effect has been minimal or the performance has even become worse (Boachie-Mensah & Dogbe, 2011; Ariely et al., 2005). There also seems to be a consensus that target-based pay has obvious limits when the focus of the performance lies in service quality due to the difficulty with measurement (Ueno, 2013; Moav & Neeman, 2010).

The supporters of target-based pay are convinced that target-based pay improves the organisation performance. By translating the company’s targets into individual performance targets and linking the targets with the individual rewards, the employees are expected to be motivated to assert more efforts in their work (Bromley, 2004; Pfau & Kay, 2002), and more highly qualified employees are likely to be attracted by the TBP incentive (Gordon & Kaswin, 2010; Banker, 2000). The targets should also motivate the managers to recruit more capable employees (Bandiera, Barankay & Rasul, 2007).

The empirical studies suggest that the effect of target-based pay is stronger than social recognitions (Stajkovic & Luthans, 2001). However, some other researchers believe the performance is rather driven by other factors e.g. employee involvement (Wolf & Zwick, 2008) or career concerns (Bryson, Buraimo & Simmons, 2011).

Besides the positive influence of payment on the employees’ performance, Christ et al. state that it is important not to restrict the employee autonomy and to give timely feedbacks (Christ et al., 2012). Jain suggests that multi-period incentive plan may strengthen the effect of target-based pay (Jain, 2012). Based on his experiment, Tafkov concludes that performance information
itself has a positive effect on the performance, although the effect is stronger when tied to compensation (Tafkov, 2013).

However, there seems to be a consensus among the researchers that the performance can only be improved when the employee’s performance falls in the bonus range. The performance does not differ if the employee can reach the maximum performance without efforts or can hardly reach the minimum performance requirements (Church et al., 2008; Kőszegi & Wei, 2008). Church et al. also suggest that penalty-framed contracts may motivate a higher task performance than bonus-framed contracts (Church et al., 2008). Besides, the positive effects of target-based pay are only expected if the compensation is substantial enough (Schaubroeck et al., 2008; Piekkola, 2005).

While confirming the positive effect of target-based pay on performance in their empirical study, Gerhard et al. warn of some unexpected effects of such incentive plans which might lead to undesired results (Gerhart et al., 2009).

Critics of target-based pay claim that financial incentives fail to improve the performance or even worsen it (Meloy, Russo & Miller, 2006). In a passionate essay, Ordóñez et al. criticise the side effects caused by such incentive plans, e.g. neglecting non-goal areas and distorting risk preferences. Importantly, target-based pay may reduce intrinsic motivation (Ordóñez et al., 2009). Although Ordóñez et al. are criticised for the shortcomings in their work, e.g. subjective evidence, unrepresentative citations from the literature and misreporting of results (Locke & Latham, 2009), their arguments are supported by results of some other researchers (Landsberg, 2009; Pouliakas & Theodossiou, 2009). A further argument against target-based pay is that financial incentives may mislead employees to cheating (Cadsby, Song & Tapon, 2010). In spite of the above advantages, most critics of target-based pay do not object the application of such incentive plans in practice, but simply recommend a careful dosing (Gerhart et al., 2009; Ordóñez et al., 2009).
2.1.2 VARIANT FORMS OF TBP

The following variant forms of target-based pay were identified during the literature review of this section.

a. “Classic” target-based pay: The “classic” target-based pay is a monetary incentive based on the individual achievements measured by predetermined performance indicators. During the academic studies in the past decades, however, researchers have also extended their interests to further variant forms of target-based pay (see b. – g.).

b. Team incentive: When only individual incentive plans are in use, those who are not willing to help their co-workers often earn significantly more than the others (Brown & Heywood, 2009; Rey-Biel, 2008). Evidence from the practice indicate that the use of team reward may lead to better organisation performance (Liu & Batt, 2010; Zenger & Marshall, 2000; Jo En et al., 2009), although some other findings have shown the opposite (Libby & Thorne, 2009). Guymon et al. declare that the effect of team incentive depends on the nature of the assignment (Guymon et al., 2008).

Some researchers deal with the trade-offs between individual and team incentive (Gerhart et al., 2009; Rothenberg, 2011). Others contribute to the organisation performance in terms of joint productivity (Lindenberg & Foss, 2011). Further research has been conducted on the influence of team reward in conjunction with other determinants on the overall performance (Knight et al., 2001; Beersma, 2003). Moreover, there are other related research topics, for example, the dynamics of team incentive plans (Hollensbe & Guthrie, 2000).

c. Rank reward: Rank reward is also worded by some authors as “tournament compensation”. In this method, the employees are not rewarded directly for their achievements, but for the rank they have achieved within a predefined group.

Previous studies indicate that rank reward has a positive impact on the employees’ performance (Judiesch & Schmidt, 2000). Researchers found out, similar to the classic form of target-based pay, rank reward seems to motivate the employee only if he/she is able to
reach the rewarding ranks with some efforts. This is the case when e.g. the team is relatively homogeneous (Casas-Arce & Martínez-Jerez, 2009).

Another interesting aspect of rank reward is that public revelation and information exchange within the group seems to play an important role in the motivational effect, as well as in the team cooperation (Bhattacharya & Dugar, 2013; Rothenberg, 2011; Goltsman & Mukherjee, 2011; Harbring, 2006).

d. **Tangible incentive:** Tangible incentives are non-monetary rewards. This kind of reward is offered typically in form of merchandise or travel. In their work, Jeffrey and Shaffer causallyised the motivational power of tangible reward based on the physical and psychological characteristics of such incentive plans (Jeffrey & Shaffer, 2007).

There has been evidence that tangible incentive may lead to a more intensive boost of performance than monetary reward with similar purchase power (Jeffrey & Adomdza, 2011). However, the success of tangible incentive may depend greatly on certain influence factors, e.g. perceived pay equity, organisational justice and organisational hardship etc. (Morrell, 2011).

e. **Incentive for knowledge-sharing:** Researchers found out that sometimes the acquisition of new knowledge or skills has a stronger impact on performance than the employee’s efforts (Seijts & Latham, 2005). In this case, rewarding knowledge-sharing is expected to be the best instrument for the improvement of the overall performance.

Besides, information-sharing or knowledge-sharing leads to stable co-operation in the team (Harbring, 2006; Seijts & Latham, 2005). This is especially important e.g. for new product development (Chang, 2007).

f. **Risk-sharing/ gain-sharing:** Incentive plan based on risk-sharing or gain-sharing ties up the employee’s benefits with the organisation’s profit. This method is believed to have a long-
term positive influence on the profit drivers, however, only when the employees have control over them (Magnan & St-Onge, 2005).

One essential precondition for functional gain-sharing mechanism is organisational trust (Chenhall & Langfield-Smith, 2003). The employee’s involvement in gain-sharing may increase his acceptance of compensation risk over time (Arthur & Kim, 2005).

g. **Penalty-framed contract**: Compared to bonus-framed incentive plans, penalty-framed contracts are rather rare. Prior studies indicate that when dealing with simple tasks and the employee’s performance lies within the range of penalty or bonus, penalty may be more effective than bonus incentive (Church, Libby & Zhang, 2008; Wynder, 2010). When dealing with complex tasks, however, clear instruction seems to be more helpful (Wynder, 2010).

To summarize the above, the “classic” target-based pay deals with monetary incentive based on the individual achievements. However, the research interest has been extended to further variant forms of target-based pay in the last decades. The following is an overview of the above-mentioned variant forms of target-based pay:

<table>
<thead>
<tr>
<th>Type of target-based pay</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. “Classic” TBP</td>
<td>The reward is a monetary incentive based on the individual achievements measured by predetermined performance indicators.</td>
</tr>
<tr>
<td>b. Team incentive</td>
<td>Team performance is rewarded in place of individual performance in the classical form of target-based pay.</td>
</tr>
<tr>
<td>c. Rank reward (=tournament compensation)</td>
<td>The employees are not rewarded directly for their achievements, but for the rank they have achieved within a predefined group.</td>
</tr>
<tr>
<td>d. Tangible incentive</td>
<td>The reward is non-monetary.</td>
</tr>
<tr>
<td>e. Incentive for knowledge-sharing</td>
<td>Instead of individual achievement, the employee’s performance in sharing knowledge with co-workers is rewarded.</td>
</tr>
</tbody>
</table>
f. Risk-sharing/ gain-sharing

The employee’s benefits are tied up with the organisations profit.

g. Penalty-framed contract

Instead of rewarding good performance, poor performance is punished.

Table 2-1  
Variant forms of target-based pay

2.1.3 INFLUENCE FACTORS ON PERCEPTIONS OF TBP

The following influence factors for perceptions of target-based pay were identified during the literature review of this section.

a. Employee empowerment: The importance of employee participation at decision-making has been underlined by many authors (Kochan, 2004; Batt, 2002; Haar & Spell, 2009). Employee empowerment is observed to have sometimes a comparable effect as financial incentive (Wolf & Zwick, 2008; Leong & Woo Gon, 2002). The incentive plan is thought to be especially effective if the employees are involved in setting up their own goals (Mujtaba & Shuaib, 2010). Restriction of employee autonomy may reduce the intrinsic motivation (Christ et al., 2012). Observations are also made that the perception for employee empowerment of the workers are different from that of the managers (Drake, Wong & Salter, 2007).

b. Career concerns: Career concerns of the employees play a big role in the employees’ behaviour (Foerster & Martinez, 2006; Bryson, Buraimo & Simmons, 2011; Batt, 2002). Under circumstances, the employees might appreciate the opportunities to obtain new skills similarly as financial incentives (Parent, 2009). However, when promoting those who perform well, attention need to be given so that employees are not transferred into positions they do not fit (Jaroslav, 2004).

c. Organisational justice: Researchers unanimously claim that organisational justice plays a central role in the employees’ perceived pay satisfaction (Morrell, 2011; Arnold et al., 2009; Haar & Spell, 2009). Previous studies suggest that TBP perception is related to
the actual link between performance and pay, their trust in decision-makers, their procedural justice perception, the pay increase, performance rating and their satisfaction with these outcomes (St-Onge, 2000). Managers perceiving effort-reward fairness are believed to perform better than their colleagues (Janssen, 2001). Also the fairness of the budget and budgeting process may have an important impact on the performance (Libby, 2001).

d. **Objective/subjective performance evaluation:** Many authors assume that only objective performance measures are optimal for employee motivation (Topjian, Buck & Kozlowski, 2009). However, those studies often focus on performance types of which the contribution is relatively easy to measure (Bol, 2008).

Based on the agency theory, it is commonly expected that performance evaluation biases would be detrimental to employee motivation (Bol, 2011). Moers observes that subjective performance measures lead to more leniency biases, which might affect future incentives and personnel decisions (Moers, 2005). However, during his examination, Bol finds no significant negative influence of leniency biases on performance. On the contrary, he believes in a positive effect of leniency biases, since they seem to be positively associated with future performance and increase the perceived fairness, thus in turn improve the employee motivation (Bol, 2011).

A survey study using panel data of 4,080 employees in a Swiss unit of an international company shows, flexible “surprise bonus” based on subjective performance evaluation provides long-term motivation (Engellandt & Riphahn, 2011).

e. **Reference comparison:** Arnold et al. found out that the perceived pay satisfaction does not only depend on a “fair” performance evaluation based on objective measures, but also on the reference comparison with internal and external co-workers (Arnold et al., 2009). Besides, the expectation of the employee plays an important role in the employee’s perception (Schaubroeck et al., 2008).
f. **Coaching**: Coaching is the individual support for employees by means of teaching, training, etc. when dealing with certain tasks. Coaching may improve performance essentially when the tasks are less complex and there are less frequent technological changes and target-based pay may strengthen this effect (Liu & Batt, 2010).

When dealing with complex tasks, managers may improve the positive effect of financial rewards by providing the employees timely feedback on what they have done right and how that adds value to the organisation (Marshall & Heffes, 2005).

g. **Team incentive**: Team incentive seems to be the most effective with difficult goals. Knowledge and task complexity have been identified as moderating variables for the effect of target-based pay on team performance. Incentives reduce strategic risk for easy-goal teams and improve tactical implementation (Wynder, 2010).

h. **Social value**: Social recognition seems to have a similar boosting effect as monetary incentives (Brickson, 2000). Some researchers go as far as to claim that forming working groups, where the members care for each other’s welfare, will lead to better performance without additional monetary incentives. Thus, the social values may become an alternative to monetary incentives (Rey-Biel, 2008). However, other studies indicate that the effect of monetary incentives is usually stronger than social values (Stajkovic & Luthans, 2001).

Under circumstances, social values may also have a negative impact on performance. A survey of 27 Asian companies, for example, showed that the desire for group harmony had led to protection of low performers and thus caused barriers for the implementation of target-based pay (Chen, Scott & Shaw, 2001). Observations are also made that social values of the employees may mediate the effect of target-based pay (Subramony et al., 2008).

i. **National culture**: The empirical studies indicate the existence of clusters based on cultural groups in perceptions of pay system. This suggests that such perceptual
differences may have been influenced by cultural differences. Some previous cross-cultural studies indicate that different cultural environments may cause different reactions towards the identical rewarding system (Fong & Shaffer, 2003; Hui et al., 1991). Previous studies also demonstrate that the cultural factors intertwine with various dimensions of perception of target-based pay (Fong & Shaffer, 2003).

Researchers also discovered that national cultures are dynamic and underlie further developments with time (Jing & Jin Nam, 2010).

In general, cross-cultural studies remain scarce in the terrain of TBP research.

j. *Organisational position:* Observations have also been made that the perceptions of target-based pay are different based on the organisational positions of the employees. Perceptions for employee empowerment of the workers are for example different from those of the managers (Drake, Wong & Salter, 2007). The target-based pay is believed to be especially effective with managers (Janssen, 2001).

k. *Further aspects:* Some further aspects are e.g. job security (Batt, 2002); inter-personal trust in the organisation (Ferrin & Dirks, 2003) etc.

Concluding the above, the findings of the literature review in this section indicate that the employees’ satisfaction with pay is not solely influenced by the amount of pay. There are further important influencing factors, which seem to have an important impact on the pay perception. The following is an overview of the main influence factors for the perception of target-based pay in the literature:

<table>
<thead>
<tr>
<th>Influence factor</th>
<th>Description</th>
<th>Effect on target-based pay</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Employee empowerment</td>
<td>Employee participation at decision-making</td>
<td>Positive; comparable to financial incentives</td>
</tr>
<tr>
<td>b. Career concerns</td>
<td>Opportunity to learn new skills or to be promoted</td>
<td>Positive with some employees, similar to financial incentives</td>
</tr>
<tr>
<td>c. Organisational justice</td>
<td>Perceived justice for the link between performance and reward</td>
<td>Central influence factor for pay satisfaction</td>
</tr>
</tbody>
</table>
d. Objective/subjective performance evaluation
How objective/subjective the performance evaluation is conducted
Objectivity is believed to have a positive effect. However, a subjective correction based on circumstances of task fulfilment may increase the perceived fairness.

e. Reference comparison
Reference comparison with internal and external co-workers
The perceived fairness is influenced by comparison with internal and external co-workers.

f. Coaching
Individual support for employees by means of teaching, training etc. when dealing with certain tasks
May increase the positive effect when dealing with complex tasks.

g. Team incentive
A special form of target-based pay. At this, team performance instead of individual performance is rewarded
Is believed to increase the positive effect when dealing with complex tasks.

h. Social value
Norms for desired behaviour within working groups
Social recognition has a positive effect. However, certain values may have a negative effect.

i. National culture
Influence of national cultures on perceptions of link between performance and reward
Affects the perception of the link before performance and reward

j. Organisational position
Individual position of employee in the business organisation
Managers are believed to perceive the influence factors differently than the worker.

Table 2-2  Main Influencing factors for perceptions of target-based pay

2.2 CULTURAL INFLUENCE ON PERCEPTIONS OF TARGET-BASED PAY

The purpose of the literature review in this section is:

- To identify current status of academic research on cultural influence on perceptions of target-based pay; and

- To identify cultural factors which influence perceptions of target-based pay in the literature.

The chosen works yielded by the systematic literature review consist of regional studies in India, China, Taiwan, South Korea, Spain, France, Ireland, Italy, Spain, UK, USA, Mexico and Serbia, etc. Except for Hofstede’s work, all the other studies were published between 2006 and 2011.

The majority of the findings are conducted as empirical studies based on survey and personal or telephone interviews. Subjects of the empirical studies are mainly a special group of employees,
i.e. HR managers, executives, engineers, salespeople, etc. In a few cases, the organisational positions of the subjects have not been explicitly described.

There is a consensus among researchers that cultural factors have a substantial impact on perceptions of target-based pay. The cultural factors need to be seriously considered before human resources techniques of the Western models are transferred to other cultural circles (Bae, Chen & Rowley, 2011; Merriman, 2010; Milikić, Janićijević & Petković, 2008). In general, the effect of cultural factors on perception of target-based pay is described as a moderating effect (Lertxundi & Landeta, 2011).

Previous studies indicate that the influence of national cultures results in different perceptions and therefore different reactions towards the same reward system (Onyemah, Rouziès & Panagopoulos, 2010; Rajagopal, 2007). Even among some cultures that are considered similar (France, Ireland, Italy, Spain, UK and USA), the nuances in performance orientations have led to different perceptions of the target-based pay (Onyemah, Rouziès & Panagopoulos, 2010).

A few recent researches relate positive results of target-based pay with high individualism, low power distance, low uncertainty acceptance and high masculinity in the national cultures (Muduli, 2011; Lertxundi & Landeta, 2011). Based on the above thoughts, target-based pay is regarded unsuitable for some cultures (Muduli, 2011; Merriman, 2010). However, those statements are contradicted by the counter-arguments, for example, a very strong individualism might compromise collaboration, while collectivism fosters teamwork and in turn improves team performance (Eby et al., 2000; Kirkman & Shapiro, 2001; Steensma et al., 2000); strong uncertainty avoidance leads to straightforward accomplishment of targets, making TBP more effective (Schmidt, 2007: 47).

Brody et al. draw attention to evaluation biases due to the superior’s preferences of certain individuals. Their experiment shows, such “favoured failures” are strongly influenced by cultural factors (Brody et al., 2006).
National cultures are dynamic and develop further with time. This development is lively illustrated by Jing & Jin through their empirical study on the differences in perceptions of target-based pay between the foreign firms and the domestic enterprises in China (Jing & Jin, 2010).

Among the 10 pertinent publications, at least 7 cited Hofstede’s Value Survey Model (VSM). Some used this model as the main framework for their investigations. This model was favoured for its precise definition, the simplicity, as well as the popularity among academics (de Mooij & Hofstede, 2010). In the next section, the cultural influence on perceptions of target-based pay in the literature will be further explored in the framework of Hofstede’s Model.

2.3 Hofstede’s Value Survey Model (VSM)

Hofstede defines management as coordination of the efforts of people – including but not limited to subordinates - towards common goals (Hofstede, 2007). According to him, the collective programming of the mind may divide people into distinctive cultural groups and the core elements in culture are the cultural values (Hofstede, 1980; 2007). Hofstede argues that since the relationship between people is always influenced by the cultural values, management is subject to culture (Hofstede, 2007). Hofstede refers to cultural differences primarily as differences among national cultures.

Initially, based on the empirical data collected by IBM subsidiaries in 74 countries between 1967 and 1973, Hofstede built up a construct for the analysis of cultural values he called Value Survey Model (VSM). Using factor analysis, Hofstede defined five dimensions of national cultures: a. individualist vs. collectivism; b. power distance; c. masculinity vs. femininity; d. uncertainty avoidance; e. short-term vs. long-term orientation (Hofstede, 1980; 2007).
**Dimension a: Individualism vs. Collectivism.** Individualism means people look after themselves and their immediate family only (de Mooij & Hofstede, 2010). Collectivism means people look after members of the social groups they belong to in exchange for group loyalty. Some later researchers interpret collectivism as dominant social values for group loyalty, social norms and participation in collective activities. On the contrary, individualism is interpreted as dominant social values for individual independence, autonomy and privacy (Lertxundi & Landeta, 2011; Muduli, 2011).

There are controversial opinions on the effect of individualism and collectivism on target-based pay. Some believe that individualism reinforces the effect of target-based pay, as it favours individual performance (Lertxundi & Landeta, 2011; Muduli, 2011). Collectivism, on the other side, is said to be obstructive, because at a high level of collectivism, the perception of the
members of the social group is dominated by the social networks, instead of being based on individual performance and pay levels. Under such circumstances, collective interest or group harmony has a higher value than personal performance or rewards. Therefore, researchers assume a negative impact of collectivism on the efficiency of target-based pay (Lertxundi & Landeta, 2011; Muduli, 2011; Bond, Leung & Wan, 1982; Kim, Park & Suzuki, 1990). However, the opponents of the above opinion argue that collectivism boosts teamwork and therefore has a positive effect on performance (Eby et al., 2000; Kirkman & Shapiro, 2001; Steensma et al., 2000).

Based on his previous studies on cultural values of some national cultures, Hofstede recognizes a domination of collectivism in China, and a domination of individualism in the western countries. It is also expected that socialism influences the cultures towards collectivism (Hofstede, 2007).

**Dimension b: Power distance.** Power distance stands for the extent of which the less powerful in a society accepts the unequal distribution of power (Hofstede, 2007).

There is a consensus among researchers that large power distance leads to a status reward, i.e. senior employees receive higher reward based on their hierarchical status or tenure, regardless of their individual performance. In an environment with large power distance, employees are usually reluctant to take actions on their own initiative. Obviously, this scenario does not seem to promote the efficiency of target-based pay. On the contrary, small power distance implies higher expectation of equality or equal pay for equal performance. This is associated with better communication, active individual participation and efficient implementation of target-based pay system (Lertxundi & Landeta, 2011; Aycan, et al., 2000; Martocchio, 2006).

Based on previous reports (Chia, et al., 2007) and the observed higher rate of misuse of official power for personal gain due to the existence of uncontrolled power (Lee & Oh, 2007), it is expected that the power distance is large in China. It is also expected that the power distance is smaller in more democratic cultures (Hofstede, 2007).
**Dimension c: Uncertainty avoidance.** Uncertainty avoidance describes the level of needs to avoid risks, because individuals feel threatened by unknown or uncertain situations (Hofstede, 2007; Lertxundi & Landeta, 2011). Strong uncertainty avoidance is expressed by a strong need for rules and formality, as well as belief in experts. Weak uncertainty avoidance leads people to be innovative and causes belief in generalists (de Mooij & Hofstede, 2002).

Some previous researches suggest that strong uncertainty avoidance may cause the employer to reduce employee autonomy with increased bureaucracy. Strong uncertainty avoidance may also cause the employees to prefer fixed reward to target-based pay. Weak uncertainty avoidance, on the other hand, is believed to lead to higher level of creativity of employees, as well as the employees’ readiness to leave their superiors greater latitude for performance evaluation (Lertxundi & Landeta, 2011; Muduli, 2011). Again some other academics argue controversially that strong uncertainty avoidance means preference for unambiguity. With this attitude, once the assignments are well defined, they will be treated by the employees with high priority, thus strong uncertainty avoidance shall strengthen the effect of target-based pay (Schmidt, 2007: 47).

**Dimension d: Masculinity vs. femininity.** This cultural dimension describes whether masculine or feminine values dominate in the society. The masculine values are distinguished with achievement and success. The feminine values are predominantly caring for others and the quality of life (de Mooij & Hofstede, 2002). Besides, the role differentiation between male and female is small in feminine societies and large in masculine societies (de Mooij & Hofstede, 2010).

To translate the above definition in business life, masculinity means high performance and high reward are admired and strived for, while femininity implies, the main purpose of the job is to make a living and group harmony and sympathy for the weaker are preferred to higher incomes. Strong masculinity is often associated with efficiency of target-based pay and femininity is interpreted as a criterion of cultural unfitness for a pay system based on individual performance (Lertxundi & Landeta, 2011; Muduli, 2011). However, some researchers also point out that
social recognition has a similar boosting effect on performance, although the motivation is not monetarily based (Brickson, 2000; Rey-Biel, 2008).

Previous field studies suggest stronger femininity of the Chinese culture. For example, the employees’ keen desire for group harmony in a Taiwanese company has led to protection of low performers in the implementation of target-based pay (Chen, Scott & Shaw, 2001).

**Dimension e: Long-term orientation.** Long-term orientation stands for a pragmatic future orientation in contrast to a conventional historic or short-term point of view (de Mooij & Hofstede, 2010). Hofstede refers to China as a long-term high-scorer (Hofstede, 2007). Long-term orientation may be found in some previous field studies, where, for example, the employee’s perception of job satisfaction is strongly influenced by his career concerns, or job security (Bryson et al., 2011; Batt, 2002).

Even today, Hofstede’s Model is still quoted for studies on cultural influence in diverse research fields. Over decades, this model has been criticised for various weaknesses, e.g. not treating the sub-cultural groups within the same national cultures (IsHak & Moore, 1988); different comprehensions of the survey questions in different cultural environments (Yeh, 1988; Huo & Randall, 1991), etc. Over time, many proposals are made for the improvement the weaknesses or the modification of the model for some particular research purposes. However, Hofstede’s methodology for the development of the model remains unchallenged (Reber & Auer-Rizzi, 2004).

2.4 MAPPING INFLUENCE FACTORS IN VSM FRAMEWORK

For the further analysis of cultural influence on perceptions of TBP, the influence factors introduced in Section 2.1.3 are mapped with Hofstede’s VSM framework as follows.

a. **Employee empowerment:** The employee participation at decision-making implies a democratic leadership style. This indicates that the gap in power distribution between the
superior and the subordinates is relatively small. Therefore, “employee empowerment” is mapped with “small power distance” in VSM.

b. **Career concerns**: Career concerns implies that the employee considers the future development of his professional life when making decisions. This is seen as one of the typical characteristics of long-term orientation (Bryson et al., 2011; Batt, 2002). Therefore, “career concern” is mapped with “long-term orientation” in VSM.

c. **Organisational justice**: In the context of target-based pay, organisational justice is to be comprehended as perceived satisfaction with the link between performance and pay. The perceived satisfaction is linked with different individual criteria, e.g. perceived fairness of performance rating (St-Onge, 2000), asserted efforts (Janssen, 2001) and the perceived fairness of the targets (Libby, 2001). Such criteria for organisational justice mirror the underlying individual values, which vary from judgement solely based on performance outcome, to a mixture with more or less “soft” factors, e.g. environmental influence, hardship etc. The individual values may be classified in Hofstede’s Model as masculine or feminine values. Therefore, “organisational justice” is mapped with “masculinity/femininity” in VSM.

d. **Objective/subjective performance evaluation**: Demand for objective performance evaluation implies the employee’s dislike of uncertainty. Agreement to subjective performance evaluation on the other hand indicates the employee’s readiness to accept the uncertainty of performance rating without formal rules. Therefore, “objective/subjective performance evaluation” is mapped with “uncertainty avoidance” in VSM.

e. **Reference comparison**: Reference comparison implies that the employee expects equal reward for equal performance in comparison with internal and external co-workers. This may be understood as equal power distribution in context of TBP. Therefore, “reference comparison” is mapped with “small power distance” in VSM.

f. **Coaching**: Coaching aims at improving performance of others through support by means of teaching, training etc. when dealing with certain tasks. Thus, coaching reflects a certain group loyalty. Therefore, “coaching” is mapped with “collectivism” in VSM.
g. **Team incentive**: Team incentive rewards team performance instead of individual performance. Thus the acceptance of team incentive implies a certain degree of collectivism. Therefore, “team incentive” is mapped with “collectivism” in VSM.

h. **Social value**: Social values match the feminine values in Hofstede’s Model. Therefore, “social value” is mapped with “femininity” in VSM.

i. **National culture**: National culture is a parameter, not an influence factor in Hofstede’s Model. Therefore, it is not mapped with a specific cultural dimension in VSM.

j. **Organisational position**: Like “national culture”, organisational position suggests shared social values within the same group. Therefore, it is regarded as another parameter of the model and not mapped with a single cultural dimension in VSM.

k. **Further aspects**: Similar to career concern, job security is regarded as one of the typical characteristics of long-term orientation (Bryson et al., 2011; Batt, 2002). Therefore, “job security” is mapped with “long-term orientation” in VSM. “Inter-personal trust” is understood as a sign of group affiliation, therefore is mapped with “collectivism” in VSM.

The following is an overview of the mapping of TBP influence factors in VSM.

<table>
<thead>
<tr>
<th>Influence factor on perceptions for target-based pay</th>
<th>Dimension of VSM</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Employee empowerment</td>
<td>Small power distance</td>
</tr>
<tr>
<td>b. Career concern</td>
<td>Long-term orientation</td>
</tr>
<tr>
<td>c. Organisational justice</td>
<td>Masculinity/ femininity</td>
</tr>
<tr>
<td>d. Objective/ subjective performance evaluation</td>
<td>strong/weak certainty avoidance</td>
</tr>
<tr>
<td>e. Reference comparison</td>
<td>Small power distance</td>
</tr>
<tr>
<td>f. Coaching</td>
<td>Collectivism</td>
</tr>
<tr>
<td>g. Team incentive</td>
<td>Collectivism</td>
</tr>
<tr>
<td>h. Social value</td>
<td>Femininity</td>
</tr>
<tr>
<td>Job security</td>
<td>Long-term orientation</td>
</tr>
<tr>
<td>Inter-personal trust</td>
<td>Collectivism</td>
</tr>
</tbody>
</table>

*Table 2-3 TBP influence factors vs. dimensions in Hofstede’s VSM*
In line with the above mapping decisions, the illustration of this Model in Figure 2-1 may be enriched with the influence factors on perceptions of target-based pay as underlying attributes. The results are displayed in Figure 2-2.

![TBP influence factors in Hofstede's VSM framework](image)

**Figure 2-2** TBP influence factors in Hofstede’s VSM framework

(Cultural factors as defined by Hofstede (2007))

### 2.5 EXPERT VIEW ON CULTURAL INFLUENCE ON TBP PERCEPTIONS

In early summer 2013, the results of the literature review on cultural influence on perceptions of target-based pay were presented at discussions with four general managers, eight intermediate managers and two high-level administration staff members in the observed business...
organisation with locations in Germany, the Czech Republic and China. Those practitioners were henceforth involved as the expert panel in further research process of this thesis. The subsequent panel discussions provided valuable insights of target-based pay practices. The early panel discussions focused on obtaining constructive feedbacks on the presented literature review. During the initial sessions, the following questions were discussed:

1. Does target-based pay have a predominantly positive effect?
2. Which forms of target-based pay are suitable for this business organisation?
3. What are the influence factors for perceptions of target-based pay?
4. What are the cultural factors?
5. How do these cultural factors influence perception of target-based pay?
6. How should the cultural factors be measured?
7. How should perceptions of target-based pay be measured?

The panel discussions reported on numerous positive experiences with target-based pay. However, the practitioners also noted the following critical aspects for the design of incentive plan, which, if not thoroughly considered, might reduce the positive effects expected from target-based pay.

The first critical aspect addressed in the panel discussion was the amount of incentive pay. As described in the previous literature (Schaubroeck et al., 2008), the panel reiterated that the target-based pay could only lead to positive effects if the amount was substantial enough. In addition, the panel asserted that the amount should also be confined within a proper range, so that the employees would still be motivated to address important tasks in their daily operations which were not directly linked with the incentive pay.

The second aspect proposed by the panel was a systematic structure for the complete workforce, due to the fact that the employees’ perceptions of the pay were not only related to the received amount, but also to reference comparison (Arnold et al., 2009).
The expert panel also debated on the application of the various forms of target-based pay as described in Section 2.1.2. The outcomes of the discussions are concluded as follows.

a. “Classic” target-based pay: This is the most common form of target-based pay in the observed business organisation. Results in the past seem to confirm the positive effect of this type of incentive.

b. Team incentive: The local management in Germany, the Czech Republic and China promote team incentive. The management shares the prevailing opinion in the literature that team performance has a stronger tie to the organisation success than individual performances (Liu & Batt, 2010; Zenger & Marshall, 2000; Jo En, Liliana & Michael, 2009). However, the employees’ feedbacks on this type of incentive are controversial. While some accept it on the account of joint productivity, some others hold a rather declining position, complaining that they are made responsible for events they have no influence on.

c. Rank reward: In consideration of expected positive effects as described in previous literature (Judiesch & Schmidt, 2000), the use of rank reward in the observed organisation was discussed, but in the end not implemented. There were concerns that this type of incentive would increase the competition among the co-workers and reduce co-operation, which in turn might reduce the team performance.

d. Tangible incentive: This type of incentive is offered in the observed organisation within a limited scope. A more intensive boost of performance than monetary reward as reported by some previous studies (Jeffrey & Adomdza, 2011) was not observed in the practice. The employees’ feedbacks indicate that monetary incentives are usually preferred to tangible incentives.

e. Incentive for knowledge-sharing: Incentive for knowledge-sharing is offered in a very restrictive frame based on the expectation of positive effects as described in the previous literature (Harbring, 2006; Seijts & Latham, 2005; Chang, Yeh & Yeh, 2007). A major difficulty in administering this type of incentive in the practice is to measure the results of knowledge-sharing.
f. **Risk-sharing/ gain-sharing**: In trust of the long-term positive effect described in the previous literature (Magnan & St-Onge, 2005; Chenhall & Langfield-Smith, 2003; Arthur & Kim, 2005), the risk-sharing/ gain-sharing is realised in the observed organisation by linking a part of the individual incentive with the financial results of the business organisation. This solution finds wide acceptance among the employees.

g. **Penalty-framed contract**: Although some authors claim that penalty might be more effective than bonus incentive (Church, Libby & Zhang, 2008; Wynder, 2010), the practitioners did not consider the application of this type of contract due to concerns of possible negative effects.

The results of the literature review on cultural influence on perceptions of target-based pay in Section 2.1.3 were verified and validated by the expert panel during discussions from early summer till winter, 2013. The outcomes of the panel discussion are summarized as follows.

a. **Employee empowerment**: In consensus with the academics (Kochan, 2004; Batt, 2002; Haar & Spell, 2009), the expert panel confirmed on a reinforcing effect of employee empowerment on the positive effect of target-based pay. However, difficulties in the practice were reported when trying to involve some employees in setting up their own goals. Such problems are frequently encountered with junior staff of a relatively low educational level.

b. **Career concern**: In addition to the consensus with the prevailing literature on the positive effect of addressing the employees’ career concerns (Foerster & Martinez, 2006; Bryson et al., 2011; Batt, 2002), the practitioners warned of not thoroughly planned offers for further education. Unless the employees could find application of the acquired knowledge within the business organisation, such qualifications would potentially encourage the employees to leave the organisation for better career opportunities.

c. **Organisational justice**: In consensus with the literature (Morrell, 2011; Arnold et al., 2009; Haar & Spell, 2009), the practitioners asserted that organisational justice was the central element for employee motivation. However, there was no consensus of how organisational
justice could be established. To some employees, this should involve consideration of the circumstances, thus subjective adjustments in performance rating based on trust in the superior. To some others, fairness was related to rigid objectivity in performance evaluation.

d. **Objective/subjective performance evaluation**: As mentioned under “organisational justice”, there was no consensus among the practitioners of the expert panel if a subjective element in performance evaluation would have a positive effect on target-based pay. There was a consensus, however, that in case subjective performance evaluation was to be made, the employees’ trust in the superior would be essential for the positive effect. Similar controversial discussions could also be found in the literature (Topjian et al., 2009; Bol, 2008).

e. **Reference comparison**: The effect of reference comparison described in previous literature (Arnold et al., 2009; Schaubroeck et al., 2008) was also observed by the practitioners. In addition, the expert panel reported on regional differences in the employees’ attitude. In Germany, reference comparison was not popular. The reason was thought to be the lack of access to the relevant information, since the individual pay was perceived by most German employees as highly intimate. In the Czech Republic, as well as in China, a common readiness to share this information was observed, especially among the junior staff members.

f. **Coaching**: There was a consensus with the academics (Liu & Batt, 2010; Marshall & Heffes, 2005) among the experts that coaching could improve the organisation’s performance. However, it was not easy to monitor the asserted efforts and the effect of coaching, so as to make it measurable for the target-based pay. A few attempts to implement coaching success in target-based pay in the observed organisation had sometimes caused disputes. Targets for knowledge-sharing among employees with similar skills, however, seemed to be less of a problem.

g. **Team incentive**: The effect of team incentives has been discussed previously in this section among the various forms of target-based pay.

h. **Social value**: The findings of literature review on the effect of social values on target-based pay were rather controversial. While some researchers reported boosting effects of social
values on individual performance (Brickson, 2000; Rey-Biel, 2008), others observed
protection of low performers, which weakened the effect of target-based pay (Chen, Scott &
Shaw, 2001; Subramony et al., 2008). The practitioners identified a number of social values
which might have different effects on perceptions of target-based pay and suggested
regional differences among the employees in Germany, the Czech Republic and China.

i. **National culture:** There was a consensus among the practitioners, as described by the
academics, that national cultures have a substantial influence on perceptions of target-based
pay (Fong & Shaffer, 2003; Hui, Triandis & Yee, 1991). The practitioners recommended a
close study of the national cultures prior to the implementation of a new element of target-
based pay of foreign origin. The expert panel also indicated the existence of sub-cultural
groups within the same national cultures. In addition, the expert panel confirmed the
assertion of the dynamic of cultures by the researchers (Jing & Jin Nam, 2010).

j. **Organisational position:** There was also a consensus among the practitioners on the effect
of organisational positions on perceptions of target-based pay as described in previous
literature (Drake, Wong & Salter, 2007; Janssen, 2001). To the expert panel, cultural groups
could be divided by the organisational positions, similar as they were commonly divided by
national cultures. Based on this proposition, a comparison study based on organisational
positions was conducted in this thesis.

The panel discussions on the influence of cultural factors on target-based pay were guided by
the findings of the literature review in Sections 2.2 and 2.3.

Initially, the expert panel affirmed the consensus among the researchers on the influence of
cultural factors on perceptions of target-based pay (Onyemah, Rouziès & Panagopoulos, 2010;
Rajagopal, 2007). Moreover, the practitioners supported the recommendation in the literature
that cultural factors be closely studied before human resources techniques of foreign origin was
transferred to other cultural circles (Bae, Chen & Rowley, 2011; Merriman, 2010; Milikić,
Janičijević & Petković, 2008).

Because **Hofstede’s Value Survey Model (VSM)** was identified by the literature review as the
most prominent holistic model for the assessment of cultural influences, the definition of
cultural factors in this model was taken over for this research. The framework of VSM also guided further discussions on the influence of cultural factors on target-based pay.

Hofstede’s model describes cultures in five dimensions (Hofstede, 2007).

a. **Individualism vs. collectivism.** There seem to be disputes in the literature on the effect of individualism and collectivism on perceptions of target-based pay. Some researchers assert a positive effect of individualism with the argument that the emphasis of individualism boosts individual performance, or a negative effect of collectivism on the account that the effect of target-based pay is weakened when the group harmony has a higher value than personal performance or reward (Lertxundi & Landeta, 2011; Muduli, 2011). However, other researchers argue that collectivism promotes teamwork and in turn leads to a positive effect of target-based pay (Eby et al., 2000; Kirkman & Shapiro, 2001; Steensma et al., 2000).

There were also disputes on the effect of collectivism among the practitioners. The expert panel interpreted the acceptance of team incentive as an expression of collectivism. While some anticipated that a positive attitude towards team incentive would lead to a positive perception of the entire target-based pay, others argued that this attitude reflected a lower appreciation of individual achievement, therefore would result in a negative impact on the individual perceptions of target-based pay. However, there was a consensus among the practitioners on the positive effect of individualism, because individualism was related to the emphasis of individual achievement, which in turn was expected to lead to higher individual performance.

b. **Power distance.** There is a consensus in the literature that small power distance encourages performance, therefore, it has a positive influence on the effect of target-based pay. Large power distance, on the contrary, has a negative effect, because this leads to the reward of social status, instead of the individual achievement (Lertxundi & Landeta, 2011; Aycan, et al., 2000; Martocchio, 2006). The above opinion was shared by the expert panel.

c. **Uncertainty avoidance.** Previous literature suggests that weak uncertainty avoidance positively influences the perception of target-based pay, because weak uncertainty
avoidance leads to higher creativity of employees, thus increases their problem-solving ability. Strong uncertainty avoidance, on the other hand, is believed to cause a dislike of flexible pay, thus should have a negative effect on perceptions of target-based pay (Lertxundi & Landeta, 2011; Muduli, 2011).

The expert panel opposed the above opinion with the argument that strong uncertainty avoidance could be interpreted as a strong target orientation. In the context of target-based pay, once the targets were defined, they would then be treated with high priority by the employees, which implied a high effectiveness of target-based pay. Some researchers expressed a similar opinion in their findings (Schmidt, 2007: 47).

d. **Masculinity vs. femininity.** The panel discussions affirmed the consensus in the literature that masculinity had a positive influence on perceptions of target-based pay, since the typical masculine values such as *achievement* and *success* were rewarded by this type of incentive (Lertxundi & Landeta, 2011; Muduli, 2011). However, while the effect of femininity of the culture seemed controversial for the researchers (Lertxundi & Landeta, 2011; Muduli, 2011; Brickson, 2000; Rey-Biel, 2008), there was a consensus among the practitioners in the expert panel that some feminine values, too, had a boosting effect on the perception of target-based pay. In the experience of the practitioners, the employees’ motivation was generally higher, when they felt that their individual needs had been taken care of.

e. **Long-term orientation.** There was a further consensus among the researchers and the practitioners on the positive effect of long-term orientation (Bryson, Buraimo & Simmons, 2011; Batt, 2002). Based on their observations, the panel asserted that the employees with strong long-term orientation could make better arrangements for the achievement of their targets.

The panel also proposed an additional dimension in Hofstede’s model. They suggested that the general attitude towards money, i.e. how important money meant to the individuals, would have a substantial impact on the perception of target-based pay. Based on this opinion, Hofstede’s VSM framework was extended by one additional dimension “general pay perception” to
describe the perceived importance of money in the further process of this thesis. Thus, in the further research round, the cultural factors will be measured in altogether six dimensions: “individualism vs. collectivism”; “power distance”; “uncertainty avoidance”; “masculinity vs. femininity”; “long-term orientation” and “general pay perception”.

Subsequently, the mapping of the influence factors in the VSM framework as described in Section 2.4 was also verified and validated by panel discussions. The results are illustrated in figure 2-3.

As a further result of the panel discussions, the following two aspects were determined as the main goals target-based pay was supposed to achieve: a. employee motivation, b. individual
prioritising of assignments. Therefore, the effect of target-based pay on the employees’ perceptions will be measured by those two criteria in the further process of this research.

Previous literature implies that perceptions of target-based pay are not only influenced by the national cultures, but also by the organisational positions (Drake, Wong & Salter, 2007; Janssen, 2001). This implication also found consensus in the expert panel. During the panel discussions, the organisational positions were divided into four groups: “general manager”; “intermediate managers”; “administration staff” and “production staff”.

To the expert panel, there were many further alternative ways to define cultural groups, e.g. age group, gender, tenure, etc. However, due to the limited capacity of this research, the empirical study on the cultural influence on perceptions of target-based pay in this thesis will be organised in two comparison studies: a cross-country comparison and an organisational position comparison.

2.6 CONCLUSIONS

The 2-step systematic literature review in this chapter analysed the current literature on cultural influence on perceptions of target-based pay, so as to answer the following research questions.

RQ1 What are the cultural factors that influence perceptions of target-based pay?

RQ2 Why are these cultural factors an important influence on perceptions of target-based pay?

RQ3 How do these cultural factors influence perceptions of target-based pay?

The abundant studies on the effect and the variant forms of target-based pay indicate that this motivational instrument still plays an important role in the modern human resources management. Previous researchers provide extensive evidence for the predominant advantages of the target-based pay. However, there are also critics of this type of incentive plans, although most of the critics do not principally object to its application, but recommend a careful dosing (Gerhart et al., 2009; Ordóñez et al., 2009). This controversy in the literature implies that the
field studies are yet insufficient to achieve an overall consensus on the effect of this type of incentive programme. Therefore, this study intends to make a contribution to knowledge by presenting real-world data on perceptions of target-based pay.

The existing literature indicates that perceptions of target-based pay are to a great extent influenced by: *Employee empowerment* (Kochan, 2004; Batt, 2002; Haar & Spell, 2009); *career concern* (Foerster & Martinez, 2006; Bryson, Buraimo, & Simmons, 2011); *organisational justice* (Morrell, 2011; Arnold et al., 2009); *objective/subjective performance evaluation* (Topjian, Buck, & Kozlowski, 2009; Bol, 2011); *reference comparison* (Schaubroeck et al., 2008); *coaching* (Liu & Batt, 2010; Marshall & Heffes, 2005); *team incentive* (Wynder, 2010); *social value* (Brickson, 2000; Rey-Biel, 2008; Stajkovic & Luthans, 2001); *national culture* (Fong & Shaffer, 2003; Hui et al., 1991; Jing & Jin Nam, 2010); *organisational position* (Janssen, 2001; Drake, Wong, & Salter, 2007) and further aspects, e.g. *job security* (Batt, 2002) and *Inter-personal trust* (Ferrin & Dirks, 2003).

The previous empirical studies suggest that different reactions towards target-based pay are often consequences of different national cultures (Fong & Shaffer, 2003; Hui et al., 1991). Besides, the organisational position also seems to have an impact, e.g. the workers’ perceptions may differ strongly from those of the executives (Drake, Wong, & Salter, 2007). This implies, cultures may be defined not only based on geographical regions, but also on organisational positions. However, the previous researchers seem to have mainly concentrated on the individual aspects of such cultural influences and there are only few systematic analyses of the cultures. Thus, this study intends to close this research gap by developing a conceptual framework to measure the influence of cultural factors on perceptions of target-based pay.

Among the pertinent literature, Hofstede’s Value Survey Model (VSM) was identified as the best fit holistic model to describe cultural influence on perceptions of target-based pay with the following dimensions of cultural factors: a. *individualism vs. collectivism*; b. *power distance*; c. *masculinity vs. femininity*; d. *uncertainty avoidance*; and e. *long-term orientation* (Hofstede, 1980; 2007). Thus, Hofstede’s model is intended to be deployed for this study as the
The fundamental structure of the conceptual framework to measure the influence of cultural factors on perceptions of target-based pay. In the process of extending the above framework into an assessment instrument, the influence factors on perceptions of target-based pay are mapped with the VSM framework, while national culture and organisational position are regarded as parameters of the model.

In order to reduce the researcher’s biases in the literature review, the above findings were subsequently reviewed by the key informants of this research (expert panel). This procedure is recommended by Yin for social science research, in order to improve the construct validity of the research design (Yin, 2009: 41-45). The panel discussions led to the following results.

The influence factors on perceptions of targeted based pay identified through the literature view were confirmed by the results of the panel discussions (see Section 2.5). The panel also acknowledged Hofstede’s Value Survey Model (VSM) as an appropriate framework to describe influence factors on perceptions of target-based pay as cultural factors. As a whole, the findings of the literature review were supported by the expert panel. However, the panel suggested based on the practitioners’ experience that the model be extended by an additional influence factor “general pay perception”. Thus the extended model is to be used in the further process of this research as the leading framework for the assessment of cultural influence on perceptions of target-based pay.

Since the major influence factors on perceptions of target-based pay in the literature can be mapped in the assessment instrument as underlying variables of the culture factors, the importance of the cultural factors for perceptions of target-based pay becomes apparent. Thus, the literature review delivered answers to the following research questions.

**RQ1** What are the cultural factors that influence perceptions of target-based pay?

**RQ2** Why are these cultural factors an important influence on perceptions of target-based pay?
In order to provide an answer to the remaining research question as how the cultural factors influence perceptions of target-based pay, anticipations of possible effects of the cultural factors were made through panel discussions based on the findings in the literature and the previous experience of the practitioners. Those anticipations are to be examined in the further progress of this thesis.

To summarize Chapter 2, the systematic literature review yields the following influence factors on perceptions of target-based pay: Employee empowerment; career concern; organisational justice; objective/subjective performance evaluation; reference comparison; coaching; team incentive; social value; national culture; organisational position and further aspects e.g. job security and inter-personal trust.

Furthermore, Hofstede’s Value Survey Model (VSM) is identified as an appropriate model to capture cultural influence in the following dimensions: a. individualist vs. collectivism; b. power distance; c. masculinity vs. femininity; d. uncertainty avoidance; e. long-term orientation (Hofstede, 1980; 2007). Subsequently, the influence factors on perceptions of target-based pay are mapped with VSM for the study of cultural influence on perceptions on target-based pay.

The above findings were verified and validated by a practitioner expert panel. As a result of the panel discussions, a further cultural factor “general pay perception” was added to the VSM framework for further research process.

Thus, the literature review delivered answers to the following research questions.

**RQ1**  *What are the cultural factors that influence perceptions of target-based pay?*

**RQ2**  *Why are these cultural factors an important influence on perceptions of target-based pay?*

The following chapter will provide an overview of the research design in seeking of the answer to the remaining research question:

**RQ3**  *How do these cultural factors influence perceptions of target-based pay?*
3 RESEARCH DESIGN

As described in Section 1.4, this section focuses on the research design, forming the basis of Part II of this thesis.

Following a presentation of the research philosophy, the research methodology and the concept of case study, the research hypotheses are explicitly outlined as a result of the literature review and the panel discussions. Next, an introduction is provided on the path of the systematic literature review. Next, the methods for data collection and data analysis are specified. Subsequently, the quality of the research design is discussed, as well as the researcher’s role and the ethical considerations. Finally, the research schedule is presented in Section 3.11.

3.1 RESEARCH PHILOSOPHY

A researcher’s world views and hidden assumptions have a crucial impact on the research work. Thus, it is necessary to clarify the researcher’s philosophical position as the basis of the research work to be conducted.

Post-positivism has a strong influence in the research of management science. To the post-positivists, the real world exists independently from the observers. However, due to the subjective perceptions of human beings, any observation of the real world will be charged with biases. The post-positivist research approach is based on empirical observations and careful measurements (Creswell, 2009: 6-7).

Based on a post-positivist philosophical position, the researcher is inclined to choose research methodology and methods which enable control of perception precision and reduction of manipulation. For this reason, the research method chosen for this study is a case study. This choice also appears to conform with the research tradition in this prolific research field.
3.2 RESEARCH METHODOLOGY

Research methodologies are the principles for the choice of research methods. Some authors have also called them “strategies of inquiry” or “approaches to inquiry” (Creswell, 2009: 11-12). The methodologies may be divided in three groups:

1. **Quantitative approaches** deal with research methods based on the quantitative features of the data. Quantitative approaches are often taken in connection with the post-positivist worldview. Typical research methods with quantitative approaches are for example surveys and experiments.

2. **Qualitative approaches** deal with research methods based on the qualitative features of the data. There are diverse philosophical grounds behind the qualitative research methodologies. Examples for research methods with qualitative approaches may be ethnography, narrative research or case study.

3. **Mixed methods approaches** are a combination of quantitative and qualitative approaches. Mixed methods approaches are associated with pragmatic worldview.

Furthermore, Creswell differentiates between the following variations of mixed methods approaches:

“**Sequential mixed methods**”: The quantitative and qualitative procedures are applied in a certain sequence, so that one method may expand or elaborate on the findings of another method.

“**Concurrent mixed methods**”: Both qualitative and quantitative data are collected at the same time. The overall results are interpreted based on both sets of findings.

“**Transformative mixed methods**”: A theoretical lens provides a framework of the research methods, where both quantitative and qualitative data are included. The framework may also contain a sequential or a concurrent approach (Creswell, 2009: 14-15).
This research intends to explore the influence of cultural factors on perceptions of target-based pay. For the purpose of this study, a quantitative research approach, especially in the form of a case study appears most appropriate and also matches the research tradition in this terrain. Therefore, the main body of the research is to be organised as a case study, whereas only quantitative data are to be collected and assessed.

### 3.3 CONCEPT OF CASE STUDY

As described in the previous section, the research in this thesis is to be mainly organised as a case study. This section is dedicated to the concept of case study.

There is no universal definition for case study. Occasionally, case study is not referred to as a research method, but a technique for data collection. In this section, case study shall be described according to Yin’s interpretation.

In his well-known book *Case Study Research*, Yin defines case study as a research method with the following characteristics (Yin, 2009: 18).

- In-depth empirical inquiry on a contemporary phenomenon in real-life context;
- Sometimes the boundaries between phenomenon and context are not evident;
- Copes with the presence of many more variables of interests than data points;
- Relies on multiple sources of evidence; and
- Adapts previous development of theoretical propositions to guide data collection and analysis.

There are various types of case studies. Depending on the purpose of the study, there are exploratory case studies, descriptive case studies and explanatory case studies (Yin, 2009: 8). Based on the number of cases, case study research may be divided into single- and multiple-case studies. Multi-case studies are also termed as *comparative case method*. (Yin, 2009: 19).
Case study research is not limited to qualitative research approaches. It may as well employ a mix of quantitative and qualitative evidence, or even be limited to quantitative approaches. Case studies may also contain elements of intervention (Yin, 2009: 19).

Although case study has become a popular form of inquiry in the last decades, there is certain disfavour of this research method among the academics. Yin sees the hurdles in the following concerns (Yin, 2009: 14-16):

1. Some of the past case studies have not been done with the due vigour. In absence of sufficient systematic procedures, the research findings have sometimes been misled by the researcher’s biases or equivocal evidence.
2. Due to the limited number of case(s), some academics doubt the appropriateness to generalize the findings of the case studies.
3. The lengthy case studies in the past have often resulted in massive, unreadable findings.
4. The case study method often has difficulties to establish causal relationships during the research project.

Some of the above criticisms may be well fended off. For example, to the question about the appropriateness of case studies for generalisation, Yin answers that case studies are aimed to generalise the findings. The validation of the findings may be done by means of employment of multiple sets of experiments or data resources. However, Yin does admit the lack of vigour of some case studies in the past. However, he believes such weakness may be overcome if researchers would carefully follow the systematic procedures of a proper research plan (Yin, 2009: 14-16).

This work is to be organised as a single case study. Therefore, there is a limitation to the generalisation of the study findings. This may be improved by repeating the research procedure in other comparable test environments, so as to increase the data set. However, due to the tight schedule of the study, this improvement has been left to future studies.
This case study consists of the following steps:

![Case study design: research steps](image)

3.4 **RESEARCH HYPOTHESES**

Aiming to verify the findings of the literature review and the discussions with the expert panel, the following hypotheses are to be tested in this thesis.

Based on the results of the literature review and the panel discussions, the following cultural factors were defined as follows for this thesis: a. *individualism vs. collectivism*; b. *power distance*; c. *masculinity vs. femininity*; d. *uncertainty avoidance*; and e. *long-term orientation*; f. *general pay perception*. 
Hypothesis 1: All cultural factors defined in this thesis are distinctive dimensions of cultural influence.

As discussed in Chapter 2, the existing literature indicates that the cultural factors have an impact on perceptions of target-based pay. This assumption shall be verified by the empirical evidence of this study.

Hypothesis 2: The cultural factors have an impact on perceptions of target-based pay.

Hypothesis 2 is to be further specified in the following aspects.

While there seems to be a consensus in the literature that individualism is positively related to the effect of target-based pay, there are disputes about the effect of collectivism (Lertxundi & Landeta, 2011; Muduli, 2011; Eby et al., 2000; Kirkman & Shapiro, 2001; Steensma et al., 2000). Also to the expert panel suggests that there is a positive relation between individualism and perceptions of target-based pay. However, the aggregate effect of collectivism is not clear to the expert panel.

Hypothesis 2a: A high degree of individualism exerts a positive effect on perceptions of target-based pay.

As discussed in Section 2.5, both academics and the practitioners from the panel support the positive effect of small power distance (Lertxundi & Landeta, 2011; Aycan et al., 2000; Martocchio, 2006).

Hypothesis 2b: Small power distance exerts a positive effect on perceptions of target-based pay.

According to the prevailing opinion in the literature, weak uncertainty avoidance positively influences perceptions for target-based pay (Lertxundi & Landeta, 2011; Muduli, 2011). The panel contradicts the theory and claims that strong uncertainty avoidance implies a target orientation, which therefore should lead to better results.
**Hypothesis 2c:** Strong uncertainty avoidance exerts a positive effect on perceptions of target-based pay.

The expert panel agrees with the literature that the masculinity of a culture has a positive impact on perceptions of target-based pay (Lertxundi & Landeta, 2011; Muduli, 2011). While the effect of femininity is controversial in the literature (Lertxundi & Landeta, 2011; Muduli, 2011; Brickson, 2000; Rey-Biel, 2008), there is a consensus among the panel that a certain set of feminine values leading to social recognition shall influence perceptions of target-based pay in a positive way.

**Hypothesis 2d:** Strong influence of masculine values, as well as that of a set of feminine values leading to social recognition, exerts a positive effect on perceptions of target-based pay.

Based on their experience and observations, the expert panel supports the findings in the literature on the positive effect of long-term orientation (Bryson, Buraimo & Simmons, 2011; Batt, 2002).

**Hypothesis 2e:** Strong long-term orientation exerts a positive effect on perceptions of target-based pay.

The panel discussions in Section 2.5 have led to the assumption that the perceived importance of pay has a positive effect on perceptions of target-based pay and shall be treated as an instinctive influence factor.

**Hypothesis 2f:** Strong general pay perception exerts a positive effect on perceptions of target-based pay.

A further academic finding supported by the expert panel is that the national cultures have an influence on perceptions of target-based pay (Fong & Shaffer, 2003; Hui, Triandis & Yee, 1991).
Hypothesis 3: The culture differences in Germany, the Czech Republic and China lead to regional differences in perceptions of target-based pay.

Hypothesis 3 is to be treated in the following aspects.

The earlier survey data in the literature imply the existence of moderate individualism in Germany (Hofstede, 1980). Based on the practical experience and observations, the expert panel estimates that there is a mild individualism or even a weak collectivism in Germany.

Few studies in the previous literature have addressed the cultural development in the Czech Republic in the post-communism era, especially for the time after the entry in the EU. The panel believes to observe a moderate degree of individualism in this country.

Although previous research on the Chinese culture often point at Confucian traditions (Jing & Jin Nam, 2010; Shi & Wang, 2011), the expert panel observes a moderate and increasing degree of individualism in China.

Hypothesis 3a: There is a moderate individualism in the Czech Republic and China and a weak individualism in Germany.

In the context of target-based pay, large power distance is interpreted as the acceptance of status pay and small power distance, the demand of equal pay for equal performance by the expert panel.

According to the literature, the power distance is smaller in more democratic cultures (Hofstede, 2007). The expert panel supports this academic opinion which implies relatively small power distance in Germany. However, due to the circumstances that the information on individual pay is often treated as highly private thus with confidentiality, such data are generally not publicly accessible. Therefore, the interest for reference comparison may be limited among the German employees. This circumstance increases potentially the power distance in context of target-based pay.
The empirical studies indicate a relatively high wage inequality between internal and external co-workers, as well as gender inequality in the Czech Republic (Ioakimidis, 2012; Eriksson, Pytlíková & Warzynski, 2013; Jurajda & Paligorova, 2009; Jurajda, 2005; Jurajda, 2003). Thus previous literature indicates large power distance in the Czech Republic. The expert panel asserts, however, that the employees are no longer ready to accept such inequality. This trend seems to be common especially in Czech enterprises with western investors.

Although previous literature often reports on large power distance in China, partially caused by higher rate of misuse of official power for personal gain due to the lack of control (Chia, et al., 2007; Lee & Oh, 2007), the cultural context in private business can be quite different. With reference to target-based pay, the expert panel has observed relatively small power distance in China in the past.

Considering the above arguments, the power distance is expected to be relatively small in all three countries, however larger in Germany than in Czech Republic and China.

**Hypothesis 3b:** The power distance is relatively small in Germany, the Czech Republic and China. However, the power distance in Germany is larger than in the Czech Republic and China.

Among the western industrial countries which are believed to share many cultural values, Germany is distinguished by its high uncertainty avoidance (Hofstede, 2001; Portz & Lere, 2010).

Empirical studies provide evidence for the preference of Czech managers to autocratic leadership style, which implies a high degree of uncertainty avoidance, although the steep increase of uncertainty in the post-communism era may have moderated this attitude (Reber & Auer-Rizzi, 2004).

Empirical studies also indicate in general a relatively low degree of uncertainty avoidance in China (Shi & Wang, 2011).
The findings in the literature are supported by the observations of the expert panel.

**Hypothesis 3c:** There is a tendency to strong uncertainty avoidance in Germany, the Czech Republic and China. However, the uncertainty avoidance is stronger in Germany and the Czech Republic than in China.

The Czech culture is described with many feminine features, e.g. non-confrontational, strongly family-orientated (Republic, 2002). Although earlier field studies often suggest stronger femininity of the Chinese culture, the more current empirical researches in Mainland China provide evidence that there have been a big shift of social values in China, characterized by a much stronger masculinity (King-Metters & Metters, 2008).

The expert panel asserts that a relatively strong influence of the masculine values is observed in all three countries. In the Czech Republic, however, in line with the findings in the literature (Republic, 2002), the feminine values have a similarly strong influence. Thus it seems that the feminine values have a similar degree of influence as the masculine values in the Czech Republic, while in Germany and China the influence of the feminine values seems weaker.

**Hypothesis 3d:** There is a moderate degree of masculinity in Germany and China. In the Czech Republic, there is a similar degree of influence of the masculine and the feminine social values.

Previous empirical studies suggest higher degree of long-term orientation among employees with higher level of education (Hofstede, 2007). Also, China is said to be a high-scorer in long-time orientation (Shi & Wang, 2011; Hofstede, 2007).

According to the expert panel, the average level of education is higher in Germany and the Czech Republic than in China. Based on their observations, the long-time orientation is estimated to be higher in those two countries than in China.
Hypothesis 3e: There is a tendency towards long-term orientation in Germany, the Czech Republic and China. However, the long-term orientation is stronger in Germany and the Czech Republic than in China.

As discussed in Section 3.6, the expert panel proposed general pay perception as a further dimension of culture to be added to the SVM framework in this research for the assessment of cultural influence. According to the panel’s estimation, the degree of general pay perception is relatively high in every country. However, compared with the other countries, the degree of general pay perception should be the highest in the Czech Republic, lower in China and is the lowest in Germany.

Hypothesis 3f: The degree of general pay perception is high in Germany, the Czech Republic and China. The general pay perception is the strongest in the Czech Republic, weaker in China and the weakest in Germany.

In the literature, the effect of cultural influence on target-based pay is usually described as “moderating” (Lertxundi & Landeta, 2011). The expert panel also advocates this position.

Hypothesis 3g: The cultural factors in Germany, the Czech Republic and China have a moderating effect on perceptions of target-based pay.

However, the results of cross-country comparison are to be considered with caution. The proportion of different organisational positions is heterogeneous in the different countries. The expert panel asserts that organisational position and education level of the employees have a similar impact on perceptions of target-based pay as national cultures. A similar position is represented in previous literature (Drake, Wong & Salter, 2007; Janssen, 2001; Večerník, 2013; Klein, 2011). Therefore, it is assumed that regardless of the regional cultures, the different organisational positions are related to differences in perceptions of target-based pay.

Hypothesis 4: The culture differences in the different organisational positions lead to differences in perceptions of target-based pay.
Hypothesis 4 contains the following aspects.

The panel discussions suggest a moderate degree of individualism in all groups of organisational positions. Moreover, there seems to be a high degree of individualism among the production staff. Due to the transparency of the individual performance and reward for this group, there seems to be a relatively strong competition among the employees.

Relatively strong competition is also observed among the intermediate managers. There are several causes for the relatively strong competition among this group of employees: the limited resources which are to be distributed to different business divisions; limited promotion opportunities; high pressure of performance both from the superior(s) and the subordinates; relatively high transparency of performance, etc.

**Hypothesis 4a:** There is a moderate individualism for all groups of organisational positions. However, the individualism is stronger for the production staff and intermediate managers than for the administration staff.

During previous discussions, the expert panel asserted that a small power distance was observed for all groups of organisational positions. However, the power distance for the administration staff seems to be slightly higher, probably because the tasks of this group of employees involve a certain level of hierarchy and status structure.

**Hypothesis 4b:** The power distance is relatively small in all groups of organisational positions. However, the power distance is slightly larger for the group of administration staff than for the other groups of organisational positions.

The panel discussions suggest a certain degree of uncertainty avoidance for all groups of organisational positions. However, the degree of uncertainty avoidance is expected to be higher for the group of intermediate managers, because this groups of employees need to justify their decisions both to their superior(s) and their subordinates, therefore, potentially tend to reduce the environmental uncertainty.
Hypothesis 4c: There is a tendency to strong uncertainty avoidance for all groups of organisational positions. However, the uncertainty avoidance is stronger for the group of intermediate managers than for the other groups of organisational positions.

A moderate degree of masculinity has been observed in each group of organisational positions in the past.

Hypothesis 4d: There is a moderate degree of masculinity in the groups of intermediate manager, administration staff and production staff.

The expert panel has observed a certain degree of long-term orientation in each group of organisational positions. Besides, previous panel discussions confirmed the suggestion by the literature that the degree of long-term orientation was higher among the employees with higher level of education (Hofstede, 2007). As a result, the degree of long-term orientation is expected to be higher among the managers and the administration staff than among the production staff. Therefore, it is anticipated that there is a moderate degree of long-term orientation in all groups of organisational positions; however, the long-term orientation is stronger for the intermediate managers and the administration staff.

Hypothesis 4e: There is a moderate long-term orientation for all groups of organisational positions; however, the long-term orientation for the intermediate managers and the administration staff is stronger than for the production staff.

The dimension “general pay perception” in the extended VSM framework for the assessment of cultural influence in this thesis emerged during previous panel discussions. In the opinion of the expert panel, this is an important aspect in perceptions of the employees of all groups of organisational positions. The degree of general pay perception is thought to be driven by two leading factors, which are the money pressure and the desire for recognition of individual performance. While the most money pressure is expected from the production staff as the group of employees with the lowest average pay, the greatest ambitions and the strongest desire for
recognition is assumed for the group of intermediate managers. Therefore, it is anticipated that the degree of general pay perception is higher for the production staff and the intermediate managers than for the other employees.

**Hypothesis 4f:** The degree of general pay perception is relatively high for all groups of employees. However, the general pay perception is stronger for the intermediate managers and the production staff than for the administration staff.

In the opinion of the expert panel, target-based pay has a motivational effect on employees of all organisational positions. Due to the higher complexity of their tasks, the degree of the positive effect of target-prioritising is anticipated to be higher among the managers than among the junior staff.

In line with the previous literature (Lertxundi & Landeta, 2011), the effect of cultural influence on target-based pay is described as a “moderating” effect by the expert panel.

**Hypothesis 4g:** The cultural factors in all groups of organisational positions have a moderating effect on perceptions of target-based pay.

Below is an overview of the hypotheses to be tested in this thesis.

<table>
<thead>
<tr>
<th>Cultural dimension(s)</th>
<th>Result of literature review</th>
<th>Result of panel discussion</th>
<th>Hypothesis</th>
<th>Empirical findings</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individualism vs. Collectivism/ power distance/ masculinity vs. Femininity/ uncertainty avoidance/ long-term orientation</td>
<td>Individualism vs. Collectivism/ power distance/ masculinity vs. Femininity/ uncertainty avoidance/ long-term orientation/ general pay perception</td>
<td><strong>Hypothesis 1:</strong> All cultural factors defined in this thesis are distinctive dimensions of cultural influence.</td>
<td>Chapter 4</td>
<td>Section. 4.9</td>
<td></td>
</tr>
<tr>
<td>All cultural factors</td>
<td>Hypothesis 2: The cultural factors have an impact on perceptions of target-based pay.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individualism vs. Collectivism</td>
<td>Hypothesis 2a: A high degree of individualism exerts a positive effect on perceptions of target-based pay.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power distance</td>
<td>Hypothesis 2b: Small power distance exerts a positive effect on perceptions of target-based pay.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uncertainty avoidance</td>
<td>Hypothesis 2c: Strong uncertainty avoidance exerts a positive effect on perceptions of target-based pay.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masculinity vs. Femininity</td>
<td>Hypothesis 2d: Strong influence of masculine values, as well as that of a certain set of feminine values leading to social recognition, exerts a positive effect on perceptions of target-based pay.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term orientation</td>
<td>Hypothesis 2e: Strong long-term orientation exerts a positive effect on perceptions of target-based pay.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General pay perception</td>
<td>Hypothesis 2f: Strong general pay perception exerts a positive effect on perceptions of target-based pay.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### All cultural factors

**The influence of national cultures on TBP perception**

**Hypothesis 3**: The culture differences in Germany, the Czech Republic and China lead to regional differences in perceptions of target-based pay.

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>5.8</td>
</tr>
</tbody>
</table>

### Individualism vs. collectivism

<table>
<thead>
<tr>
<th>Moderate individualism in Germany; collectivism in China</th>
<th>Mild individualism in Germany; moderate individualism in the Czech Republic and China</th>
<th>Hypothesis 3a: There is a moderate individualism in the Czech Republic and China and a weak individualism in Germany.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 5</td>
<td>Section 5.8</td>
<td></td>
</tr>
</tbody>
</table>

### Power distance

<table>
<thead>
<tr>
<th>Small power distance in Germany; large power distance in the Czech Republic and China</th>
<th>Small power distance in all three country, but comparatively larger in Germany</th>
<th>Hypothesis 3b: The power distance is relatively small in Germany, the Czech Republic and China. However, the power distance in Germany is larger than in the Czech Republic and China.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 5</td>
<td>Section 5.8</td>
<td></td>
</tr>
</tbody>
</table>

### Uncertainty avoidance

<table>
<thead>
<tr>
<th>Strong uncertainty avoidance in Germany and the Czech Republic; weak uncertain avoidance in China</th>
<th>Strong uncertainty avoidance in Germany and the Czech Republic; weak uncertain avoidance in China</th>
<th>Hypothesis 3c: There is a tendency to strong uncertainty avoidance in Germany, the Czech Republic and China. However, the uncertainty avoidance is stronger in Germany and the Czech Republic than in China.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 5</td>
<td>Section 5.8</td>
<td></td>
</tr>
</tbody>
</table>

### Masculinity vs. femininity

<table>
<thead>
<tr>
<th>Feminine values in the Czech Republic; traditional femininity in China undergoing changes in the recent decades</th>
<th>Moderate masculinity in Germany and China; similar influence of masculine and feminine values in the Czech Republic</th>
<th>Hypothesis 3d: There is a moderate degree of masculinity in Germany and China. In the Czech Republic, there is a similar degree of influence of the masculine and the feminine social values.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 5</td>
<td>Section 5.8</td>
<td></td>
</tr>
<tr>
<td>Long-term orientation</td>
<td>Long-term orientation in China and with higher educational level</td>
<td>Stronger long-term orientation in Germany and the Czech Republic due to higher average educational level</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------------------------------------------</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>General pay perception</td>
<td>Cross-country comparison based on general pay perception not available in literature review</td>
<td>General pay perception the strongest in the Czech Republic; lower in China; the lowest in Germany</td>
</tr>
<tr>
<td>Perception of target-based pay</td>
<td>Moderating effect of cultural factors on perceptions of target-based pay in all countries</td>
<td>Moderating effect of cultural factors on perceptions of target-based pay in all countries</td>
</tr>
<tr>
<td>All cultural factors</td>
<td>Apart from the national cultures, a multitude of influence factors affect TBP perception, e.g. organisational position, education, business sector, etc.</td>
<td>Apart from the national cultures, a multitude of influence factors affect TBP perception, especially organisational position and education etc.</td>
</tr>
<tr>
<td>Individualism vs. collectivism</td>
<td>Comparison study based on organisational position not available in literature review</td>
<td>There is a moderate individualism for all groups of organisational positions. The individualism is stronger for the production staff and intermediate managers than for the administration.</td>
</tr>
</tbody>
</table>
**Power distance**
Comparison study based on organisational position not available in literature review

The power distance is relatively small in all groups of organisational positions. The power distance is slightly larger for the group of administration staff than for the other groups of organisational positions.

Hypothesis 4b: The power distance is relatively small in all groups of organisational positions. However, the power distance is slightly larger for the group of administration staff than for the other groups of organisational positions.

Chapter 6 Section 6.8

---

**Uncertainty avoidance**
Comparison study based on organisational position not available in literature review

There is a tendency to strong uncertainty avoidance for all groups of organisational positions. The uncertainty avoidance is stronger for the group of intermediate managers than for the other groups of organisational positions.

Hypothesis 4c: There is a tendency to strong uncertainty avoidance for all groups of organisational positions. However, the uncertainty avoidance is stronger for the group of intermediate managers than for the other groups of organisational positions.

Chapter 6 Section 6.8

---

**Masculinity vs. Femininity**
Comparison study based on organisational position not available in literature review

There is a moderate degree of masculinity in the groups of intermediate manager, administration staff and production staff.

Hypothesis 4d: There is a moderate degree of masculinity in the groups of intermediate manager, administration staff and production staff.

Chapter 6 Section 6.8
There is a moderate long-term orientation for all groups of organisational positions. The long-term orientation for the intermediate managers and the administration staff is stronger than for the other employees.

Hypothesis 4e: There is a moderate long-term orientation for all groups of organisational positions; however, the long-term orientation for the intermediate managers and the administration staff is stronger than for the production staff.

Chapter 6  Section 6.8

The degree of general pay perception is relatively high for all groups of employees. However, the general pay perception is stronger for the intermediate managers and the production staff than for the other employees.

Hypothesis 4f: The degree of general pay perception is relatively high for all groups of employees. However, the general pay perception is stronger for the intermediate managers and the production staff than for the administration staff.

Chapter 6  Section 6.8

The cultural factors in all groups of organisational have a moderating effect on perceptions of target-based pay.

Hypothesis 4g: The cultural factors in all groups of organisational positions have a moderating effect on perceptions of target-based pay.

Chapter 6  Section 6.8

Table 3-1  Details of research Hypotheses

The aims of the research hypotheses in this thesis are summarized in Figure 3-2.
3.5 **PROCESS OF LITERATURE REVIEW**

The main purpose of the literature review is to provide background information on the research objectives. The results of the literature review shall deliver answers to the research questions:

**Q1** *What are the cultural factors that influence perceptions of target-based pay?*

**Q2** *Why are these cultural factors an important influence on perceptions of target-based pay?*

The literature review in this thesis is organised as a 2-step systematic literature review.

First, Section 3.5.1 provides an overview of the concept of systematic literature review. Next, Section 3.5.2 deals with the first step of the literature review, focusing on influence factors on perceptions of target-based pay. Finally, Section 3.5.3 is dedicated to cultural influence on perceptions of target-based pay in the second step of the literature review.
3.5.1 CONCEPT OF SYSTEMATIC LITERATURE REVIEW

Literature review is an important tool in management science, both to assess and to map the existing research (Tranfield, Denyer & Smart, 2003). Traditionally, the literature review in management research has been conducted in a narrative style. However, the narrative research methodology has been criticized for promoting implicit biases of the researcher (Fink, 1998; Landa et al., 2010) and for lacking of rigor and critical assessment (Tranfield, Denyer & Smart, 2003). The systematic literature review is an attempt to provide an objective summary and synthesis of existing, relevant evidence (Kitchenham et al., 2008).

The systematic literature review methodology was a result of the evidence-based movement of academic research (Tranfield, Denyer & Smart, 2003). One of the earliest fields of application for this approach was medical science and healthcare. Meanwhile, the evidence-based paradigm also finds applications in many other disciplines, e.g. education, nursing, public policing, teaching, management and software engineering, etc. (Tranfield, Denyer & Smart, 2003; Landa et al., 2010).

The exhaustive literature search of published and unpublished studies applied by systematic literature review helps to minimize the researcher’s biases, while the replicable process by means of protocol of the reviewer’s decisions, procedures and conclusions make the results transparent (Tranfield, Denyer & Smart, 2003). In practice, however, there are limitations to the exhaustive search approach, for example, due to data access restrictions or limits of time and workforce when dealing with a massive data quantity.

The selection of data by application of inclusion and exclusion criteria based on the title and the abstract is helpful to narrow down the information to a manageable amount. However, this approach might be considered a weakness of this methodology, because the decisions of inclusion and exclusion are often subjective; also the abstracts do not always bear sufficient information on the main body of the literature. Structured abstracts, as examined by Kitchenham et al. (2008), might improve the quality of the data selection. However, there are still debates in
this area since the structured abstracts are longer, therefore inapplicable for occasions like conference proceedings whereas the length of the abstracts is restricted (Kitchenham et al., 2008).

Although some proposals have been made (Popay, Rogers & Williams, 1998; Sandelowski, Docherty & Emden, 1997; Tranfield, Denyer & Smart, 2003), there is yet no consensus for the standards of quality appraisal. Besides, whilst the aggregation of homogeneous quantitative findings seems less of a problem, the synthesis of heterogeneous findings and the implementation of qualitative findings demonstrate a greater challenge (Greenhalgh & Taylor, 1997). In the past, some methods have been proposed for dealing with qualitative assessment in the systematic review (Popay, Rogers & Williams, 1998).

The literature review in this paper was conducted in the style as described by Tranfield, Denyer & Smart (2003).

The data source of the literature review used for this study was:

- The online database of the University of Gloucestershire BUSINESS SOURCE COMPLETE EBSCO (http://web.ebscohost.com).

3.5.2 INFLUENCE FACTORS ON PERCEPTION OF TBP

The purpose of the literature review in this section is:

- To identify current status of academic research on target-based pay; and
- To identify influence factors on perceptions for target-based pay in the literature.

3.5.2.1 SEARCH STRATEGY

This section of literature review deals with the influence factors on perceptions of target-based pay.

Literature Scoping
As suggested by Tranfield et al. (2003), prior to the main review, a scoping review was conducted on the literature of previous reviews and primary studies with the objectives of intended main search. The purposes of the scoping review were:

- To estimate the quantity of research on the application of target-based pay as incentive plans in the industry;
- To outline the subjects of existing literature on the relevant issues; and
- To establish the search strategy for the main review.

The scoping review was conducted in the electronic database BUSINESS SOURCE COMPLETE EBSCO (http://www.ebscohost.com/) on 20.03.2013.

During the scoping review, the database search retrieved 1,040 articles in academic journals in the English language, published between 1952 and 2013, which addressed the target-based pay. The subject terms “incentive” and “performance” have been chosen for the search, since they are frequently used for the articles on target-based pay. Among those published disseminations, 836 were written in industrial context (subject term: “incentive” AND “performance” AND “industry”).

Many of the previous studies were focused on the incentive plan for the executives. The main focus of this study, however, is the incentive plan for both executive and non-executive employees. Therefore, a further subject term “employee” was added to the search inclusion criteria, which led to the output of 308 disseminations (subject term: “incentive” AND “performance” AND “industry” AND “employee”).

In order to concentrate on the latest findings, studies before year 2000 were excluded from the search. This reduced the data set to 186 disseminations.

Special topics, e.g. stock options for the employees as incentive, special interests of the non-profit organisations, especially in the public sector, or employee performance in context of organisational change, were considered non-relevant for this study. The exclusion of those three
criteria (the subject terms “stock” and “public” and “change”) brought down the data amounts to 155 citations.

**Search Outline:** The database is to be searched according to the combination of keywords. Subsequently, based on the inclusion and exclusion criteria, the findings are then to be reduced to the data set that is regarded relevant to this search.

**Database:**

The following database was accessed for the full review:

BUSINESS SOURCE COMPLETE EBSCO (http://web.ebscohost.com/)

**Search terms:** SU incentive AND SU performance AND SU industry AND SU employee NOT SU stock NOT SU public NOT SU change

**Publication type:** academic journal

**Document type:** article

Confinement to academic journal is made to reduce the search load due to the limited capacity for this review. A significant amount of previous academic studies have been conducted in the practical business environment. Therefore, the search of academic journals is considered sufficient for the purpose of this review.

**Language:** English

**Published date:** from January 2000 to March 2013

The combined search strategies resulted initially in the retrieval of 155 citations.

**Inclusion/ Exclusion Criteria:** Bearing in mind the focus of this study is to study the incentive plan for staff members of the automotive industry, the following inclusion/exclusion criteria are employed to shape the boundaries of the literature search.
Languages: Most of the disseminations in this prolific research field are published in the English language. Therefore, the concentration on the publications in English is considered sufficient for this study.

Study Type: According to Tranfield et al. (2003), only primary studies contribute to the results of a systematic literature review. Therefore, literature reviews and book reviews are to be eliminated from this study.

Study Subject: The subject of this study is the general findings regarding target- or performance-based incentive issues. Studies without consideration of employee performance, e.g. retirement incentive, minimum wages, special issues on executive income/benefit development; sociological/psychological process; ethical issues, etc. are considered non-relevant to this study.

Focus of Study: The focus of this study is profitability improvement through improvement of employee performance with aid of target-based pay. Therefore, non-profit organisations, special issues e.g. stock options as rewards for employees, employee motivation in change management, etc., are considered non-pertinent to this study.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Inclusion criteria</th>
<th>Exclusion criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>English</td>
<td>Studies written in other languages</td>
</tr>
<tr>
<td>Study Type</td>
<td>Primary research</td>
<td>Literature reviews, book reviews</td>
</tr>
<tr>
<td>Study subject</td>
<td>Findings on target- (performance-) based incentive issues.</td>
<td>Studies with other focuses, e.g. retirement incentive, minimum wages. Special issues on executive income/benefit development; sociological/psychological process; ethical issues, etc.</td>
</tr>
<tr>
<td>Focus of study</td>
<td>Target-based incentive plan based on economical rationality as instrument for employee motivation.</td>
<td>Non-profit organisations; special issues e.g. stock options as rewards for employees, employee motivation in change management, etc.</td>
</tr>
<tr>
<td>Business Sector</td>
<td>Manufacturing industry</td>
<td>Studies with special focus on banking sector, insurances, universities, tourism, wholesaling, retailing, facility management, asset management, restaurant service, etc.</td>
</tr>
</tbody>
</table>

Table 3-2 Inclusion / exclusion criteria – perceptions of target-based pay
Business Sector: This study shall concentrate on the manufacturing industry. Therefore, studies with special focus on banking sector, insurances, universities, tourism, wholesaling, retailing, facility management, asset management, restaurant service etc., are to be excluded from this search.

No further exclusion criteria are defined based on the size of the business although the intended study objects are SMEs. The reason for this inclusion is that findings on big-scale businesses may also be applicable for SMEs, or at least give indications for potential SME solutions.

3.5.2.2 SEARCH RESULTS AND DATA SYNTHESIS

The titles and the abstracts of the 155 citations were read. By employing the inclusion/exclusion criteria, 25 studies were initially rejected, because they did not focus on target-based incentive plan, or they did not aim at business profitability, or because they concentrated on particular business sectors other than the manufacturing business. Further exclusions were made, because the studies were secondary literature.

All of the remaining 130 citations were read for a second time. In some cases, the titles and the abstracts did not yield sufficient information to ascertain if the research was relevant to this work. In case of ambiguity of the information borne by the title, the abstract and the keywords, the full text was read for decision on inclusion or exclusion. On some occasions, only the author’s abstract was available in the database. In case the abstract did not yield stuffiest information for the decision on inclusion or exclusion, the citations were excluded when a copy of the full text could not be obtained. As a result, a further 3 studies were rejected for similar reasons thus altogether 127 citations were considered pertinent to this study.

In the process of data synthesis, the 127 citations selected were examined to identify the research trends in target-based pay. Data synthesis is the process of summarizing and aggregating the study findings in a certain research area (Mulrow, 1994, quoted by Tranfield et al., 2003). This research employed the method of meta-ethnography which started with
identifying categories of study findings based on their similarities, and subsequently, provided a holistic summary by interpretively connecting the categories (Tranfield et al., 2003).

3.5.3 CULTURAL INFLUENCE ON PERCEPTION OF TBP

This section of literature review deals with the influence of cultural factors on perceptions of target-based pay.

3.5.3.1 SEARCH STRATEGY

Search Outline: Similar as in section 3.5.2.1, the database is to be searched based on the combination of keywords. Subsequently, with aid of the inclusion and exclusion criteria, the findings are to be reduced to the data set that is regarded relevant to this search.

Database: The following database was accessed for the full review on 31.07.2013:

BUSINESS SOURCE COMPLETE EBSCO (http://web.ebscohost.com/)

Search terms:

Subject terms: performance based pay AND culture NOT corporate culture

Publication type: academic journal

Document type: article

Language: English

Inclusion/ Exclusion Criteria: Based on the focus of this study, the following inclusion/exclusion criteria are to be employed to shape the boundaries of the literature search.
Table 3-3  Inclusion exclusion criteria – cultural influence on management

Languages: Most of the available disseminations are published in the English language. Therefore, the concentration on the publications in English is considered sufficient for this study.

Study Type: According to Tranfield et al. (2003), only primary studies contribute to the results of a systematic literature review. Therefore, literature reviews and book reviews are to be eliminated from this study.

Study Subject: The subject of this study is findings on the influence of cultural factors of target-based pay issues. The cultural factors should be understood in a broader context, e.g. national cultures. Findings on corporate culture are thus considered irrelevant to this study. Also studies with focus on sociological/ psychological processes, ethical issues, etc. were considered impertinent to this study.

Focus of Study: The focus of this study was previous researches on target-based pay as an instrument for employee incentive based on economical rationality. Non-profit organisations, especially studies on public sector are not included, since the policy of such institutions is not solely based on economical rationality.

The combined search strategies resulted initially in the retrieval of 30 citations.
3.5.3.2 SEARCH RESULTS

The titles and the abstracts of the 30 citations were read. Subsequently, by employing the inclusion/exclusion criteria, 19 studies were rejected, because they did not focus on target-based pay as an instrument for employee incentive, or aimed at non-profit organisations.

The remaining 11 citations were read for a second time. The full text was read for decision on inclusion or exclusion. A further study was rejected for similar reasons. As a result, 10 citations were considered pertinent to this study.

Data synthesis for this part of literature review was conducted in the same style as in the previous section.

3.6 METHODS FOR DATA COLLECTION

To Yin, there are mainly six sources of evidence: 1. Documentation; 2. archival records; 3. interviews; 4. direct observations; 5. participant observation and 6. physical artifacts.

The features of the above sources of evidence are introduced briefly in the following, with some slight modifications to Yin’s descriptions (Yin, 2009: 101-114).

1. Documentation:
   
a. Strengths: Can be reviewed repeatedly; contains exact data e.g. names, references and details of an event; broad coverage in terms of time, events and many settings; occasionally, inferences may be made for further inquiry based on documentary details;

b. Weaknesses: May be difficult to find; access may not be granted; bias out of incomplete collection; bias out of bias of the authors;

c. Cautions: When evidence contradictory further inquiry necessary for judgment.
d. Examples: Memoranda, e-mail correspondence, personal documents e.g. notes; agendas, minutes of meetings; administrative documents; formal studies; articles in the mass media, etc.

2. Archival records:

   a. Strengths: Same as documentation; precise (records are usually quantitative);

   b. Weaknesses: Same as documentation; access may not be affordable;

   c. Cautions: Relevance of evidence needs to be examined; investigators need to be aware of the conditions under which the evidence was made and the accuracy of the evidence;

   d. Examples: Official publications, e.g. statistical data made available by governmental institutions; organisational records, e.g. budget or personnel records; survey data, etc.

3. Interviews:

   a. Strengths: Focus on pertinent topics; insightful information on perceived causal relationships and explanations;

   b. Weaknesses: Bias due to poorly articulated questions; response bias; poor recall; interviewee tends to give answers expected by interviewer (reflexivity);

   c. Cautions: Questions need to be unbiased; not to be dependent on one single informant when conducting in-depth interviews; notice the discrepancies at focused interviews, if the interviewees seem to be artificially corroborating.

4. Direct observation:

   a. Strengths: Covers events in real time (reality) and often provides additional information in context of “case” (contextual);
b. Weaknesses: Time (or cost)-consuming, broad coverage is difficult without a team of observers (selectivity); event may proceed differently due to observation (reflexivity);

c. Cautions: The single observer’s subjective perception may reduce the liability of the observational evidence. This may be improved if multiple observers are involved in the investigation.

5. Participant-observation: A special form of observation where the observer is at the same time also participant in the event being studied.

a. Strengths: Same as direct observation; insight into interpersonal behaviour and motives;

b. Weaknesses: Sames as direct observations; bias due to observer’s manipulation of events;

c. Cautions: The observer tends to assume subjective position; documentation of the evidence may be difficult, due to the participation of the observer.


a. Strengths: Insight into cultural features and/or technical operations;

b. Weaknesses: Selectivity; availability.

Using multiple sources of evidence may help to improve the accuracy and credibility of the investigation (Yin, 2009: 114-118). For this purpose, this thesis will employ various types of evidence from different sources during this research.

The literature review in Part I highlights that the previous studies have taken both the analytical and the empirical paths. Many empirical studies are conducted in form of a case study, whereas the most popular methods for data collection seem to be survey and interview (personal or telephone interviews).
Following the example of the previous studies, the intended case study in this thesis is to be conducted with a survey instrument to measure the influence of cultural factors on perceptions of target-based pay. The survey instrument is to be initially designed based on the results of the panel verification of the literature review and subsequently, to be further developed through discussions with the expert panel, as well as with further chosen employees in the observed business organisation.

The items of the survey instrument are to be translated from English into German, Czech and Chinese. The survey is to be verified and validated for comprehension and completeness before use.

The finalised standard survey is to be distributed to the employees in Germany, the Czech Republic and China in the respective local language. The choices of the returned samples, covering employees of all observed locations, all hierarchical levels in the organisation, are to be entered in an SPSS database for further analyses.

Thus, the data collection for this research is to involve the following sources of evidence.

- Documentation (survey);
- Interviews (personal interviews) and
- Physical artefacts (data operations in SPSS database).

### 3.7 METHODS FOR DATA ANALYSIS

The data analysis in this thesis consists of three stages:

a. Data verification and validation (numeric);

b. Data assessment;

c. Data verification and validation (panel discussions).

**Data verification and validation (numeric)**

The data verification and validation aims to examine the validity and reliability of the research design. The results of data verification and validation shall also deliver empirical evidence to answer the following research questions.
RQ 1  What are the cultural factors that influence perceptions of target-based pay?

RQ 2  Why are these cultural factors an important influence on the perceptions of target-based pay?

RQ 3  How do these cultural factors influence perceptions of target-based pay?

The first step of the numeric data verification and validation is the validation of the data dimensionality by means of a factor analysis in IBM SPSS.

For this research, the analysed variables are divided into independent and dependent variables. According to Field’s definition, an independent variable (also known as predictor variable) is a variable considered to cause an effect. A dependent variable (also known as outcome variable), on the other hand, is one that reacts to the changes of an independent variable (Field, 2013: 8).

In the factor analysis, the independent variables are to be subjected to orthogonal rotation analyses (principal axis factoring using the Varimax procedure in SPSS), in order to increase the reliability of the scale. By eliminating variables with low loadings and factors with too few items, the factor structure is to be improved iteratively. Parasuranman et al. applied a similar method of factor analysis (Parasuranman, Berry & Zeithaml, 1988) for the measurement of service quality. The principle of this statistical method appears however appropriate for this study because of similarities in statistical requirements, therefore is to be employed in this thesis with slight modifications.

Based on the content of the underlying attributes in the outcome of the factor analysis, each factor is then to be mapped with a cultural dimension in the extended SVM framework as defined in chapter 2. This construct is henceforth used as an assessment instrument for the cultural influence on perceptions of target-based pay.

Next, in order to assess the reliability of the cultural factors determined by the factor analysis, the Cronbach’s alpha for each dimension is to be computed. The reliability coefficient Cronbach’s alpha indicates if the applied variables as determinants for the further tests share a sufficient common core (Field, 2013: 665-715).
Subsequently, the construct validity of the research procedures is to be examined by using the correlation matrix of all cultural factor attributes. The construct validity is aimed at establishing a set of operational measures for the research procedures. This is meant to keep the researcher from using subjective judgments, in order to reduce the researcher’s biases (Yin, 2009: 10-45).

Following the example of van Ree, for an overall assessment of construct validity, the convergent validity (CV) for each attribute is to be computed as the average of within-dimension correlations and the discriminant validity (DV), as the average of cross-dimensional correlations (van Ree, 2009).

The final part of the numeric data verification and validation in this study is the validation of cultural influence on perceptions of target-based pay. This is to be organised in two steps.

First, the relationships between the dependent and the independent variables are to be tested by a simple regression analysis. The results are to be reported based on the following key figures (Field, 2013: 293-355):

\[ R \text{ Square} \quad \text{Amount of variance in the outcome that can be explained by the model} \]

\[ b\text{-value} \quad \text{Magnitude of influence of each independent variable on the dependent variable, if the effects of the other independent variables are kept constant} \]

\[ \rho \quad \text{Significance of b-value} \]

The results of the regression analysis shall indicate how much of the outcomes may be explained by the dependent variables in the database.

Finally, the association between the cultural factors and the pay perceptions of target-based pay is to be examined by means of a correlation analysis. The correlation analysis shall indicate the degree of linear dependence between the independent and the dependent variables in the database. The correlation between the independent and the dependent variables is to be measured by the correlation coefficient \( r \) and the significance \( \rho \). The correlation coefficient
referred to in this thesis is defined as Person’s correlation coefficient and is defined as follows (Field, 2013: 262-291):

\[ r = \frac{\sum_{i=1}^{n}(X_i - \bar{X})(Y_i - \bar{Y})}{(N - 1)S_xS_y} \]  

\[ (X = \text{mean of } X_i; \ Y = \text{mean of } Y_i; \ N = \text{number of observations}; \ S_x = \text{Standard deviation of } X; \ Sy = \text{Standard deviation of } Y) \]

For more details of the statistical concepts and methods see Appendix II.

**Data assessment**

The data assessment is to be organised in two comparison studies.

a. Cross-country comparison; and

b. Organisational position comparison.

The comparison studies are aimed to assess how cultural factors influence the perceptions of target-based pay. The comparison studies shall provide further indications for the effect of cultural factors on perceptions of target-based pay in respect of the national cultures, as well as of the organisational positions.

The analysis method for both comparison studies is mean comparison. The following key figures are to be analysed for each cultural factor and the effect on perceptions of target-based pay, each with all the underlying attributes.

- Mean (N)
- 95% confidence interval for mean (including lower bound and upper bound)
- Median
- Minimum
- Maximum
- Standard deviation

The key figures are defined as follows (Field, 2013: 262-291):
The *mean* is the average score calculated by the sum of all scores divided by the total number of scores.

The lower bound and upper bound of *95% confidence interval for mean* indicate the likely values in the population with a likelihood of 95%.

The *median* is the middle score when scores are ranked in order of magnitude.

The *minimum* is the smallest value in the population.

The *maximum* is the largest value in the population.

The *standard deviation* is computed as follows:

\[
\text{Standard deviation } (s) = \sqrt{\frac{\sum_{i=1}^{n}(x_i - \bar{x})^2}{N-1}} \tag{3.2}
\]

\(N = \text{Number of entities in the data set; } (x) = \text{the mean}\)

For more details of the statistical concepts and methods see *Appendix II*.

In the comparison study based on organisational positions, due to the limited size of samples in the group of general managers, no statistic analysis is to be conducted for this specific group of employees.

**Data verification and validation (panel discussions)**

As described in Section 2.5, an expert panel for this thesis was established in early summer 2013, involving four general managers, eight intermediate managers and two high-level administration staff members in the observed business organisation with locations in Germany, the Czech Republic and China.

The results of data assessment are to be presented to the expert panel for subsequent discussions. The panel discussions are to provide valuable insights into target-based pay practices, so as to verify and validate the results of data assessment.

### 3.8 QUALITY OF RESEARCH DESIGN

Due to the nature of the research method case study, the researcher’s biases or errors are expected to be the biggest threat in the research procedures that might mislead the research findings (Yin, 2009: 41-45). Yin suggests that the following four common tests out of social science methods be applied in the case study designs.
a. **Construct validity:** Establishing a set of operational measures for the research procedures. This is meant to keep the researcher from using subjective judgments, in order to reduce the researcher’s biases. (Yin, 2009: 41-45).

b. **Internal validity:** Establishing correct causal relationship(s) (Yin, 2009: 41-45).

c. **External validity:** Making right judgment on if the study findings may be generalised (Yin, 2009: 41-45).

d. **Reliability:** The procedure descriptions must be objective, so that if a later researcher follows the procedures all over again, he/she will reach the same findings and conclusions (Yin, 2009: 41-45).

Below are the tactics in this thesis to deal with the above tests for the case study design.

**Construct validity:** Yin recommends a number of tactics to ensure construct validity in a case study (Yin, 2009:41-45). Those are to be implemented in the case study process in this thesis as follows.

**Multiple sources of evidence:** The first source of evidence for this case study is the previous literature. The findings of the literature review are verified and validated through discussions with the key informants of this research (expert panel). Based on the verified results of the literature review, the data collection is to be organised as a survey study. The collected data are to be analysed through various statistical procedures. Finally, the findings of the data analysis are again to be verified and validated by discussions with the expert panel.

**Chain of evidence:** The chain of evidence in the case study is established as illustrated in Figure 3-3.
Key informants reviewing draft case study report: As described in Section 2.5, an expert panel was established for the entire process of this research. For the development of the assessment instrument for the cultural influence on target-based pay in this research, employees of various hierarchical levels in the observed business organisation are to be involved in the determination of items for the survey study. At the stage of composition of the research findings, the expert panel is again to be engaged in data interpretation through personal discussions.

Internal validity: The recommended approaches by Yin to ensure construct validity in a case study (Yin, 2009:41-45) are implemented in the case study design as follows.

Pattern matching: According to Yin, pattern matching is one of the best techniques to strengthen the internal validity of a case study (Yin, 2009: 136).

The technique of factor analysis in SPSS is to be applied to optimise the dimensionality of the collected data. This is a modern technique to match the data pattern with the theoretical frame of the research.
The validity of the data pattern is to be further validated by correlation analysis for the independent variables. To prove the validity of the data dimensionality, the convergent validity (CV) for each attribute computed as the average of within-dimension correlations must be significantly higher than the discriminant validity (DV) as the average of cross-dimensional correlations (van Ree, 2009).

In addition, the internal consistency of the cultural factor scale is to be examined up by the reliability coefficients Cronbach’s alpha. The purpose of this procedure is to verify if the variables as determinants for the further tests share a sufficient common core (Field, 2013: 665-715).

**Explanation building:** The relationship between the dependent and the independent variables are to be validated by means of simple regression analysis and correlation analysis. Subsequently, the interpretation of the findings of the statistical analysis is to be verified and validated by panel discussions.

**Address rival explanations:** The results of data analysis shall indicate the cultural influence on perceptions of target-based pay. As discussed in Chapter 2, the influence can be related to the national cultures, but also to the organisational positions. Both rival explanations are to be addressed in the data analysis.

**External validity:**

**Theory in single-case study:** The case study is constructed based on the framework of an extended version of Hofstede’s Value Survey Model (VSM) which has been verified by numerous previous studies on cultural influences.

**Reliability:**

**Case study protocol:** A case study protocol is constructed for this research. The content of the protocol is explained in detail in the research design.
Develop case study database: The survey data are to be completely transcribed in an electronic database in IBM SPSS.

Below is an overview of the tactics to be applied in the case study to deal with the tests for the quality of research design.

<table>
<thead>
<tr>
<th>Tests</th>
<th>Case study tactic</th>
<th>Phase of research in which tactic occurs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct validity</td>
<td>• use multiple sources of evidence</td>
<td>data collection</td>
</tr>
<tr>
<td></td>
<td>• establish chain of evidence</td>
<td>data collection</td>
</tr>
<tr>
<td></td>
<td>• have key informants review draft case study report</td>
<td>composition</td>
</tr>
<tr>
<td>Internal validity</td>
<td>• do pattern matching</td>
<td>data analysis</td>
</tr>
<tr>
<td></td>
<td>• do explanation building</td>
<td>data analysis</td>
</tr>
<tr>
<td></td>
<td>• address rival explanations</td>
<td>data analysis</td>
</tr>
<tr>
<td>External validity</td>
<td>• use theory in single-case studies</td>
<td>research design</td>
</tr>
<tr>
<td>Reliability</td>
<td>• use case study protocol</td>
<td>data collection</td>
</tr>
<tr>
<td></td>
<td>• develop case study database</td>
<td>data collection</td>
</tr>
</tbody>
</table>

Table 3-4 Case study tactics for four design tests (Yin, 2009: 41, with modifications)

3.9 RESEARCHER’S ROLE

The researcher’s personal values and biases may affect the outcome of data analysis. Therefore, the researcher’s role is discussed in the following.

As the global CFO in the observed business organisation, the researcher is involved with all top-level administrative decisions and acquainted with the major internal procedures. Furthermore, the researcher has the privilege to be able to obtain a thorough understanding of the business context through many years of practical experience in the organisation. Thus, this study has an advantage compared to the most management science research studies where conclusions are drawn based on observations during timely restricted research projects.
However, the researcher’s involvement might also cause biases in data collection and data interpretation. Being aware of the potential risk of biases from the very beginning of the research, the researcher has taken steps as described in Section 3.8 in the research design to minimize the biases.

3.10 ETHICAL CONSIDERATIONS

Ethical considerations were given to the researcher’s position in the business organisation as the CFO. As a result, the survey was designed to be anonymous and did not include any identifying information.

The above ethical issues incurred were dealt with in line with the standards of the University of Gloucestershire.

**Free and informed consent** was obtained from all participants through an introduction letter, stating that the survey study was to be conducted on a voluntary basis. It was the free will of the individual employees if they would like to participate at the survey study.

**Privacy and confidentiality** were assured, since the obtained data were stored with precaution and released without any identifying information. Caution has also been given to the organisation of data analyses, so that no data assessment was conducted in a form that the identity of the participants might be revealed.

3.11 RESEARCH SCHEDULE

The research schedule is illustrated as follows:

**Temporal plan**
<table>
<thead>
<tr>
<th></th>
<th>March 2011 - February 2014</th>
<th>0 - 6 m</th>
<th>6 - 12 m</th>
<th>12 - 18 m</th>
<th>18 - 24 m</th>
<th>24 - 30 m</th>
<th>30 - 36 m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Module study</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DBA504 Reflective professional development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DBA503 Systematic literature review</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DBA501 Research methodology &amp; methods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DBA502 Action and case research in management and organisational contexts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RD 1</strong></td>
<td>Draft, submission, rework &amp; resubmission</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Literature review</td>
<td>Literature review</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Verifying results of literature review (panel discussions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data collection, analysis and interpretation</td>
<td>Survey design</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Survey distribution - data collection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statistical data evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Verifying data / data interpretation (panel discussions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing up</td>
<td>Writing, rework and submission of thesis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 3-5 Research schedule**

Furthermore, an additional period of 12 months was estimated for further improvements of the thesis till the final acceptance.
To summarize Chapter 3, an introduction is given on the research methodology.

The findings of the literature review and results of the Panel discussions in Chapter 2 were translated into four hypotheses. Thus, the initial research interest as defined in Section 1.3 is transformed into specific propositions.

Next, the methods for systematic literature review, data collection and data analysis are described in detail, as well as research procedures to reassure the quality of research design.

Subsequently, thoughts are given to the researcher’s role and the ethical considerations of the research. Finally, an overview of the research schedule is presented.
Part II RESEARCH FINDINGS AND VERIFICATION OF RESULTS

As described in Section 1.4, Part II of this thesis focuses on the investigation into cultural influence on perceptions of target-based pay and the verification of the empirical findings.

Chapter 4 documents the data collection, as well as the verification and validation of the empirical evidence. In Chapter 5, the influence of German, Czech and Chinese cultural factors on perceptions of target-based pay is assessed based on the collected data. Finally, in Chapter 6, the cultural influence on perceptions of target-based pay is examined based on the different organisational positions.

All statistical assessments in Part II are conducted by using the programme IBM SPSS. The statistical procedures are chosen largely in accordance with the instructions by Andy Field in his book “Discovering statistics using IBM SPSS statistics” (Field, 2013).
4 DATA COLLECTION AND DATA VERIFICATION

This chapter focuses on data collection and data verification as explained in Chapter 3. It begins with a brief introduction of initial situation in the company under observation, followed by a description of the survey development and distribution, as well as an examination of the dimensionality of cultural factors by means of a factor analysis. Next, the cultural dimensions are labelled based on the content of the underlying variables. Subsequently, after scrutinizing the reliability and validity of the cultural factors, the influence of the cultural factors on perceptions of target-based pay is validated by means of regression analysis and correlation analysis. Finally, the empirical findings are verified by panel discussions.

4.1 THE COMPANY

The case study in this thesis is conducted in a multi-national SME in the automotive industry. The company was founded in Germany in the 1920’s as a family business and was taken over by an industrial investor in the early 1990’s. In the late 1990’s, two overseas production plants were established in the Czech Republic and China.

In 2010, the production in Germany was transferred to the Czech Republic and China. Since then, the headquarter focuses on the tasks of strategic planning, technical development, sales and marketing, as well as supply chain management.

Today, some 60 employees are working in the administration of the German Headquarter. The majority of some 300 employees in the Czech Republic and some 400 employees in China are production staff. There is constant exchange of information and experience among employees in those three countries. The numbers of employees vary relatively strongly in the Czech Republic and in China, mainly due to seasonal workloads in the production.

In the past, target-based pay was mainly deployed for the general managers and a few intermediate managers in the German headquarter. In order to improve the overall productivity, the company launched a new strategic policy in early 2013 by extending the target-based pay system to all hierarchical levels for both the Headquarter and the subsidiaries.
Due to lack of theoretical understanding of this motivational instrument, initially, the definition of the targets for the individual employees mainly relied upon the “gut feelings” of the superiors. Not surprisingly, the feedbacks clearly indicated that an essential number of employees perceived the new incentive programme as “inefficient” or “sub-optimal”.

The results of this research were also intended to help the practitioners to develop a systematic understanding of the employees’ perceptions of target-based pay, so as to improve its effect in the practice.

4.2 SURVEY DEVELOPMENT

In order to investigate the cultural influence on perceptions of target-based pay, a survey instrument was developed to explore perceptions of the employees. For this purpose, the items of cultural factors and perceptions of target-based pay were translated into statements. The data collected through the survey served subsequently as data input for the data analyses aiming to test the research hypotheses.

In early May 2013, further panel discussions were conducted with focus on the following questions:

1. How should the culture factors be measured?
2. How should perceptions of target-based pay be measured?

Under consideration of the results of the literature research and panel discussions, with special reference to the survey design of Heneman & Schwab (1985), the interviews led to the identification of a series of items chosen out of the management practice.

Initially, the items of the survey were designed to be measured by the degree of perceived satisfaction. However, during the panel discussions, critiques merged towards this choice with the arguments that, a) the employees who did not receive target-based pay would not be able to give their opinions towards the items related to satisfaction with the pay, although their opinion would still be valuable for this study, and b) presumably only the items of importance to the
individual employees would substantially influence their perceptions of target-based pay. Therefore, the items of the survey instrument were determined to be measured by the individually perceived importance with a four-point Likert-type scale (1=“very unimportant” and 4=“very important”).

From May to June 2013, 20 individuals from the observed organisation were interviewed to validate the preliminary survey for comprehension and completeness. The interviews involved all members of the expert panel, as well as some additional administration staff. As a result of the discussions, the description of the preliminary survey items was changed into a simple language for better comprehension. Besides, further content of interest detected during the interviews was added into the survey instrument.

The survey instrument begins with a section of background information, including gender, country, organisational position, received target-based pay and desired target-based pay. In addition, the validated survey contains 56 items as determinants of cultural influence on perceptions of target-based pay. To facilitate further research, each item received an additional short description. There was a consensus among the expert panel that the following 5 items used in previous studies to describe pay perceptions best described the general pay perceptions of the employees. Thus, those items were employed for the analyses of this cultural factor in the survey instrument.

<table>
<thead>
<tr>
<th>Code</th>
<th>Text</th>
<th>Short text</th>
</tr>
</thead>
<tbody>
<tr>
<td>V1</td>
<td>My net salary/wage</td>
<td>Net pay</td>
</tr>
<tr>
<td>V2</td>
<td>The amount of raises I expect (e.g. according to the last raises I received)</td>
<td>Expected raise</td>
</tr>
<tr>
<td>V3</td>
<td>The amount of target-based bonus I expect (e.g. according to the last bonuses I received)</td>
<td>Bonus amount</td>
</tr>
<tr>
<td>V4</td>
<td>How punctual the company makes the pay</td>
<td>Punctual payment</td>
</tr>
<tr>
<td>V5</td>
<td>Non-monetary rewards, e.g. events at vacation resorts paid by the company</td>
<td>Tangible reward</td>
</tr>
</tbody>
</table>

Table 4-1 Measures for general pay perception

In addition, the following further 49 items were chosen to measure the further cultural factors in the survey instrument.
<table>
<thead>
<tr>
<th>Code</th>
<th>Text</th>
<th>Short text</th>
</tr>
</thead>
<tbody>
<tr>
<td>V6</td>
<td>Information the company provides about pay issues of concern to me, e.g. development of minimum wage regulation</td>
<td>Info on pay rules</td>
</tr>
<tr>
<td>V7</td>
<td>How well the company keeps my pay data confidential</td>
<td>How my pay is kept confidential</td>
</tr>
<tr>
<td>V8</td>
<td>My total pay compared with pay of similar jobs in other companies</td>
<td>My pay compared with similar jobs in other companies</td>
</tr>
<tr>
<td>V9</td>
<td>My pay compared with pay of other jobs in our company</td>
<td>My pay compared with other jobs in our company</td>
</tr>
<tr>
<td>V10</td>
<td>Differences in pay amount different jobs in the company (e.g. the difference in pay of the department head and his subordinates)</td>
<td>Differences in pay among jobs in the company</td>
</tr>
<tr>
<td>V11</td>
<td>I prefer a bigger number of targets, so that I can distribute my &quot;risks&quot; better.</td>
<td>Big number of targets</td>
</tr>
<tr>
<td>V12</td>
<td>I prefer a small number of targets, so that I can concentrate on the key issues.</td>
<td>Small number of targets</td>
</tr>
<tr>
<td>V13</td>
<td>I don't like risks and prefer to have no target-based bonus. I would rather accept a fixed wage which lies much lower than the bonus I could expect.</td>
<td>Preference of fixed wage to probably higher bonus</td>
</tr>
<tr>
<td>V14</td>
<td>The minimum performance for my target-based bonus can be reached without efforts.</td>
<td>Minimum performance reachable without efforts</td>
</tr>
<tr>
<td>V15</td>
<td>The maximum performance for my target-based bonus can be reached without efforts.</td>
<td>Maximum performance reachable without efforts</td>
</tr>
<tr>
<td>V16</td>
<td>The maximum performance for my target-based bonus is realistic and can be reached with some efforts.</td>
<td>Maximum performance reachable with efforts</td>
</tr>
<tr>
<td>V17</td>
<td>The maximum performance for my target-based bonus is unrealistic and simply out of reach.</td>
<td>Maximum performance not reachable with efforts</td>
</tr>
<tr>
<td>V18</td>
<td>My superior evaluates my achievements and my performance objectively without prejudice</td>
<td>Objective performance evaluation</td>
</tr>
<tr>
<td>V19</td>
<td>My superior evaluates my achievements and my performance under consideration of circumstances that have made my job difficult which are not under my control.</td>
<td>Subjective performance evaluation - consideration of circumstances</td>
</tr>
<tr>
<td>V20</td>
<td>My superior evaluates my achievements and my performance in consideration of social aspects, e.g. my standing in the company, my financial needs etc.</td>
<td>Subjective performance evaluation - consideration of social status</td>
</tr>
<tr>
<td>V21</td>
<td>My superior provides timely feedback regarding his evaluation of my achievements and the reasons for his opinion.</td>
<td>Timely feedback on performance evaluation</td>
</tr>
<tr>
<td>V22</td>
<td>My superior treats me kindly and with respect.</td>
<td>My superior treats me with respect</td>
</tr>
<tr>
<td>V23</td>
<td>My superior takes steps to deal with me in a truthful manner.</td>
<td>My superior treats me in truthful manner</td>
</tr>
</tbody>
</table>
V24  Even if I have not done that well, the kind colleagues will help me so that I will receive a good portion of my bonus. 

V25  I would also like to help my colleagues who have not done that well out, so that they can also receive a good part of the bonus. 

V26  Giving and taking among the colleagues ought to be balanced. 

V27  I help nobody, but will take help offered by others. 

V28  I help nobody; need also no help from others. 

V29  Group incentives make sense, because they contribute to the group’s and the company’s success. 

V30  Group incentives make no sense, because my efforts alone have no influence on the results. 

V31  On request I can receive additional information on the evaluation of my achievements and the decision on the amount of my bonus payout. 

V32  If I am not satisfied with the above decisions made, I may ask for a further review. 

V33  The principle for making decisions on my bonus payouts remains unchanged in foreseeable time. 

V34  The important data as info for decision-making are accessible for me all the time. 

V35  Regardless of my own performance, I receive a part of my bonus according to the company’s success. 

V36  At difficult times, the managers should make the same sacrifice as the other employees. 

V37  At difficult times, the managers should make bigger sacrifice as the other employees, since they also profit more at good times. 

V38  At difficult times, the managers should make less sacrifice as the other employees, since they often work much more and harder than the others. 

V39  At difficult times, everybody should give up a part of their money, so that everybody can keep their job. 

V40  At difficult times, I am ready to give up a part of my money, but only if I will get something back when things go well again. 

V41  At difficult times, the organisation needs to be rationalized and those in need (married with children, bad chance for a new job etc.) should then be favoured to stay. 

V42  At difficult times, the organisation needs to be rationalized and those with higher status (age, standing, years of service in the company etc.) should then be favoured to stay.
V43 At difficult times, the organisation needs to be rationalized and those with better performance should then be favoured to stay.

V45 If I perform well, there will be a payout from the company’s target-based incentive plan.

V47 The target-based incentive plan is counter-productive. It misleads me to ignore some of my important tasks that are not rewarded by the incentive plan.

V48 The opportunity to extend my horizon through cooperation with overseas colleagues

Pay-out on good performance

 Targets mislead to ignoring important tasks

Benefits through cooperation with overseas colleagues

Benefits through overseas trips

New skills through new tasks

New skills through internal trainings

New skills through external trainings

V50 My opportunity to obtain new knowledge or skills through new assignments on the job

V51 My opportunity to obtain new knowledge or skills through internal training programmes

V52 My opportunity to obtain new knowledge or skills through external training programmes

V53 My opportunity to be promoted in the company

V54 The job security

V55 The good atmosphere among the colleagues is more important than more money for me.

V56 The company’s long-term health programme to maintain the employees’ health.

Table 4-2 Measures for cultural influence

According to the previous literature, the aim of the HRM tools is to achieve certain HR outcomes, e.g. commitment, motivation, etc. The specific goals usually derive from the company’s overall business strategy and vary from organisation to organisation (Muduli, 2012).

Although the positive effect of target-based pay is often described as employee motivation in the literature (Rehu, Lusk & Wolff, 2005), the expert panel identified an additional important aspect of the TBP effect, which was how the target-based pay helped the employee to recognise the priorities in his/her daily operations. Therefore, the following two items were determined as measures of the perceptions of target-based pay (dependent variables).

Table 4-3 Measures for perceptions of target-based pay

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Short text</th>
</tr>
</thead>
<tbody>
<tr>
<td>V44</td>
<td>My target-based incentive plan makes me work harder.</td>
<td>Employee motivation</td>
</tr>
<tr>
<td>V46</td>
<td>The target-based incentive plan is useful. It helps me to recognize the priorities of my work.</td>
<td>Target-prioritising</td>
</tr>
</tbody>
</table>
The survey was originally designed in the English language and subsequently, translated into German by the researcher and into Czech and Chinese by the local human resources department of the subsidiaries.

The Chinese translation was verified by the researcher. As a native speaker, the researcher was confident that the translation exhibited the exact content of the English text.

For the Czech translation, each question had been explained with practical example to the translator. The Czech translation was then translated back into English by a Czech native speaker and showed the same content as the original English text. Three individual employees of various educational levels were asked to describe the text in their own language. The result showed that their understanding of the translation reconciled with the content of the original.

4.3 SURVEY DISTRIBUTION

The survey was distributed to all employees in Germany, the Czech Republic and China in summer 2013. An accompanying letter was attached to the survey, explaining the purpose of the study and that the participation was on a voluntary basis with guarantee for data discretion. The feedbacks were mainly submitted anonymously as printouts with individually marked opinions. The process of survey distribution at the three locations is described in more details in the following.

Germany

In Germany, all employees were in possession of a company e-mail account, although in some rare cases, the employees used shared accounts instead of individual e-mail accounts. In July 2013, all 62 employees were contacted by e-mail with the survey form and the introduction letter. Two weeks later, a reminder e-mail was again distributed to all e-mail accounts.

To ensure the anonymity of the individual answers, the employees were asked to submit their answers to the researcher’s pigeonhole. Also paper printouts of the survey and the accompanying letter were made available in a free accessible room. Most of the answers were
returned in the pigeonhole as filled out printouts. A few employees chose to send their answer to the researcher directly by e-mail.

With 28 replies, the return rate was 45.2%. Among the participants, 22 were male, 5 female and 1 did not reveal the gender. Also, 2 of the participants identified themselves as general managers, 8 intermediate managers, 16 administration staff and 2 refused to reveal their positions in the organisation.

**The Czech Republic**

In the Czech Republic, all employees were in possession of a company e-mail account, with the exception of the junior production staff. In July 2013, the survey form was distributed to all company e-mail accounts, together with the introduction letter. Paper printouts were prepared by the human resources department and distributed to the production staff members by the foremen. Additional printouts were distributed in the free accessible social rooms for all employees. Thus the survey was distributed to all 286 employees by the above ways of contact.

Most of the employees returned their anonymous answers as requested to the free accessible pigeonhole of the human resources department. Some junior production staff members left their answers to the foremen as they left the shift. The collected answers were subsequently brought to the foreseen submission location by the foremen.

Altogether, 118 replies were received at a return rate of 41.3%. Among the participants, 29 were male, 84 female and 5 refused to reveal their gender. Altogether, there were 7 intermediate managers, 10 administration staff, 94 production staff and 7 persons refused to reveal their positions in the organisation.

**China**

In July 2013, the human resources department in the Chinese factory prepared abundant printouts of the survey with the introduction letter and distributed those to all employees by department. Among the 372 employees, 13 were on leave or on vacation, thus altogether 359 persons were contacted.
The filled out surveys were gathered anonymously by department and subsequently submitted to the human resources department. The return rate was 92.2% with 331 responses. Among the participants, 125 were male and 206 female. Among those, there was 1 general manager, 22 intermediate managers, 19 administration staff, 288 production staff and 1 person refused to reveal his/her position in the organisation.

Altogether, among 707 contacted employees, 477 participated at the survey, among which 176 identified themselves as male, 295 as female and 6 did not reveal their gender. The overall return rate was thus 67.5%.

In the following tables, the survey return rates are displayed according to national culture, gender and organisational position.

<table>
<thead>
<tr>
<th>Country</th>
<th>Germany</th>
<th>The Czech Republic</th>
<th>China</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>22</td>
<td>29</td>
<td>125</td>
<td>176</td>
</tr>
<tr>
<td>% within Gender</td>
<td>12.5%</td>
<td>16.5%</td>
<td>71.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within Country</td>
<td>78.6%</td>
<td>24.6%</td>
<td>37.8%</td>
<td>36.9%</td>
</tr>
<tr>
<td>% of Total</td>
<td>4.6%</td>
<td>6.1%</td>
<td>26.2%</td>
<td>36.9%</td>
</tr>
<tr>
<td>Female</td>
<td>Count</td>
<td>5</td>
<td>84</td>
<td>206</td>
</tr>
<tr>
<td>% within Gender</td>
<td>1.7%</td>
<td>28.5%</td>
<td>69.8%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within Country</td>
<td>17.9%</td>
<td>71.2%</td>
<td>62.2%</td>
<td>61.8%</td>
</tr>
<tr>
<td>% of Total</td>
<td>1.0%</td>
<td>17.6%</td>
<td>43.2%</td>
<td>61.8%</td>
</tr>
<tr>
<td>no response</td>
<td>Count</td>
<td>1</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>% within Gender</td>
<td>16.7%</td>
<td>83.3%</td>
<td>.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within Country</td>
<td>3.6%</td>
<td>4.2%</td>
<td>.0%</td>
<td>1.3%</td>
</tr>
<tr>
<td>% of Total</td>
<td>.2%</td>
<td>1.0%</td>
<td>.0%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>28</td>
<td>118</td>
<td>331</td>
</tr>
<tr>
<td>% within Gender</td>
<td>5.9%</td>
<td>24.7%</td>
<td>69.4%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within Country</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>5.9%</td>
<td>24.7%</td>
<td>69.4%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 4-4  Survey participation – divided by country and gender

<table>
<thead>
<tr>
<th>Country</th>
<th>Germany</th>
<th>The Czech Republic</th>
<th>China</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position</td>
<td>general manager</td>
<td>Count</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>% within Position</td>
<td>66.7%</td>
<td>.0%</td>
<td>33.3%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within Country</td>
<td>7.1%</td>
<td>.0%</td>
<td>.3%</td>
<td>.6%</td>
</tr>
<tr>
<td>% of Total</td>
<td>.4%</td>
<td>.0%</td>
<td>.2%</td>
<td>.6%</td>
</tr>
<tr>
<td>intermediate</td>
<td>Count</td>
<td>8</td>
<td>7</td>
<td>22</td>
</tr>
</tbody>
</table>
### Table 4-5
Survey participation – divided by country and position

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
<th>% within Position</th>
<th>% within Country</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Manager</strong></td>
<td>106</td>
<td>21.6%</td>
<td>18.9%</td>
<td>59.5%</td>
</tr>
<tr>
<td></td>
<td>21.6%</td>
<td>18.9%</td>
<td>59.5%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>28.6%</td>
<td>5.9%</td>
<td>6.6%</td>
<td>7.8%</td>
</tr>
<tr>
<td></td>
<td>1.7%</td>
<td>1.5%</td>
<td>4.6%</td>
<td>7.8%</td>
</tr>
<tr>
<td><strong>Administration Staff</strong></td>
<td>16</td>
<td>35.6%</td>
<td>22.2%</td>
<td>42.2%</td>
</tr>
<tr>
<td></td>
<td>57.1%</td>
<td>8.5%</td>
<td>5.7%</td>
<td>9.4%</td>
</tr>
<tr>
<td></td>
<td>3.4%</td>
<td>2.1%</td>
<td>4.0%</td>
<td>9.4%</td>
</tr>
<tr>
<td><strong>Production Staff</strong></td>
<td>0</td>
<td>0.0%</td>
<td>24.6%</td>
<td>75.4%</td>
</tr>
<tr>
<td></td>
<td>0.0%</td>
<td>79.7%</td>
<td>87.0%</td>
<td>80.1%</td>
</tr>
<tr>
<td></td>
<td>0.0%</td>
<td>19.7%</td>
<td>60.4%</td>
<td>80.1%</td>
</tr>
<tr>
<td><strong>No Response</strong></td>
<td>2</td>
<td>20.0%</td>
<td>70.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td></td>
<td>7.1%</td>
<td>5.9%</td>
<td>3%</td>
<td>2.1%</td>
</tr>
<tr>
<td></td>
<td>.4%</td>
<td>1.5%</td>
<td>2%</td>
<td>2.1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>28</td>
<td>5.9%</td>
<td>24.7%</td>
<td>69.4%</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>5.9%</td>
<td>24.7%</td>
<td>69.4%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

#### 4.4 EXAMINING THE DIMENSIONALITY OF CULTURAL FACTORS

An entry was made in the SPSS database for each returned survey. Data from all three surveyed locations were combined in a database. The conceptual 56-item survey instrument as described in the previous section was refined by a factor analysis conducted in SPSS, with the 49 independent variables as potential underlying attributes of the cultural factors (independent variables) in the VSM framework. The purpose of the factor analysis was to produce a scale that was reliable and valid for the assessment of cultural factors which influence perceptions of target-based pay.

The first factor analysis extracted 13 factors. In the factor matrix with 14 iterations no clear pattern emerged, with 46 items loading on factor 1. Another 7 factors were loaded with 1-10
items each with loadings higher than .300, most of which also loaded on factor 1. There were no loadings higher than .300 on the other 5 factors.

Subsequently, the factor solution was subjected to orthogonal rotation analysis (principal axis factoring, using the Varimax procedure in SPSS), in order to improve the liability of the scale. The following steps were repeatedly implemented.

a. Orthogonal rotation analysis to verify the dimensionality of the scale. Loadings lower than .300 are to be omitted;
b. Deletion of components consisting of less than 3 items with loading higher than .300 and/ or deletion of items whose loadings are all lower than .400.
c. Reassignment of items and restructuring of dimensions where necessary.

Step 1. In the first step of orthogonal rotation, again 13 factors were extracted (rotation converged in 17 iterations). However, this time a clear pattern emerged. Factors 1, 2 & 3 had 6-11 loadings; factor 2 had 2 loadings and the rest of the factors, 3-4 loadings each. Factor 2 consisting of items 48 and 49 had only 2 loadings higher than .300. Items 6, 7, 11, 12, 20, 26, 29, 47 and 54 had no loading higher than .400. To increase the liability of the scale, the items 6, 7, 11, 12, 20, 26, 29, 47, 48, 49 and 54 were deleted before the orthogonal rotation was repeated under the same conditions.

Step 2. The resulting factor pattern contained 11 factors (rotation converged in 190 iterations). Factors 8, 9 & 10 consisting of items 10, 16, 24, 25, 55 and 56, had each 2 loadings higher than .300. To increase the liability of the scale, the mentioned items were deleted before the orthogonal rotation was repeated under the same conditions.

Step 3. The resulting factor pattern contained 9 factors (rotation converged in 14 iterations). Items 13, 38 and 45 had no loading higher than .400. To increase the liability of the scale, the mentioned items were deleted before the orthogonal rotation was repeated under the same conditions.
Step 4. The resulting factor pattern contained 8 factors (rotation converged in 7 iterations). Items 14 and 39 had no loading higher than .400. To increase the liability of the scale, the mentioned items were deleted before the orthogonal rotation was repeated under the same conditions.

Step 5. The resulting factor pattern contained 8 factors (rotation converged in 7 iterations). Factor 7 consisting of items 15 and 17 had only 2 loadings higher than .300. To increase the liability of the scale, the mentioned items were deleted before the orthogonal rotation was repeated under the same conditions.

Step 6. The resulting factor pattern contained 7 factors (rotation converged in 6 iterations). All factors had at least 3 loadings and the highest loading of each item was higher than .400.

Since the factor pattern was already very clear, step 6 was rerun while the number of extracted factor was reduced to 5. The resulting factor pattern contained 5 factors (rotation converged in 6 iterations).

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>V21</td>
<td>.637</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V23</td>
<td>.625</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V18</td>
<td>.623</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V32</td>
<td>.533</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V34</td>
<td>.524</td>
<td>.313</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V19</td>
<td>.492</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V16</td>
<td>.420</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V31</td>
<td>.372</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V22</td>
<td>.331</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V42</td>
<td></td>
<td>.746</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V41</td>
<td></td>
<td>.610</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V40</td>
<td></td>
<td>.592</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V43</td>
<td></td>
<td>.583</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V36</td>
<td></td>
<td>.532</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V35</td>
<td>.437</td>
<td>.446</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V37</td>
<td></td>
<td>.405</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V50</td>
<td></td>
<td>.775</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V52</td>
<td></td>
<td>.774</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V51</td>
<td></td>
<td>.684</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V53</td>
<td></td>
<td>.572</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V28</td>
<td></td>
<td>.804</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V27</td>
<td></td>
<td>.731</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V30</td>
<td></td>
<td>.618</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V33</td>
<td>.388</td>
<td>.390</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V9</td>
<td></td>
<td>.802</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V8</td>
<td></td>
<td>.646</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V10</td>
<td>.334</td>
<td>.364</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In order to bring down the number of items for factors 1 and 2 to a similar level of the other factors, only the items of the 4 highest loadings of those two factors were kept for further analysis. Therefore, the items 10, 16, 19, 22, 31, 34, 35, 36 and 37 were deleted before the orthogonal rotation was repeated again.

Finally, the resulting factor pattern exposes a very clear 5-dimensional construct.

<table>
<thead>
<tr>
<th>Underlying attributes</th>
<th>Factor</th>
<th>Factor</th>
<th>Factor</th>
<th>Factor</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>V52 New skills through external trainings</td>
<td>.805</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V50 New skills through new tasks</td>
<td>.785</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V51 New skills through internal trainings</td>
<td>.688</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V53 Promotion opportunity</td>
<td>.579</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V28 I help nobody; need also no help from others</td>
<td>.901</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V27 I help nobody but will take help offered by others</td>
<td>.733</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V30 Group incentive - negative</td>
<td>.602</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V42 Lay-off decision based on social status</td>
<td>.785</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V41 Lay-off decision based on private needs</td>
<td>.606</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V43 Lay-off decision based on contribution</td>
<td>.602</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V40 Pay cut-off but pay-out at better times</td>
<td>.546</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V21 Timely feedback on performance evaluation</td>
<td>.703</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V23 My superior treats me in truthful manner</td>
<td>.699</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V18 Objective performance evaluation</td>
<td>.550</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V32 Possibility to request review</td>
<td>.432</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V9 My pay compared with other jobs in our company</td>
<td>.954</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V8 My pay compared with similar jobs in other companies</td>
<td>.561</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4-7  Dimensions of factor analysis and their underlying attributes

4.5  **LABELLING CULTURAL FACTORS**

The dimensions of the factor analysis were labelled by the cultural factors according to the results of Section 2.5 and Section 2.6. The allocation was carried out under the following considerations.

**Factor 1**: The table below includes the variables of factor 1 of the factor analysis.
All four variables represent events that are expected to improve the employee’s career opportunities in the future. According to the results of Section 2.5, such career concerns are to be interpreted as long-term orientation (Hofstede, 2007). Therefore, factor 1 is labelled as the cultural factor “long-term orientation”. A perceived high importance of the variable (high score in the data set) is to be interpreted as a strong long-term orientation.

**Factor 2:** The table below includes the variables of factor 2 of the factor analysis.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Individualism vs. collectivism</th>
</tr>
</thead>
<tbody>
<tr>
<td>V28 I help nobody; need also no help from others</td>
<td>individualism</td>
</tr>
<tr>
<td>V27 I help nobody but will take help offered by others</td>
<td>individualism</td>
</tr>
<tr>
<td>V30 Group incentive – negative</td>
<td>negative collectivism = individualism</td>
</tr>
</tbody>
</table>

Table 4-9 Labelling factor 2 of factor analysis

In Hofstede’s definition, collectivism means members of the social groups look after each other in exchange for group loyalty. Individualism is the opposite of collectivism, meaning the individuals look after themselves and their immediate family only (de Mooij & Hofstede, 2010).

Both V27 and V28 depict the refusal to help the co-workers, which may be understood as the opposite of inter-personal trust. A negative attitude towards group incentive (V30) may be understood as a declination to group loyalty. Thus, according to the results of Section 2.5, all three variables represent the opposite values of collectivism which are for example team incentive and inter-personal trust, therefore represent individualism.
Therefore, factor 2 is labelled with the cultural factor “individualism vs. collectivism”. A perceived high importance of the variables (high score in the data set) is to be interpreted as strong individualism.

**Factor 3:** The table below includes the variables of factor 3 of the factor analysis.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Masculinity vs. femininity</th>
</tr>
</thead>
<tbody>
<tr>
<td>V42</td>
<td>Lay-off decision based on social status</td>
</tr>
<tr>
<td>V41</td>
<td>Lay-off decision based on private needs</td>
</tr>
<tr>
<td>V43</td>
<td>Lay-off decision based on contribution</td>
</tr>
<tr>
<td>V40</td>
<td>Pay cut-off but pay-out at better times</td>
</tr>
</tbody>
</table>

Table 4-10  Labelling factor 3 of factor analysis

Depending on the dominant social values, Hofstede divides cultures into masculine and feminine cultures. In his terms, the masculine cultures may be distinguished by the dominant masculine values, e.g. achievement and success. The feminine cultures, on the contrary, are dominated by the feminine values, e.g. caring for others and the quality of life (de Mooij & Hofstede, 2002).

V40 shows the employee’s readiness to sacrifice his/her benefits in terms of risk-sharing with the company. V41, V42 and V43 reflect the perceived organisational justice at the lay-off decisions. While V41 and V42 emphasize the social aspects, V43 values the employee’s contribution to the company. According to the results of Section 2.5, those variables exhibit typical masculine or feminine social values and are therefore labelled with the cultural factor “masculinity vs. femininity”.

A perceived high importance of the variables V40, V41 and V42 (high score in the data set) is to be interpreted as strong femininity. A perceived high importance of the variable 43 is to be interpreted as strong masculinity.

**Factor 4:** The table below includes the variables of factor 4 of the factor analysis.
Strong uncertainty avoidance is a description of a strong need for rules and formality (de Mooij & Hofstede, 2002). According to the results of Section 2.5, all four variables match this description and therefore are labelled with the cultural factor “uncertain avoidance”.

A perceived high importance of the variables V18, V21, V23, and V32 (high score in the data set) is to be interpreted as strong uncertainty avoidance.

**Factor 5:** The table below includes the variables of factor 5 of the factor analysis.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Large vs. small power distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>V9</td>
<td>My pay compared with other jobs in our company</td>
</tr>
<tr>
<td>V8</td>
<td>My pay compared with similar jobs in other companies</td>
</tr>
</tbody>
</table>

The variables V8 and V9 are both aspects of reference comparison. Based on the results of Section 2.5, reference comparison may be interpreted as the individual expectation of equal pay for equal achievement or performance, which implies the absence or a weak acceptance of pay difference based on social status. Therefore, those two variables are labelled with the cultural factor “power distance”. The term “power distance” is used by Hofstede to describe the extent of which the less powerful in a society accepts the unequal distribution of power (Hofstede, 2007). A perceived high importance of the variables V8 and V9 (high score in the data set) is to be interpreted as small power distance.

Thus, based the content of the underlying variables, the outcomes of the factor analysis are mapped with the cultural dimensions of the VSM framework according to the results of Chapter 2. Below is an overview of the cultural dimensions and their underlying attributes.
### Table 4-13
Overview of cultural factors with their underlying attributes

<table>
<thead>
<tr>
<th>Cultural dimension</th>
<th>Underlying attributes</th>
<th>Cultural characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individualism vs. collectivism (factor 2)</td>
<td>V27 I help nobody but will take help offered by others</td>
<td>Individualism</td>
</tr>
<tr>
<td></td>
<td>V28 I help nobody; need also no help from others</td>
<td>Individualism</td>
</tr>
<tr>
<td></td>
<td>V30 Group incentive - negative</td>
<td>Individualism</td>
</tr>
<tr>
<td>Power distance (factor 5)</td>
<td>V8 My pay compared with similar jobs in other companies</td>
<td>Small power distance</td>
</tr>
<tr>
<td></td>
<td>V9 My pay compared with other jobs in our company</td>
<td>Small power distance</td>
</tr>
<tr>
<td>Uncertainty avoidance (factor 4)</td>
<td>V18 Objective performance evaluation</td>
<td>Strong uncertainty avoidance</td>
</tr>
<tr>
<td></td>
<td>V21 Timely feedback on performance evaluation</td>
<td>Strong uncertainty avoidance</td>
</tr>
<tr>
<td></td>
<td>V23 My superior treats me in truthful manner</td>
<td>Strong uncertainty avoidance</td>
</tr>
<tr>
<td></td>
<td>V32 Possibility to request review</td>
<td>Strong uncertainty avoidance</td>
</tr>
<tr>
<td>Masculinity vs. Femininity (factor 3)</td>
<td>V40 Pay cut-off but pay-out at better times</td>
<td>Femininity</td>
</tr>
<tr>
<td></td>
<td>V41 Lay-off decision based on private needs</td>
<td>Femininity</td>
</tr>
<tr>
<td></td>
<td>V42 Lay-off decision based on social status</td>
<td>Femininity</td>
</tr>
<tr>
<td></td>
<td>V43 Lay-off decision based on contribution</td>
<td>Masculinity</td>
</tr>
<tr>
<td>Long-term orientation (factor 1)</td>
<td>V50 New skills through new tasks</td>
<td>Long-term orientation</td>
</tr>
<tr>
<td></td>
<td>V51 New skills through internal trainings</td>
<td>Long-term orientation</td>
</tr>
<tr>
<td></td>
<td>V52 New skills through external trainings</td>
<td>Long-term orientation</td>
</tr>
<tr>
<td></td>
<td>V53 Promotion opportunity</td>
<td>Long-term orientation</td>
</tr>
</tbody>
</table>

### 4.6 ASSESSING RELIABILITY OF CULTURAL FACTORS

In order to verify the reliability of the cultural factor scale and its five dimensions as described in the previous sections, the reliability coefficient Cronbach’s alpha was computed separately for each of the determined cultural factors. The purpose of this step is to verify if the underlying variables of each cultural factor share a sufficient common core (Field, 2013: 665-715). The results are shown in the following table.
All five Cronbach’s alpha values are around .800. This shows a relatively high degree of internal consistency of the cultural factor scale. It is not necessary to eliminate further variables from the survey instrument to improve the value of Cronbach’s alpha.

### 4.7 ASSESSING VALIDITY OF CULTURAL FACTORS

As introduced in Sections 3.7 and 3.8, the construct validity of the research procedures was examined by using the correlation matrix of all cultural factor attributes. This is meant to keep the researcher from using subjective judgments, so as to reduce the researcher’s biases (Yin, 2009: 41-45).

For an overall assessment of construct validity, the convergent validity (CV) for each attribute was computed as the average of within-dimension correlations and the discriminant validity (DV) as the average of cross-dimensional correlations (Churchill, 1979).
<table>
<thead>
<tr>
<th>V27</th>
<th>.313</th>
<th>.228</th>
<th>.289</th>
<th>.133</th>
<th>.279</th>
<th>1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>V28</td>
<td>.270</td>
<td>.213</td>
<td>.301</td>
<td>.131</td>
<td>.326</td>
<td>.717</td>
<td>1</td>
</tr>
<tr>
<td>V30</td>
<td>.211</td>
<td>.180</td>
<td>.277</td>
<td>.205</td>
<td>.264</td>
<td>.451</td>
<td>.609</td>
</tr>
<tr>
<td>V8</td>
<td>.316</td>
<td>.305</td>
<td>.335</td>
<td>.191</td>
<td>.306</td>
<td>.220</td>
<td>.183</td>
</tr>
<tr>
<td>V9</td>
<td>.182</td>
<td>.213</td>
<td>.192</td>
<td>.221</td>
<td>.269</td>
<td>.074</td>
<td>.090</td>
</tr>
<tr>
<td>V18</td>
<td>.372</td>
<td>.290</td>
<td>.285</td>
<td>.261</td>
<td>.222</td>
<td>.178</td>
<td>.197</td>
</tr>
<tr>
<td>V21</td>
<td>.324</td>
<td>.289</td>
<td>.259</td>
<td>.167</td>
<td>.073</td>
<td>.252</td>
<td>.255</td>
</tr>
<tr>
<td>V23</td>
<td>.251</td>
<td>.126</td>
<td>.181</td>
<td>.068</td>
<td>.043</td>
<td>.218</td>
<td>.120</td>
</tr>
<tr>
<td>V32</td>
<td>.278</td>
<td>.212</td>
<td>.250</td>
<td>.098</td>
<td>.187</td>
<td>.240</td>
<td>.257</td>
</tr>
<tr>
<td>V40</td>
<td>.401</td>
<td>.287</td>
<td>.377</td>
<td>.234</td>
<td>.218</td>
<td>.347</td>
<td>.223</td>
</tr>
<tr>
<td>V41</td>
<td>.209</td>
<td>.188</td>
<td>.342</td>
<td>.126</td>
<td>.147</td>
<td>.242</td>
<td>.193</td>
</tr>
<tr>
<td>V43</td>
<td>.353</td>
<td>.219</td>
<td>.168</td>
<td>.125</td>
<td>.065</td>
<td>.162</td>
<td>.129</td>
</tr>
<tr>
<td>V50</td>
<td>.131</td>
<td>.077</td>
<td>.109</td>
<td>.077</td>
<td>.011</td>
<td>.069</td>
<td>.015</td>
</tr>
<tr>
<td>V52</td>
<td>.116</td>
<td>.136</td>
<td>.143</td>
<td>.017</td>
<td>.057</td>
<td>.217</td>
<td>.203</td>
</tr>
<tr>
<td>V53</td>
<td>.192</td>
<td>.152</td>
<td>.080</td>
<td>.068</td>
<td>.103</td>
<td>.175</td>
<td>.111</td>
</tr>
</tbody>
</table>

| V50  | 1    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| V51  | .563 | 1    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| V52  | .591 | .578 | 1    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| V53  | .469 | .347 | .444 | 1    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| CV   | .541 | .496 | .538 | .420 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| DV   | .190 | .226 | .238 | .219 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |

Table 4-15 Pearson's correlation for all attributes of cultural factors
The results exhibit a high average within-dimension correlation and a lower average cross-dimension correlation for each attribute of the cultural factors (see Table 4-15). Thus it may be said that the construct validity of the assessment instrument was supported by the correlation analysis.

### 4.8 VALIDATING CULTURAL INFLUENCE ON PERCEPTIONS OF TARGET-BASED PAY

As described in Sections 3.7 and 3.8, to examine the effect of cultural influence on perceptions of target-based pay, the association of the output measures V44 and V46 on each of the underlying variables of the cultural factors were tested by a simple regression analysis. The results of the analysis are reported in Tables 4-16 and 4-17, including the coefficients of determination (R square and adjusted R square values), the regression coefficients (Beta coefficients B and standardized Beta coefficients), as well as the ρ-values for the significance of each relationship between a dependent variable and an independent variable.

<table>
<thead>
<tr>
<th>Dimension a: Individualism vs. collectivism</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>B</th>
<th>Standardized Coefficient</th>
<th>Sig. ρ</th>
</tr>
</thead>
<tbody>
<tr>
<td>V27</td>
<td>.855</td>
<td>.854</td>
<td>1.038</td>
<td>.924</td>
<td>.000</td>
</tr>
<tr>
<td>V28</td>
<td>.840</td>
<td>.839</td>
<td>1.012</td>
<td>.916</td>
<td>.000</td>
</tr>
<tr>
<td>V30</td>
<td>.864</td>
<td>.863</td>
<td>1.009</td>
<td>.929</td>
<td>.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimension b: Power distance</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>V8</td>
<td>.908</td>
<td>.908</td>
<td>.897</td>
<td>.953</td>
<td>.000</td>
</tr>
<tr>
<td>V9</td>
<td>.900</td>
<td>.900</td>
<td>.899</td>
<td>.949</td>
<td>.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimension c: Uncertainty avoidance</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>V18</td>
<td>.938</td>
<td>.778</td>
<td>.896</td>
<td>.969</td>
<td>.000</td>
</tr>
<tr>
<td>V21</td>
<td>.914</td>
<td>.914</td>
<td>.936</td>
<td>.956</td>
<td>.000</td>
</tr>
<tr>
<td>V23</td>
<td>.909</td>
<td>.909</td>
<td>.895</td>
<td>.953</td>
<td>.000</td>
</tr>
<tr>
<td>V32</td>
<td>.907</td>
<td>.907</td>
<td>.954</td>
<td>.952</td>
<td>.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimension d: Masculinity vs. Femininity</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>V40</td>
<td>.903</td>
<td>.903</td>
<td>.965</td>
<td>.950</td>
<td>.000</td>
</tr>
<tr>
<td>V41</td>
<td>.921</td>
<td>.921</td>
<td>.980</td>
<td>.960</td>
<td>.000</td>
</tr>
<tr>
<td>V42</td>
<td>.918</td>
<td>.917</td>
<td>.986</td>
<td>.958</td>
<td>.000</td>
</tr>
<tr>
<td>V43</td>
<td>.930</td>
<td>.930</td>
<td>.953</td>
<td>.965</td>
<td>.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimension e: Long-term orientation</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>V50</td>
<td>.908</td>
<td>.908</td>
<td>.964</td>
<td>.953</td>
<td>.000</td>
</tr>
<tr>
<td>V51</td>
<td>.908</td>
<td>.908</td>
<td>.963</td>
<td>.953</td>
<td>.000</td>
</tr>
<tr>
<td>V52</td>
<td>.900</td>
<td>.900</td>
<td>.963</td>
<td>.949</td>
<td>.000</td>
</tr>
<tr>
<td>V53</td>
<td>.905</td>
<td>.905</td>
<td>.962</td>
<td>.951</td>
<td>.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General pay</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>V1</td>
<td>.924</td>
<td>.923</td>
<td>.849</td>
<td>.961</td>
<td>.000</td>
</tr>
</tbody>
</table>
Table 4-16  Simple regression analyses with dependent variable V44

<table>
<thead>
<tr>
<th>Dimension</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>B</th>
<th>Standardized Coefficient</th>
<th>Sig.</th>
<th>ρ</th>
</tr>
</thead>
<tbody>
<tr>
<td>V27</td>
<td>.862</td>
<td>.862</td>
<td>.995</td>
<td>.928</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>V28</td>
<td>.840</td>
<td>.840</td>
<td>.966</td>
<td>.917</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>V30</td>
<td>.871</td>
<td>.871</td>
<td>.967</td>
<td>.933</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>V8</td>
<td>.923</td>
<td>.922</td>
<td>.863</td>
<td>.961</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>V9</td>
<td>.915</td>
<td>.915</td>
<td>.865</td>
<td>.957</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>V18</td>
<td>.924</td>
<td>.924</td>
<td>.849</td>
<td>.961</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>V21</td>
<td>.909</td>
<td>.909</td>
<td>.891</td>
<td>.953</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>V23</td>
<td>.911</td>
<td>.911</td>
<td>.856</td>
<td>.955</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>V32</td>
<td>.909</td>
<td>.909</td>
<td>.911</td>
<td>.953</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>V40</td>
<td>.886</td>
<td>.885</td>
<td>.912</td>
<td>.941</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>V41</td>
<td>.897</td>
<td>.897</td>
<td>.958</td>
<td>.923</td>
<td>.947</td>
<td>.000</td>
</tr>
<tr>
<td>V42</td>
<td>.905</td>
<td>.904</td>
<td>.934</td>
<td>.951</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>V43</td>
<td>.912</td>
<td>.911</td>
<td>.901</td>
<td>.955</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>V50</td>
<td>.926</td>
<td>.926</td>
<td>.930</td>
<td>.962</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>V51</td>
<td>.917</td>
<td>.916</td>
<td>.924</td>
<td>.957</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>V52</td>
<td>.907</td>
<td>.907</td>
<td>.923</td>
<td>.952</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>V53</td>
<td>.923</td>
<td>.923</td>
<td>.927</td>
<td>.961</td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>

Table 4-17  Simple regression analyses with dependent variable V46

All regression coefficients in Tables 4-16 and 4-17 have positive signs. This indicates that all observed attributes are positively related to the dependent variables.

The results of the regression analysis show that all attributes of the cultural dimension “individualism vs. collectivism” have a very strong ($R^2 > .800$) and highly significant relationship ($ρ<0.001$) with both dependent variables V44 and V46.
In the cultural dimension “power distance”, both independent variables have a very strong ($R^2 > .900$) relationship with the dependent variables V44 and V46 at a high level of significance ($p<0.001$).

In the dimension “uncertainty avoidance”, all independent variables relate very strongly ($R^2 > .900$) and highly significantly ($p<0.001$) to the dependent variables.

In the dimension “masculinity vs. femininity”, the relationships between the independent variables and the dependent variables seem to be very strong (V44: $R^2 > .900$; V46: $R^2 > .850$) and significant ($p<0.001$).

In the dimension “long-term orientation”, the relationships between the independent variables and the dependent variables appear to be very strong ($R^2 > .900$) and highly significant ($p<0.001$).

Finally, also the independent variables of general pay perception are subjected to regression analysis. The statistical findings indicate very strong ($R^2 > .850$) and highly significant ($p<0.001$) relationships between the independent and the dependent variables.

Comprising the above, the simple regression analysis suggests that all independent variables have a strong and significant association with both of the dependent variables.

Subsequently, the relationship between the cultural factors and the perceptions of target-based pay was tested by a correlation analysis. The results of the correlation analysis are shown in Table 4-18.

<table>
<thead>
<tr>
<th>Cultural dimension</th>
<th>Underlying attributes</th>
<th>Cultural characteristic</th>
<th>V44</th>
<th>V46</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individualism vs. collectivism</td>
<td>V27 I help nobody but will take help offered by others</td>
<td>Individualism</td>
<td>.048</td>
<td>.165**</td>
</tr>
<tr>
<td></td>
<td>V28 I help nobody; need also no help from others</td>
<td>Individualism</td>
<td>.051</td>
<td>.072</td>
</tr>
<tr>
<td></td>
<td>V30 Group incentive - negative</td>
<td>Individualism</td>
<td>-.081</td>
<td>.121*</td>
</tr>
<tr>
<td>Power distance</td>
<td>V8 My pay compared with similar jobs in other companies</td>
<td>Small power distance</td>
<td>.083</td>
<td>.295**</td>
</tr>
<tr>
<td></td>
<td>V9 My pay compared with other jobs in our company</td>
<td>Small power distance</td>
<td>.085</td>
<td>.280**</td>
</tr>
<tr>
<td>Uncertainty avoidance</td>
<td>V18 Objective performance evaluation</td>
<td>Strong uncertainty avoidance</td>
<td>.208**</td>
<td>.254**</td>
</tr>
<tr>
<td></td>
<td>V21 Timely feedback on performance evaluation</td>
<td>Strong uncertainty avoidance</td>
<td>.139*</td>
<td>.217**</td>
</tr>
</tbody>
</table>
The results of the correlation analysis indicate that two of the three variables for the cultural dimension “individualism vs. collectivism” are moderately (0.121 < r < 0.165) and significantly (p < 0.050) or highly significantly (p < 0.010) related to the dependent variable V46 “target-prioritising”. However, the correlation between the independent variables and the dependent variable V44 “employee motivation” appears to be relatively weak and not significant (r < 0.100; p > 0.050).

In the cultural dimension “power distance”, the relationship between both independent variables and the dependent variable V46 “target-prioritising” seems to be moderate (0.280 < r < 0.295), yet highly significant (p < 0.010). In addition, the relationship between both independent variables and the dependent variable V44 “employee motivation” seems to be relatively weak and not significant (r < 0.100; p > 0.050).

In the dimension “uncertainty avoidance”, there is a moderate (0.194 < r < 0.279), yet highly significant (p < 0.010) correlation between all independent variables and the dependent variable V46 “target-prioritising”. Besides, three out of the four dependent variables are moderately

<table>
<thead>
<tr>
<th>V23</th>
<th>My superior treats me in truthful manner</th>
<th>Strong uncertainty avoidance</th>
<th>-0.055</th>
<th>0.194**</th>
</tr>
</thead>
<tbody>
<tr>
<td>V32</td>
<td>Possibility to request review</td>
<td>Strong uncertainty avoidance</td>
<td>0.122*</td>
<td>0.279**</td>
</tr>
<tr>
<td>V40</td>
<td>Pay cut-off but pay-out at better times</td>
<td>Femininity</td>
<td>0.281**</td>
<td>0.171**</td>
</tr>
<tr>
<td>V41</td>
<td>Lay-off decision based on private needs</td>
<td>Femininity</td>
<td>0.380**</td>
<td>0.226**</td>
</tr>
<tr>
<td>V42</td>
<td>Lay-off decision based on social status</td>
<td>Femininity</td>
<td>0.321**</td>
<td>0.317**</td>
</tr>
<tr>
<td>V43</td>
<td>Lay-off decision based on contribution</td>
<td>Masculinity</td>
<td>0.378**</td>
<td>0.321**</td>
</tr>
<tr>
<td>V50</td>
<td>New skills through new tasks</td>
<td>Long-term orientation</td>
<td>0.223**</td>
<td>0.412**</td>
</tr>
<tr>
<td>V51</td>
<td>New skills through internal trainings</td>
<td>Long-term orientation</td>
<td>0.176**</td>
<td>0.376**</td>
</tr>
<tr>
<td>V52</td>
<td>New skills through external trainings</td>
<td>Long-term orientation</td>
<td>0.186**</td>
<td>0.309**</td>
</tr>
<tr>
<td>V53</td>
<td>Promotion opportunity</td>
<td>Long-term orientation</td>
<td>0.140*</td>
<td>0.368**</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 4-18: Influence of cultural factors on target-based pay – Pearson’s correlation
(0.122< r < 0.275), yet significantly (ρ< 0.050) or highly significantly (ρ< 0.010) related to the dependable variable V44 “employee motivation”.

In the dimension “masculinity vs. femininity”, all independent variables appear to relate moderately (0.171< r < 0.380), yet highly significantly (ρ< 0.010) to both dependant variables. In every case, the correlation coefficient between the dependent variables and the independent variable V44 “employee motivation” is higher than in the case of the dependent variable V46 “target-prioritising”.

In the dimension “long-term orientation”, all independent variables appear to relate moderately (0.140< r < 0.412), yet significant (ρ< 0.050) or highly significantly (ρ< 0.010) to both dependant variables. In every case, the correlation coefficient between the independent variables and the dependent variable V44 “employee motivation” is clearly lower than in the case of the dependent variable V46 “target-prioritising”.

Finally, all independent variables of “general pay perception” appear to relate moderately (0.153< r < 0.262), yet highly significantly (ρ< 0.010) to the dependent variable V44. In four out of five cases, the correlation of the independent variables and the dependent variable V46 is moderate (0.132< r < 0.147), yet significant (ρ< 0.050).

Altogether, the empirical findings indicate the following effects of the cultural factors on perceptions of target-based pay.

The simple regression analysis suggests that all observed independent variables have a strong and significant association with both of the dependent variables. This confirms the findings of previous researches (Lertxundi & Landeta, 2011; Muduli, 2011).

In the cultural dimension “individualism vs. collectivism”, the results of the correlation analysis suggest a moderate, yet significant or highly significant correlation between two of the three independent variables for strong individualism and the outcome variable “target-prioritising. The correlations between the independent variables and the outcome variable “employee motivation” are weak and insignificant.
The findings imply that a high degree of individualism exerts a positive effect on perceptions of target-based pay in the aspect of target-prioritising of the individuals, but not in the employee motivation. Previous literature also predicts a positive effect of strong individualism (Lertxundi & Landeta, 2011; Muduli, 2011), although the positive effect is mainly expected in the employee motivation.

In the cultural dimension “power distance”, the results of the correlation analysis suggest a moderate and strongly significant correlation between both independent variables for small power distance and the outcome variable “target-prioritising”. The correlations between the independent variables and the outcome variable “employee motivation” are weak and insignificant.

The empirical findings may be interpreted as that a low degree of power distance exerts a positive effect on perceptions of target-based pay in the aspect of target-prioritising of the individuals, but not in the employee motivation. While previous literature also predicts a positive effect of small power distance on perceptions of target-based pay (Lertxundi & Landeta, 2011; Aycan, et al., 2000; Martocchio, 2006), the positive effect is mainly expected in the employee motivation.

In the dimension “uncertainty avoidance”, the correlation between the independent variables for strong uncertainty avoidance and both outcome variables appears to be moderate and significant or strongly significant. Those findings imply that a high degree of uncertainty avoidance exerts a positive effect on perceptions of target-based pay.

The results of the empirical study support the theory by Schmidt (2007: 47) that strong uncertainty avoidance is related to target-prioritising of the employee motivation, therefore strengthens the positive effect of target-based pay. On the other hand, the findings contradict the assumption of some previous researchers that strong uncertainty avoidance causes the preference of fixed pay thus has a negative impact on perceptions of target-based pay (Lertxundi & Landeta, 2011; Muduli, 2011).
In the dimension “masculinity vs. femininity”, the statistics indicate a strongly significant correlation between all independent variables and both outcome variables. There is no distinguishable domination of the masculine or feminine values among the independent variables.

In the previous literature, there are disputes about the effects of masculinity and femininity of the cultures. While some authors associate strong masculinity with efficiency of target-based pay and femininity as unfitness for such an incentive system (Lertxundi & Landeta, 2011; Muduli, 2011), others argue that feminine values related to social recognition may boost the performance thus have a positive effect on target-based pay (Brickson, 2000; Rey-Biel, 2008).

The empirical findings of this study may be concluded that a high degree of influence of masculine values, as well as a set of feminine values leading to social recognition, exerts a positive effect on perceptions of target-based pay.

In the dimension “long-term orientation”, the correlation analysis shows that there is a moderate and predominantly strongly significant correlation between all independent variables representing strong long-term orientation and both outcome variables.

The findings imply that a high degree of long-term orientation exerts a positive effect on perceptions of target-based pay. This conforms to the results of the previous studies (Lertxundi & Landeta, 2011; Muduli, 2011).

Finally, in the dimension “general pay perception”, the statistics indicate a moderate, yet significant or strongly significant correlation between all independent variables representing a strong general pay perception and both outcome variables “employee motivation. The findings suggest that a high degree of general pay perception exerts a positive effect on perceptions of target-based pay. This supports the assumption of the practitioners (see Section 2.5).

Concluding the findings in Sections 4.3 – 4.6, all cultural factors defined in the survey instrument are instinctive dimensions of cultural influence and each cultural factor has a moderate yet significant influence on perceptions of target-based pay.
<table>
<thead>
<tr>
<th>Cultural dimension(s)</th>
<th>Hypothesis</th>
<th>Statistical findings</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>All influential cultural factors</td>
<td><strong>Hypothesis 1</strong>: All cultural factors defined in this thesis are distinctive dimensions of cultural influence. Higher average within-dimension correlation and a lower average cross-dimension correlation for each attribute of the cultural factors; high R square values (&gt; .800) and statistical significance (p&lt; 0.001).</td>
<td>All cultural factors in the survey instrument are distinctive dimensions of cultural influence.</td>
<td></td>
</tr>
<tr>
<td>All influential cultural factors</td>
<td><strong>Hypothesis 2</strong>: The cultural factors have an impact on perceptions of target-based pay. All cultural factors have moderate, yet significant to highly significant correlation with the outcome variables.</td>
<td>The cultural factors have an impact on perceptions of target-based pay.</td>
<td></td>
</tr>
<tr>
<td>Individualism vs. collectivism</td>
<td><strong>Hypothesis 2a</strong>: A high degree of individualism exerts a positive effect on perceptions of target-based pay. Weak correlation between predictor variables representing high degree of individualism and dependent variable “employee motivation”; moderate and significant correlation (p&lt; 0.050) between predictor variables and dependent variable “target-prioritising”.</td>
<td>High degree of individualism exerts a positive effect on perceptions of target-based pay. Moderate effect of cultural dimension mainly in the aspect of prioritising targets in daily operations.</td>
<td></td>
</tr>
<tr>
<td>Power distance</td>
<td><strong>Hypothesis 2b</strong>: A low degree of power distance exerts a positive effect on perceptions of target-based pay. Weak correlation between predictor variables representing low power distance and dependent variable “employee motivation”; moderate and highly significant (p&lt; 0.010) correlation between predictor variables and dependent variable “target-prioritising”.</td>
<td>Low degree of power distance exerts a positive effect on perceptions of target-based pay. Moderate effect of cultural dimension mainly in the aspect of prioritising targets in daily operations.</td>
<td></td>
</tr>
<tr>
<td>Uncertainty avoidance</td>
<td><strong>Hypothesis 2c</strong>: A high degree of uncertainty avoidance exerts a positive effect on perceptions of target-based pay. Moderate correlation between predictor variables representing high uncertainty avoidance and both dependent variables. Correlation is significant (p&lt; 0.050) on dependent variable “employee motivation” and highly significant (p&lt; 0.010) on “target-prioritising”.</td>
<td>High degree of uncertainty avoidance exerts a positive effect on perceptions of target-based pay. Moderate effect of cultural dimension on employee motivation is weaker than on prioritising targets in daily operations.</td>
<td></td>
</tr>
</tbody>
</table>
Altogether, the Hypotheses 1 and 2 are fully supported by the empirical findings.

4.9 VERIFICATION OF CULTURAL INFLUENCE ON TBP PERCEPTIONS

In autumn 2013, further discussions took place to verify the empirical findings on the influence of the cultural factors in the survey instrument on perceptions of target-based pay.

The identification of the cultural factors in this thesis was conducted as a combined result of the literature review and the subsequent discussions with the practitioners of the expert panel. The dimensionality of the cultural factors was verified by the factor analysis in Section 4.2. The reliability of the cultural factors was positively tested in Section 4.4 by the relatively high
internal consistency of the cultural factor scale. Finally, the construct validity of the cultural factors was supported by the higher convergent validity than the discriminant validity values in Section 4.5. Thus, Hypothesis 1 was supported by previous literature, panel discussions and empirical findings.

**Hypothesis 1:** All cultural factors defined in this thesis are distinctive dimensions of cultural influence.

According to the empirical findings in Section 4.6, the attributes for the cultural dimension “individualism vs. collectivism” is significantly associated with the employees’ perceptions of target-based pay. The correlations analysis suggests a moderate, yet significant effect of individualism on the employees’ positive perceptions of target-based pay in the aspect of task-prioritising. This effect was confirmed by the panel discussions based on previous experience of the practitioners. There have also been discussions among the panel members on the reasons behind the weak correlation between individualism and employee motivation. One explanation is that it is more difficult to motivate the employees of a high degree of individualism who are not ready to help their co-workers. Thus Hypothesis 2a is partially supported by the empirical findings and the panel discussions.

**Hypothesis 2a:** A high degree of individualism exerts a positive effect on perceptions of target-based pay.

Similarly, the empirical findings in Section 4.6 suggest that the attributes for the cultural dimension “power distance” is significantly associated with the employees’ perceptions of target-based pay. The correlations analysis suggests a moderate, yet highly significant effect of small power distance on the employees’ positive perceptions of target-based pay in the aspect of task-prioritising. This effect was confirmed by the panel discussions based on previous experience of the practitioners.
There have been discussions among the panel members on the reasons behind the weak correlation between small power distance and employee motivation. One possible reason is that reference comparisons representing small power distance are negative control instances, i.e. if the expectation is not met, the employee will be discouraged; if the expectation is met, then he/she will not be more motivated.

As a whole, Hypothesis 2b is partially supported by the empirical findings and the panel discussions.

**Hypothesis 2b:** Small power distance exerts a positive effect on perceptions of target-based pay.

Likewise, the empirical findings in Section 4.6 suggest that the attributes for the cultural dimension “uncertainty avoidance” is significantly associated with the employees’ perceptions of target-based pay. The correlations analysis suggests a moderate, yet highly significant or significant effect of strong uncertainty avoidance on both aspects of the employees’ positive perceptions of target-based pay. Such effects were confirmed by the panel discussions based on previous experience of the practitioners. The positive effect of this cultural factor is stronger in the aspect of prioritising targets than in employee motivation, which was reasoned by the practitioners with the logical link between strong uncertainty avoidance and the target-orientation. Thus, Hypothesis 2c is fully supported by the empirical findings and the panel discussions.

**Hypothesis 2c:** Strong uncertainty avoidance exerts a positive effect on perceptions of target-based pay.

The empirical evidence in Section 4.6 indicates that the attributes for the cultural dimension “masculinity vs. femininity” is significantly associated with the employees’ perceptions of target-based pay. The correlations analysis suggests a moderate, yet highly significant effect of the feminine and the masculine values on both aspects of the employees’ positive perceptions of
target-based pay. However, the effect of employee motivation seems stronger than the effect of task-prioritising, especially with respect of the feminine values.

The results of the empirical findings were confirmed by the panel. To the expert panel, as described in previous literature (Brickson, 2000; Rey-Biel, 2008), there was a stronger logical link between the feminine social values and the employee motivation. Therefore, the influence of the feminine values on employee motivation was stronger than on targets prioritising.

As a whole, Hypothesis 2d is fully supported by the empirical findings and the panel discussions.

**Hypothesis 2d:** Strong influence of masculine values, as well as that of a set of feminine values leading to social recognition, exerts a positive effect on perceptions of target-based pay.

The empirical evidence in Section 4.6 suggests that the attributes for the cultural dimension “long-term orientation” is significantly associated with the employees’ perceptions of target-based pay. The correlations analysis suggests a moderate, yet highly significant effect of the cultural factor long-term orientation on both aspects of the employees’ positive perceptions of target-based pay. However, the effect of task-prioritising seems stronger than the effect of employee motivation.

The results of the empirical findings were confirmed by the panel. To the practitioners, long-term orientation focuses on events in the future. This might explain why the immediate motivation effect of the bonus is weaker than the positive effect of target-prioritising which benefits the self-organisation in the future.

Altogether, Hypothesis 2e is fully supported by the empirical findings and the panel discussions.

**Hypothesis 2e:** Strong long-term orientation exerts a positive effect on perceptions of target-based pay.
The empirical evidence in Section 4.6 suggests that the attributes for the cultural dimension “general pay perception” is significantly associated with the employees’ perceptions of target-based pay. The correlations analysis suggests a moderate, yet highly significant or significant effect of the cultural factor “general pay perception” on both aspects of the employees’ positive perceptions of target-based pay. However, the effect of employee motivation seems stronger than the effect of task-prioritising. The results of the empirical findings were confirmed by the panel. To the practitioners, the general pay perception reflects the boosting effect of financial incentives, thus the logical link between general pay perception and the motivation effect is stronger than with the benefit of target-prioritising.

Altogether, Hypothesis 2f is fully supported by the empirical findings and the panel discussions.

**Hypothesis 2f:** Strong general pay perception exerts a positive effect on perceptions of target-based pay.

Comprising the results of verification of Hypotheses H2a-H2f, it may be said that the hypothesis, that the cultural factors have an impact on perceptions of target-based pay, has been supported by both empirical findings and the panel discussions.

**Hypothesis 2:** The cultural factors have an impact on perceptions of target-based pay.

Thus both Hypothesis 1 and Hypothesis 2 supported by the empirical findings were confirmed by the panel discussions.

The following is an overview of the results of the panel discussions on the empirical findings.

<table>
<thead>
<tr>
<th>Cultural dimension(s)</th>
<th>Hypothesis</th>
<th>Empirical findings</th>
<th>Panel interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>All influential cultural factors</td>
<td><strong>Hypothesis 1:</strong> All cultural factors defined in this thesis are distinctive dimensions of cultural influence.</td>
<td>All cultural factors in the survey instrument are distinctive dimensions of cultural influence.</td>
<td>Empirical findings confirmed by panel discussions.</td>
</tr>
<tr>
<td>All influential cultural factors</td>
<td>Hypothesis 2: The cultural factors have an impact on perceptions of target-based pay.</td>
<td>The cultural factors have an impact on perceptions of target-based pay.</td>
<td>Empirical findings confirmed by panel discussions.</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Individualism vs. collectivism</td>
<td>Hypothesis 2a: A high degree of individualism exerts a positive effect on perceptions of target-based pay.</td>
<td>High degree of individualism exerts a positive effect on perceptions of target-based pay. Moderate effect of cultural dimension mainly in the aspect of target-prioritising.</td>
<td>Positive effect of individualism on TBP perception. Weak correlation between individualism and employee motivation due to difficulty to motivate individualist employees who are not ready to help co-workers.</td>
</tr>
<tr>
<td>Large vs. Small power distance</td>
<td>Hypothesis 2b: Small power distance exerts a positive effect on perceptions of target-based pay.</td>
<td>Low degree of power distance exerts a positive effect on perceptions of target-based pay. Moderate effect of cultural dimension mainly in the aspect of target-prioritising.</td>
<td>Positive effect of individualism on TBP perception. Weak correlation between small power distance and employee motivation due to negative control effect of reference comparisons.</td>
</tr>
<tr>
<td>Strong vs. Weak uncertainty avoidance</td>
<td>Hypothesis 2c: Strong uncertainty avoidance exerts a positive effect on perceptions of target-based pay.</td>
<td>High degree of uncertainty avoidance exerts a positive effect on perceptions of target-based pay. Moderate effect of cultural dimension on employee motivation is weaker than on target-prioritising.</td>
<td>The positive effect stronger in target-prioritising, due to logical link between strong uncertainty avoidance and the target-orientation</td>
</tr>
<tr>
<td>Masculinity vs. Femininity</td>
<td>Hypothesis 2d: Strong influence of masculine values, as well as that of a set of feminine values leading to social recognition, exerts a positive effect on perceptions of target-based pay.</td>
<td>High degree of influence of masculine values, as well as a set of feminine values leading to social recognition, exerts a positive effect on perceptions of target-based pay. Moderate effect of cultural dimension on employee motivation is stronger than on target-prioritising.</td>
<td>Positive effect of individualism on TBP perception. The social values influence employee motivation, therefore the motivation effect stronger than target-prioritising.</td>
</tr>
<tr>
<td>Long-term vs. Short-term orientation</td>
<td>Hypothesis 2e: Strong long-term orientation exerts a positive effect on perceptions of target-based pay.</td>
<td>High degree of perceived importance of pay exerts a positive effect on perceptions of target-based pay. Moderate effect of cultural dimension on employee motivation is weaker than on target-prioritising.</td>
<td>Positive effect of individualism on TBP perception. Due to focus on future events, immediate motivation effect of the bonus is weaker than target-prioritising which benefits the self-organisation in the future.</td>
</tr>
</tbody>
</table>
To summarize Chapter 4, a 56-item survey instrument was developed to measure the influence of cultural factors on perceptions of target-based pay. The statistical analyses of the survey data indicate high reliability and validity, while a 6-dimensional scale emerged based on the empirical evidence. The dimensions of this assessment tool to measure the cultural influence on perceptions of target-based pay are subsequently mapped with the extended VSM framework as described in Chapter 2 with the labels: “individualism vs. collectivism”, “power distance”, “uncertainty avoidance”, “masculinity and femininity”, “long-term orientation” and “general pay perception”.

The results of the regression analysis and the correlation analysis suggest a moderate, yet significant influence of the above cultural factors on perceptions of target-based pay.

The statistical findings were subsequently verified by panel discussions. H1 & H2 were both supported by the empirical evidence and the panel discussions.

Hypothesis 1: The cultural factors defined in this thesis are distinctive dimensions of cultural influence on the perceptions of target-based pay.

Hypothesis 2: The cultural factors have an impact on perceptions of target-based pay.

The next chapter will explore the influence of the cultural factors on perceptions of target-based pay in a cross-country context.
5 CROSS-COUNTRY COMPARISON

In line with the research design, this chapter focuses on the impact of different cultural characteristics of Germany, the Czech Republic and China on perceptions of target-based pay.

The regional cultural characteristics are examined based on the descriptive statistics on the cultural dimensions “Individualism vs. collectivism”, “power distance”, “uncertainty avoidance”, “masculinity vs. femininity”, “long-term orientation” and “general pay perception”. Moreover, the regional difference in the perceptions of target-based pay is analysed based on the descriptive statistics on the outcome variables “employee motivation” and “target-prioritising”. Finally, the empirical findings are verified and validated by the outcome of panel discussions held in autumn 2013.

5.1 INDIVIDUALISM VS. COLLECTIVISM

In order to assess the regional differences in the cultural dimension individualism vs. collectivism, the descriptive statistics on the attributes for this cultural factor as described in Chapter 3 were explored. As discussed in Section 4.3, a high value of the independent variables suggests a high degree of individualism. The results are summarized in the following table.

<table>
<thead>
<tr>
<th>Country</th>
<th>N</th>
<th>Mean</th>
<th>Std. Error</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
<th>Median</th>
<th>Std. Deviation</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>21</td>
<td>1.52</td>
<td>.164</td>
<td>1.18</td>
<td>1.87</td>
<td>1.00</td>
<td>.750</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>109</td>
<td>2.75</td>
<td>.100</td>
<td>2.55</td>
<td>2.95</td>
<td>3.00</td>
<td>1.047</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>V27 China</td>
<td>308</td>
<td>2.67</td>
<td>.045</td>
<td>2.58</td>
<td>2.75</td>
<td>3.00</td>
<td>.796</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>438</td>
<td>2.63</td>
<td>.043</td>
<td>2.55</td>
<td>2.72</td>
<td>3.00</td>
<td>.897</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>N</th>
<th>Mean</th>
<th>Std. Error</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
<th>Median</th>
<th>Std. Deviation</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>21</td>
<td>1.48</td>
<td>.178</td>
<td>1.11</td>
<td>1.85</td>
<td>1.00</td>
<td>.814</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>110</td>
<td>2.75</td>
<td>.093</td>
<td>2.57</td>
<td>2.94</td>
<td>3.00</td>
<td>.979</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>V28 China</td>
<td>309</td>
<td>2.70</td>
<td>.053</td>
<td>2.59</td>
<td>2.80</td>
<td>3.00</td>
<td>.939</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>440</td>
<td>2.65</td>
<td>.047</td>
<td>2.56</td>
<td>2.74</td>
<td>3.00</td>
<td>.978</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>N</th>
<th>Mean</th>
<th>Std. Error</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
<th>Median</th>
<th>Std. Deviation</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>25</td>
<td>2.12</td>
<td>.194</td>
<td>1.72</td>
<td>2.52</td>
<td>2.00</td>
<td>.971</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>109</td>
<td>2.83</td>
<td>.082</td>
<td>2.67</td>
<td>3.00</td>
<td>3.00</td>
<td>.855</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>V30 China</td>
<td>315</td>
<td>2.76</td>
<td>.048</td>
<td>2.67</td>
<td>2.85</td>
<td>3.00</td>
<td>.844</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>449</td>
<td>2.74</td>
<td>.041</td>
<td>2.66</td>
<td>2.82</td>
<td>3.00</td>
<td>.866</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

V27 = I help nobody but will take help offered by others
For all three measures of individualism, both the means and the confidence intervals around the means for the Czech Republic appear slightly higher than those for China. While the medians, minimums and maximums are identical in the Czech Republic and China, the Czech Republic displays in one of three cases significant higher and in the other two cases, slightly higher standard deviations than the other two countries. This suggests that the degree of individualism in the Czech Republic and China are similar, however slightly higher in the Czech Republic. The higher standard deviation indicates that the individual differences among the employees are higher in the Czech Republic.

For all three measures, the means for Germany appear to be the lowest with a large difference to the average of all three countries. The confidence intervals around the means appear much lower and there is no overlap with the other two countries. While the minimums for all countries appear identical in all three cases (“1”), the maximums are identical in two cases (“4”) and in the third case, lower for Germany than for the other two countries (“3” compared to “4”). On a scale from 1 to 4, the median values for Germany of “1” in two out of three cases and “2” in the other case indicate that the majority of employees in Germany are of a relatively low degree of individualism (the median value is “3” for the Czech Republic and China in all three cases). In two cases, Germany has the lowest standard deviation values. In the third case, the standard deviation of Germany appears moderately higher than the other two countries.

Concluding the above findings, there seems to be a moderately low degree of individualism in Germany and a moderately high degree of individualism in the Czech Republic and China. Besides, the differences in the individual attitudes appear to be relatively high in the Czech Republic and moderate in Germany and China.
5.2 POWER DISTANCE

In order to assess the regional differences in the cultural dimension *power distance*, the descriptive statistics on the attributes for this cultural factor as described in the research design were explored. As discussed in Section 4.3, both variables measure the perceived importance of reference comparison, thus a high value of both variables suggests a high degree of small power distance. The results are summarized in the following table.

<table>
<thead>
<tr>
<th>Country</th>
<th>N</th>
<th>Mean</th>
<th>Std. Error</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
<th>Median</th>
<th>Std. Deviation</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>V8 Germany</td>
<td>28</td>
<td>2.93</td>
<td>.135</td>
<td>2.65</td>
<td>3.21</td>
<td>3.00</td>
<td>.716</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>111</td>
<td>3.52</td>
<td>.072</td>
<td>3.38</td>
<td>3.67</td>
<td>4.00</td>
<td>.761</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>China</td>
<td>315</td>
<td>3.15</td>
<td>.043</td>
<td>3.06</td>
<td>3.23</td>
<td>3.00</td>
<td>.756</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>454</td>
<td>3.22</td>
<td>.036</td>
<td>3.15</td>
<td>3.30</td>
<td>3.00</td>
<td>.774</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country</th>
<th>N</th>
<th>Mean</th>
<th>Std. Error</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
<th>Median</th>
<th>Std. Deviation</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>28</td>
<td>3.04</td>
<td>.131</td>
<td>2.77</td>
<td>3.30</td>
<td>3.00</td>
<td>.693</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>107</td>
<td>3.39</td>
<td>.081</td>
<td>3.23</td>
<td>3.55</td>
<td>4.00</td>
<td>.833</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>China</td>
<td>310</td>
<td>3.14</td>
<td>.045</td>
<td>3.05</td>
<td>3.23</td>
<td>3.00</td>
<td>.800</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>445</td>
<td>3.20</td>
<td>.038</td>
<td>3.12</td>
<td>3.27</td>
<td>3.00</td>
<td>.808</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

V8= My pay compared with similar jobs in other companies  
V9= My pay compared with other jobs in our company

Table 5-2 Cross-country comparison data – power distance

For both measures of power distance, the means for the Czech Republic appear the highest among the three countries. The confidence intervals around the means for the Czech Republic appear higher than those for the other two countries. In one of both cases, there is an overlap at the lower boundary for the Czech Republic and the upper boundary for Germany. While the minimums and maximums are identical in all three countries, the Czech Republic exhibits a higher median (“4” compared to “3”).

The means for Germany appear to be lower than for the other two countries. The confidence intervals around the means for Germany and China seem to be similar and there is a big range of overlap at the higher boundary for Germany. The median, minimum and maximum for both countries appear to be identical in both cases.
On a scale from 1 to 4, the median value of “3” (for Germany and China) or “4” (for the Czech Republic) suggest that the majority of employees in all three countries share the tendency towards a low power distance. The standard deviations seem moderate for all three countries in both cases, while in one case the standard deviation for Germany seems moderately lower than in the other two countries. This implies moderate individual differences in this cultural dimension.

The above findings imply that all three countries share the tendency to small power distance. However, the power distance in Germany seems larger than in the Czech Republic and China. Furthermore, there seem to be moderate individual differences in each measure for all three countries.

5.3 UNCERTAINTY AVOIDANCE

In order to assess the regional differences in the cultural dimension uncertainty avoidance, the descriptive statistics on the attributes for this cultural factor as described in Chapter 3 were explored. As discussed in Section 4.3, a high value of all four variables suggests a high degree of strong uncertainty avoidance. The results are summarized in the following table.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>26</td>
<td>3.54</td>
<td>.114</td>
<td>3.30</td>
<td>3.77</td>
<td>4.00</td>
<td>.582</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>114</td>
<td>3.66</td>
<td>.051</td>
<td>3.56</td>
<td>3.76</td>
<td>4.00</td>
<td>.546</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>China V18</td>
<td>314</td>
<td>3.18</td>
<td>.031</td>
<td>3.12</td>
<td>3.24</td>
<td>3.00</td>
<td>.550</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>454</td>
<td>3.32</td>
<td>.028</td>
<td>3.27</td>
<td>3.38</td>
<td>3.00</td>
<td>.589</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Germany</td>
<td>27</td>
<td>3.07</td>
<td>.168</td>
<td>2.73</td>
<td>3.42</td>
<td>3.00</td>
<td>.874</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>115</td>
<td>3.47</td>
<td>.073</td>
<td>3.32</td>
<td>3.61</td>
<td>4.00</td>
<td>.787</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>China V21</td>
<td>310</td>
<td>2.97</td>
<td>.037</td>
<td>2.90</td>
<td>3.04</td>
<td>3.00</td>
<td>.645</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>452</td>
<td>3.10</td>
<td>.034</td>
<td>3.04</td>
<td>3.17</td>
<td>3.00</td>
<td>.730</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Germany</td>
<td>27</td>
<td>3.56</td>
<td>.111</td>
<td>3.33</td>
<td>3.78</td>
<td>4.00</td>
<td>.577</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>109</td>
<td>3.55</td>
<td>.068</td>
<td>3.42</td>
<td>3.69</td>
<td>4.00</td>
<td>.713</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>China V23</td>
<td>318</td>
<td>3.13</td>
<td>.037</td>
<td>3.05</td>
<td>3.20</td>
<td>3.00</td>
<td>.653</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>454</td>
<td>3.25</td>
<td>.032</td>
<td>3.19</td>
<td>3.32</td>
<td>3.00</td>
<td>.690</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>V18</td>
<td>V21</td>
<td>V23</td>
<td>V32</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>26</td>
<td>3.46</td>
<td>.114</td>
<td>3.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Czech</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Republic</td>
<td>111</td>
<td>3.19</td>
<td>.068</td>
<td>3.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V32 China</td>
<td>318</td>
<td>2.93</td>
<td>.043</td>
<td>2.85</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>455</td>
<td>3.02</td>
<td>.036</td>
<td>2.95</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5-3  Cross-country comparison data – uncertainty avoidance

For two out of four measures of uncertainty avoidance, the means for Germany appear higher than those for the other countries. In both cases, there is a clear overlap of the confidence intervals around the means for Germany and the Czech Republic. In those two cases, the confidence intervals around the means for China appear lower than those for the Czech Republic and Germany without overlap. The minimums for Germany appear higher than for the Czech Republic and China (“2” compared to “1”), although the maximums are identical for all three countries (“4”). In one of the two cases, the median for Germany and the Czech Republic is higher than for China (“4” compared to “3”) and in the other case, the median is identical for all three countries. In both cases, the standard deviations for Germany appear lower than those for the other two countries.

For the other two measures of uncertainty avoidance, the means for the Czech Republic appear higher than those for Germany and China. In both cases, there is a clear overlap of the confidence intervals around the means for the Czech Republic and Germany and there is no overlap for the Czech Republic and China. The minimum is in one case higher for Germany than for the other two countries (“2” compared with “1”), while the maximum is identical for all three countries. The median for the Czech Republic is in one of those two cases higher than that for both other countries and in the other case, identical with that for Germany, but higher than for China. The standard deviations are moderately higher for Germany and slightly lower for the Czech Republic and China.
On a scale from “1” to “4”, the means, as well as the median values for all three countries appear clearly at the high end between “3” and “4”.

Concluding the findings above, the employees in Germany, the Czech Republic and China seem to share the tendency to strong uncertainty avoidance. However, the uncertainty avoidance appears to be a relatively strong in Germany and the Czech Republic and moderately strong in China. The differences in the individual attitudes towards uncertainty avoidance appear to be moderate in all three countries.

5.4 **MASCULINITY VS. FEMININITY**

In order to assess the regional differences in the cultural dimension masculinity vs. femininity, the descriptive statistics on the attributes for this cultural factor as described in Chapter 3 were explored. As discussed in Section 4.3, V40, V41 and V42 represent feminine values, while V43 represents the masculine value. Thus a high score in V40, V41 and V42 implies a high degree of influence of feminine values and a high score in V43, of masculine values. The results are summarized in the following table.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>V40</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>27</td>
<td>3.04</td>
<td>.136</td>
<td>2.76</td>
<td>3.32</td>
<td>3.00</td>
<td>.706</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>14</td>
<td>3.30</td>
<td>.086</td>
<td>3.13</td>
<td>3.47</td>
<td>4.00</td>
<td>.921</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>China</td>
<td>316</td>
<td>2.82</td>
<td>.046</td>
<td>2.73</td>
<td>2.91</td>
<td>3.00</td>
<td>.814</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>457</td>
<td>2.95</td>
<td>.040</td>
<td>2.87</td>
<td>3.03</td>
<td>3.00</td>
<td>.860</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td><strong>V41</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>25</td>
<td>2.36</td>
<td>.199</td>
<td>1.95</td>
<td>2.77</td>
<td>3.00</td>
<td>.995</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>112</td>
<td>3.20</td>
<td>.072</td>
<td>3.05</td>
<td>3.34</td>
<td>3.00</td>
<td>.757</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>China</td>
<td>323</td>
<td>2.92</td>
<td>.042</td>
<td>2.84</td>
<td>3.00</td>
<td>3.00</td>
<td>.747</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>460</td>
<td>2.96</td>
<td>.037</td>
<td>2.88</td>
<td>3.03</td>
<td>3.00</td>
<td>.785</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td><strong>V42</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>23</td>
<td>2.48</td>
<td>.226</td>
<td>2.01</td>
<td>2.95</td>
<td>2.00</td>
<td>1.082</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>112</td>
<td>3.13</td>
<td>.068</td>
<td>2.99</td>
<td>3.26</td>
<td>3.00</td>
<td>.724</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>China</td>
<td>323</td>
<td>2.89</td>
<td>.044</td>
<td>2.81</td>
<td>2.98</td>
<td>3.00</td>
<td>.783</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>458</td>
<td>2.93</td>
<td>.037</td>
<td>2.85</td>
<td>3.00</td>
<td>3.00</td>
<td>.797</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td><strong>V43</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>26</td>
<td>3.12</td>
<td>.169</td>
<td>2.77</td>
<td>3.46</td>
<td>3.00</td>
<td>.864</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>113</td>
<td>3.24</td>
<td>.073</td>
<td>3.10</td>
<td>3.38</td>
<td>3.00</td>
<td>.771</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 5-4 Cross-country comparison data – masculinity vs. femininity

For all three measures of femininity, the means for the Czech Republic appear higher than those for the other two countries. In one out of the three cases, there is a slight overlap of the confidence intervals around the means for the Czech Republic and Germany, otherwise no further overlap. The minimums and the maximums are identical for all three countries in those three cases. The medians are identical for all three countries in one case, higher for the Czech Republic in one case and lower for Germany in the third case. The standard deviations appear higher for Germany than for the other two countries in two out of the three cases and higher for the Czech Republic in the third case.

Compared to Germany, the means for China appear higher in two out of the three measures of femininity and lower in the third case. There is a clear overlap of the confidence intervals around the means for China and Germany in two of the three cases, while in the third case the confidence interval for Germany appears lower than that for China without overlap.

For the measure of masculinity, the mean for the Czech Republic appears slightly higher than that for Germany and China. There is an overlap of the confidence interval around the mean for the Czech Republic and Germany, but no overlap for China. The minimum, maximum as well as median are identical for all three countries. There is also a clear overlap of the confidence intervals around the means for all three countries. The standard deviation is slightly higher for Germany than for the other two countries.
The mean of the measure for masculinity is lower than the means of the measures for femininity for Germany and China. For the Czech Republic, the mean of the measures for masculinity and femininity appear to be at a similar level.

Concluding the above findings, there seems to be a moderate masculinity in Germany and in China, while the influence of masculine and feminine values seem to be a similar level in the Czech Republic. The differences in the individual attitudes appear to be higher in Germany than in the other two countries.

5.5 LONG-TERM ORIENTATION

In order to assess the regional differences in the cultural dimension long-term orientation, the descriptive statistics on the attributes for this cultural factor as described in Chapter 3 were explored. As discussed in Section 4.3, all four output measures represent aspects of long-term orientation. Therefore, a high value of all four variables is interpreted as a higher degree of long-term orientation. The results are summarized in the following table.

<table>
<thead>
<tr>
<th>Country</th>
<th>N</th>
<th>Mean</th>
<th>Std. Error</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
<th>Median</th>
<th>Std. Deviation</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>28</td>
<td>3.21</td>
<td>.107</td>
<td>2.99</td>
<td>3.43</td>
<td>3.00</td>
<td>.568</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>114</td>
<td>3.15</td>
<td>.069</td>
<td>3.01</td>
<td>3.28</td>
<td>3.00</td>
<td>.731</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>China</td>
<td>307</td>
<td>2.91</td>
<td>.045</td>
<td>2.82</td>
<td>2.99</td>
<td>3.00</td>
<td>.793</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>449</td>
<td>2.99</td>
<td>.036</td>
<td>2.91</td>
<td>3.06</td>
<td>3.00</td>
<td>.773</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Germany</td>
<td>27</td>
<td>3.11</td>
<td>.111</td>
<td>2.88</td>
<td>3.34</td>
<td>3.00</td>
<td>.577</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>112</td>
<td>3.24</td>
<td>.060</td>
<td>3.12</td>
<td>3.36</td>
<td>3.00</td>
<td>.633</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>China</td>
<td>310</td>
<td>2.89</td>
<td>.045</td>
<td>2.80</td>
<td>2.98</td>
<td>3.00</td>
<td>.795</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>449</td>
<td>2.99</td>
<td>.036</td>
<td>2.92</td>
<td>3.06</td>
<td>3.00</td>
<td>.760</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Germany</td>
<td>27</td>
<td>3.33</td>
<td>.107</td>
<td>3.11</td>
<td>3.55</td>
<td>3.00</td>
<td>.555</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>115</td>
<td>3.11</td>
<td>.067</td>
<td>2.98</td>
<td>3.25</td>
<td>3.00</td>
<td>.723</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>China</td>
<td>304</td>
<td>2.89</td>
<td>.047</td>
<td>2.80</td>
<td>2.98</td>
<td>3.00</td>
<td>.821</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>446</td>
<td>2.97</td>
<td>.038</td>
<td>2.90</td>
<td>3.05</td>
<td>3.00</td>
<td>.793</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Germany</td>
<td>27</td>
<td>2.89</td>
<td>.111</td>
<td>2.66</td>
<td>3.12</td>
<td>3.00</td>
<td>.577</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>115</td>
<td>3.12</td>
<td>.055</td>
<td>3.01</td>
<td>3.23</td>
<td>3.00</td>
<td>.595</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>China</td>
<td>310</td>
<td>2.96</td>
<td>.045</td>
<td>2.87</td>
<td>3.05</td>
<td>3.00</td>
<td>.795</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>452</td>
<td>3.00</td>
<td>.035</td>
<td>2.93</td>
<td>3.07</td>
<td>3.00</td>
<td>.740</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>-------</td>
<td>--</td>
<td>--</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>V50</td>
<td>New skills through new tasks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V51</td>
<td>New skills through internal trainings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V52</td>
<td>New skills through external trainings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V53</td>
<td>Promotion opportunity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5-5  Cross-country comparison data – long-term vs. short-term orientation

For two out of four measures of long-term orientation, the means for Germany appear higher than those for the other countries. In both cases, there is a clear overlap of the confidence intervals around the means for Germany and the Czech Republic. In those two cases, the confidence intervals around the means for China appear below those for the Czech Republic and Germany without overlap. The standard deviations are moderate, but higher for China than for the Czech Republic and Germany.

In the other two cases, the means for the Czech Republic appear higher than those for the other countries. In both cases, there is a clear overlap of the confidence intervals around the means for Germany and the Czech Republic. In one of the two cases, the confidence interval around the mean for China does not overlap that for the Czech Republic and Germany substantially. In the other case, the confidence interval around the means for China overlaps that for the Czech Republic insubstantially. The standard deviations are moderate, but higher for China than for the Czech Republic and Germany.

For all four measures of long-term orientation, the minimums for Germany appear higher than those for the Czech Republic and China (“2” compared to “1”), although the maximums and the medians are identical for all three countries.

For Germany, the mean of the attribute V53 (“Promotion opportunity”) is lower than those of the other measures of long-term orientation.

Altogether, the empirical evidence suggests a tendency to long-term orientation in Germany, the Czech Republic and China. The degree of long-term orientation seems higher in Germany and the Czech Republic than in China. However, the interest for promotion opportunity seems to be lower in Germany compared with other measures of long-term orientation. The differences in
the individual attitudes appear to be moderate in all three countries although higher in China than in the other two countries.

5.6 GENERAL PAY PERCEPTION

In order to assess the regional differences in the cultural dimension general pay perception, the descriptive statistics on the attributes for this cultural factor as described in Chapter 3 were explored. As discussed in Section 4.3, there are altogether five attributes in the assessment instrument used to measure general pay perception. A high score represents a high degree of perceived importance of the attribute of pay. The results are summarized in the following table.

<table>
<thead>
<tr>
<th>Country</th>
<th>N</th>
<th>Mean</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
<th>Median</th>
<th>Std. Deviation</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany The Czech Republic</td>
<td>28</td>
<td>3.21</td>
<td>.149</td>
<td>2.91</td>
<td>3.52</td>
<td>3.00</td>
<td>.787</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>117</td>
<td>3.79</td>
<td>.051</td>
<td>3.68</td>
<td>3.89</td>
<td>4.00</td>
<td>.554</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>315</td>
<td>3.37</td>
<td>.040</td>
<td>3.29</td>
<td>3.45</td>
<td>3.00</td>
<td>.703</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>460</td>
<td>3.47</td>
<td>.033</td>
<td>3.40</td>
<td>3.53</td>
<td>4.00</td>
<td>.699</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Germany The Czech Republic</td>
<td>28</td>
<td>3.21</td>
<td>.140</td>
<td>2.93</td>
<td>3.50</td>
<td>3.00</td>
<td>.738</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>116</td>
<td>3.69</td>
<td>.054</td>
<td>3.58</td>
<td>3.80</td>
<td>4.00</td>
<td>.581</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>296</td>
<td>3.42</td>
<td>.036</td>
<td>3.35</td>
<td>3.49</td>
<td>3.00</td>
<td>.611</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>440</td>
<td>3.48</td>
<td>.030</td>
<td>3.42</td>
<td>3.54</td>
<td>4.00</td>
<td>.626</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Germany The Czech Republic</td>
<td>20</td>
<td>2.85</td>
<td>.182</td>
<td>2.47</td>
<td>3.23</td>
<td>3.00</td>
<td>.813</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>113</td>
<td>3.61</td>
<td>.058</td>
<td>3.50</td>
<td>3.73</td>
<td>4.00</td>
<td>.619</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>302</td>
<td>3.22</td>
<td>.040</td>
<td>3.14</td>
<td>3.29</td>
<td>3.00</td>
<td>.689</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>435</td>
<td>3.30</td>
<td>.034</td>
<td>3.23</td>
<td>3.37</td>
<td>3.00</td>
<td>.705</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Germany The Czech Republic</td>
<td>28</td>
<td>3.18</td>
<td>.155</td>
<td>2.86</td>
<td>3.50</td>
<td>3.00</td>
<td>.819</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>118</td>
<td>3.69</td>
<td>.053</td>
<td>3.59</td>
<td>3.80</td>
<td>4.00</td>
<td>.577</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>307</td>
<td>3.51</td>
<td>.039</td>
<td>3.43</td>
<td>3.59</td>
<td>4.00</td>
<td>.683</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>453</td>
<td>3.54</td>
<td>.032</td>
<td>3.48</td>
<td>3.60</td>
<td>4.00</td>
<td>.676</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Germany The Czech Republic</td>
<td>24</td>
<td>2.17</td>
<td>.177</td>
<td>1.80</td>
<td>2.53</td>
<td>2.00</td>
<td>.868</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>111</td>
<td>3.53</td>
<td>.068</td>
<td>3.40</td>
<td>3.67</td>
<td>4.00</td>
<td>.711</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>308</td>
<td>3.08</td>
<td>.047</td>
<td>2.99</td>
<td>3.17</td>
<td>3.00</td>
<td>.827</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>443</td>
<td>3.14</td>
<td>.041</td>
<td>3.06</td>
<td>3.22</td>
<td>3.00</td>
<td>.856</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

V1 Net pay
V2 Expected raise
For all five measures of general pay perception, the means for the Czech Republic appear higher than those for the other countries. In all five cases, the confidence intervals around the means for the Czech Republic do not overlap with those for the other two countries. In all five cases, the minimums and maximums for all three countries are identical. The medians are in all five cases higher for the Czech Republic than for the other two countries (“4” compared to “3” or “2”).

For all five measures of general pay perception, the means for China appear higher than those for Germany. Besides, there is a clear overlap of the confidence intervals around the means for China and Germany in four out of five cases. In the fifth case, the confidence interval around the means for China does not overlap that for Germany. In three out of five cases, the medians are identical for Germany and China, while in the other two cases, the medians for Germany are lower (“2” and “3” compared with “3” and “4”). The standard deviations for Germany appear higher in all five cases than for the other two countries.

On a scale from “1” to “4”, the means, as well as the median values for all three countries appear clearly at the high end between “3” and “4” with the exception of perceived importance of tangible reward for Germany (“2”).

For Germany, the mean of the attribute V5 (“Tangible reward”) is clearly lower than those of the other measures of long-term orientation. A similar trend is observed for China.

Altogether, the empirical evidence suggests a high degree of general pay perception in all three observed countries. Besides, compared with the other countries, the degree of general pay perception is the highest in the Czech Republic, lower in China and the lowest in Germany. However, tangible incentive seems to be of less interest for Germany and China.
5.7 PERCEPTION OF TARGET-BASED PAY

In order to assess the regional differences in the perceptions of target-based pay, the descriptive statistics on the outcome variables of the survey instrument as described in Chapter 3 were explored. As discussed in Section 4.3, there are altogether two attributes in the assessment instrument used to measure the perception of target-based pay. A high score represents a high degree of positive perception of target-based pay. The results are summarized in the following table.

<table>
<thead>
<tr>
<th>Country</th>
<th>N</th>
<th>Mean</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>24</td>
<td>2.67</td>
<td>.167</td>
<td>2.32 - 3.01</td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>113</td>
<td>3.32</td>
<td>.064</td>
<td>3.19 - 3.45</td>
</tr>
<tr>
<td>V44 China</td>
<td>298</td>
<td>2.97</td>
<td>.038</td>
<td>2.90 - 3.05</td>
</tr>
<tr>
<td>Total</td>
<td>435</td>
<td>3.05</td>
<td>.033</td>
<td>2.98 - 3.11</td>
</tr>
<tr>
<td>Germany</td>
<td>24</td>
<td>2.71</td>
<td>.165</td>
<td>2.37 - 3.05</td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>113</td>
<td>3.13</td>
<td>.076</td>
<td>2.98 - 3.28</td>
</tr>
<tr>
<td>V46 China</td>
<td>298</td>
<td>2.79</td>
<td>.044</td>
<td>2.70 - 2.88</td>
</tr>
<tr>
<td>Total</td>
<td>435</td>
<td>2.88</td>
<td>.038</td>
<td>2.80 - 2.95</td>
</tr>
</tbody>
</table>

Table 5-7 Cross-country comparison data – perception of target-based pay

For both measures of perceptions of target-based pay, the means for the Czech Republic appear higher than those for Germany and China. Besides, there is no overlap of the confidence intervals around the means for the Czech Republic and those for the other two countries. In both cases, the medians, the minimums and the maximums are identical for all three countries.

In both cases, the means for China appear higher than those for Germany. Besides, in both cases there is a clear overlap of the confidence intervals around the means for the Czech Republic and those for China. The standard deviations in both cases for all three countries are moderate, although the standard deviation of V44 (“employee motivation”) for Germany is moderately higher than that for the Czech Republic and China.
The empirical findings suggest that the perceptions of target-based pay are moderately positive in all three countries. Measured by both outcome variables, the positive effect of target-based pay seems to be more intensive in the Czech Republic than in the other countries. In the attribute “employee motivation”, the positive effect seems slightly more intensive in China than in Germany. In the attribute “target-prioritising”, there seems to be a similar degree of positive effect in China and Germany. In Germany, there seems to be a similar degree of positive effect in both measures of perceptions of target-based pay, while in the Czech Republic and China the positive effect of employee motivation appears slightly stronger than the effect of target-prioritising.

5.8 VERIFICATION OF INFLUENCE OF NATIONAL CULTURES

In autumn 2013, the results of the cross-country comparison were presented to the expert panel. The following table contains an overview of the cross-country comparison study as described in the previous sections of this chapter.

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Germany</th>
<th>The Czech Republic</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Individualism vs. collectivism</td>
<td>Weak individualism</td>
<td>Moderate individualism; relatively high individual differences</td>
<td>Moderate individualism</td>
</tr>
<tr>
<td>b</td>
<td>Power distance</td>
<td>Moderately small power distance</td>
<td>Very small power distance</td>
<td>Small power distance</td>
</tr>
<tr>
<td>c</td>
<td>Uncertainty avoidance</td>
<td>Very strong uncertainty avoidance</td>
<td>Very strong uncertainty avoidance</td>
<td>Moderately strong uncertainty avoidance</td>
</tr>
<tr>
<td>d</td>
<td>Masculinity vs. femininity;</td>
<td>Moderate masculinity</td>
<td>Similar degree of influence of masculine and feminine values</td>
<td>Moderate masculinity</td>
</tr>
<tr>
<td>e</td>
<td>Long-term orientation</td>
<td>High degree of long-term orientation. However, promotion opportunity of less interest than learning new skills</td>
<td>High degree of long-term orientation</td>
<td>Moderate long-term orientation</td>
</tr>
<tr>
<td>General pay perception</td>
<td>Moderate high degree of perceived importance of pay. Tangible reward is of less interest</td>
<td>Very high degree of perceived importance of pay.</td>
<td>High degree of perceived importance of pay. Tangible reward is of less interest</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>--------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perception of target-based pay</td>
<td>Moderate positive effect; equal degree of impact of employee motivation and target-prioritising</td>
<td>Very positive effect; slightly greater impact of employee motivation than target-prioritising</td>
<td>Positive effects; stronger impact of employee motivation than target-prioritising</td>
<td></td>
</tr>
</tbody>
</table>

Table 5-8 Cross-country comparison data: summary

The panel discussions were guided by the structure of the assessment instrument in the dimensions of: a. individualist vs. collectivism; b. power distance; c. masculinity vs. femininity; d. uncertainty avoidance; e. long-term orientation; f. general pay perception and finally in the outcome g. perception of target-based pay.

a. Individualism vs. collectivism

Based on earlier survey data, Hofstede discovered a moderate level of individualism in the German culture (Hofstede, 1980). While few studies on the Czech culture could be located, the Chinese culture was often described with Confucian traditions (Jing & Jin Nam, 2010; Shi & Wang, 2011).

The empirical findings in Section 5.1 indicate a mild individualism or even a weak collectivism in Germany, as well as moderate individualism in the Czech Republic and China. The practitioners of the expert panel confirmed the empirical evidence.

To the expert panel, the weak individualism is a product of the social environment in Germany. As a social state, Germany promotes solidarity among its citizens (“the stronger help the weaker”). The legislation e.g. the Industrial Constitution Act (“Betriebsverfassungsgesetz”) reinforces the powerful trade unions in every economic sector, which in turn restricts dismissals by the employer and enables the trade unions to carry out collective wage negotiations on behalf of the employees on a regular basis. According to the expert panel, such environmental circumstances have weakened the individualism in Germany. Furthermore, the panel pointed
out that the individual differences in this cultural factor could be related to the organisational positions.

As for the Czech Republic, the panel reported an observed tradition of collectivism, which was thought to be a combined result of the long colonial past of this nation and the communist history. Since the implementation of democracy, while there seems to be an increasing degree of individualism among the senior employees, the young generations, especially those growing up after the communism era, seem to share a similar point of view towards individualism with their contemporary counterparts in the countries with substantially longer history of democracy. Furthermore, the degree of individualism among production staff seems to be higher than that of administration staff. Thus, the expert panel confirmed an average moderate degree of individualism in the Czech Republic, as well as relatively high individual differences which may be related to age group, organisational position, etc.

Although the political system in China remains officially unchanged for more than sixty years, the drastic economic reform in the last two and a half centuries seems to have led to a similar impact on the individual attitudes towards individualism/collectivism as the political changes in the Czech Republic. A similar phenomenon is observed in China as in the Czech Republic that the young generations born in the latest 25 years seem to share a higher degree of individualism with their contemporary counterparts in the countries with substantially longer history of democracy. This is explained by the influence of the westernised neighbouring city Hong Kong which was a colony of Great Britain until 1997 and the internet access, etc. Another important cause of such changes is believed to be China’s one-child policy. The majority of the younger generations are born as single child due to this policy, whereas the “concentrated” attention in the family is said to lead the children to a higher degree of individualism.

The deviating results of the researcher’s empirical study to the previous literature suggest that the cultures have evolved over time. Previous researchers already made such dynamics of cultures the subject of their studies (Jing & Jin Nam, 2010).
Concluding the above, Hypothesis 3a is supported both by both empirical findings and the data interpretation of the expert panel.

**Hypothesis 3a:** There is a moderate individualism in the Czech Republic and China and a weak individualism in Germany.

*b. Power distance*

Previous literature anticipates smaller power distance in more democratic countries (Hofstede, 2007). In spite of the longer history of democracy in Germany, the empirical evidence in Section 5.2 suggests that the power distance is larger in Germany than in the Czech Republic and China.

During the panel discussions, assertions were made that private income counted as very personal data in the German society. Out of a high sensibility for privacy, topics regarding individual pays are rarely publicly discussed in Germany. Being used to this lack of information, the German employees tend to attribute less importance to reference comparison which is reflected as a larger power distance in the cultural factor scale. The expert panel assumes, hypothetically, should the pay data in Germany become equally transparent as in some other cultures, the perceived importance of reference comparison would also increase to a similar degree as in those countries.

Despite common pay inequality in the past (Ioakimidis, 2012; Eriksson, Pytliková & Warzynski, 2013; Jurajda & Paligorova, 2009; Jurajda, 2005; Jurajda, 2003), the Czech employees are no longer ready to accept such unfairness. Moreover, the majority of the employees share their pay information openly with the colleagues. Pay difference for similar jobs sometimes has caused complaints to the decision-makers in the past. Observations have been made that with the cave-in of the centralized command system, democratic concepts seem to appeal more to the victims of the old system than to members of existing democratic societies (Reber & Auer-Rizzi, 2004). Thus, the very small power distance is interpreted by the expert
panel as a combined effect of rebelling from the old system and transparency of pay information. The practitioners have made observations that the power distance is smaller among the production workers than in the other groups of organisational positions.

Previous literature often reports on large power distance in China (Chia et al., 2007; Lee & Oh, 2007). However, the panel discussions and the empirical findings seem to support the opposite. Furthermore, a program against status thinking launched 3-4 years ago by the local management in China was believed to have made a substantial contribution to the observed small power distance in the organisation. Especially among the junior staff, privacy in respect of information on individual pays seems to be of no importance. Based on the transparency of pay information and the relatively high transparency of the individual performances especially among the production staff, higher pay is often perceived as a recognition of the personal achievement which is related to a higher social status. Due to the fast ascending minimal wage development in the previous years, the privileges of the high-performers have been shrinking steadily. This has caused complaints to the decision-makers and in some rare cases, even to resignations. Thus, the small power distance in China is interpreted as a result of the replacement of the status-orientated traditions by the modern development induced by the free economy.

Concluding the above arguments, the power distance seems to be small in all three countries, however higher in Germany than in the Czech Republic and in China. Thus Hypothesis 3b is supported both by the empirical findings and the data interpretation of the expert panel.

**Hypothesis 3b:** The power distance is relatively small in Germany, the Czech Republic and China. However, the power distance in Germany is larger than in the Czech Republic and China.

c. Uncertainty avoidance
The empirical findings in Section 5.3 suggest a tendency to strong uncertainty avoidance at all three locations. However, the uncertainty avoidance seems to be stronger in Germany and the Czech Republic than in China.

To the expert panel, the high uncertainty avoidance in Germany is an expression of the preference of certainty in the German tradition. Also in the literature, high uncertainty avoidance is commonly attributed to the German culture (Hofstede, 2001; Portz & Lere, 2010).

The uncertainty avoidance in a similar high degree in the Czech Republic is however interpreted as an aftertaste of the centralised command system. According to the panel, the Czech culture is characterised by flexibility. The high uncertainty avoidance detected among the Czech employees is comprehended as a result of the autocratic leadership style induced by the former political structure, although the increase of uncertainty in the post-communism era is believed to have moderated this cultural character (Reber & Auer-Rizzi, 2004). In other words, the high uncertainty avoidance is interpreted as motivated by the employees’ convenience in avoiding making decisions and taking responsibilities.

Previous empirical studies indicate relatively low uncertainty avoidance in China (Shi & Wang, 2011). The results of previous studies are also supported by the empirical study of this thesis. Although the degree of uncertainty avoidance for China is relatively high, it is clearly lower than those for Germany and the Czech Republic. The moderate degree of uncertainty avoidance is reasoned by the flexibility of the Chinese culture to adapt, as well as the non-existence of management standards since the nationwide economic reform. The Chinese employees describe themselves as “open to all new methods from the Western”.

Concluding the above, Hypothesis 3c is supported both by the empirical findings in the cross-country comparison and by the observations of the expert panel.
**Hypothesis 3c:** There is a tendency to strong uncertainty avoidance in Germany, the Czech Republic and China. However, the uncertainty avoidance is stronger in Germany and the Czech Republic than in China.

d. Masculinity vs. femininity

The empirical evidence in Section 5.4 exhibits a relatively strong influence of the masculine values in all three observed countries.

To the expert panel, in spite of the influence of a variety of feminine social values among the German employees, as commonly observed in the industrialised countries, the masculine values outweigh.

The opinion of the expert panel is congruent with the research findings of some recent field studies, indicating that a big shift of social values has taken place in Mainland China, characterized by a stronger influence of masculine social values (King-Metters & Metters, 2008). Although communism originally promotes feminine values, China lost much of its traditions through the 10-year-long Cultural Revolution which aimed to destroy the old social orders. With the Cultural Revolution, the traditional values which are mainly feminine values such as solidarity, caring for the fellow human beings diminished. On the other hand, the economic reform in this country has put achievements and individual performance in foreground. Furthermore, the family planning policy has also added to the shift of social values, because as a result of the policy, the majority of the young generation were born single children who potentially lack of social behaviour compared to children grown up in bigger families. There are brisk on-going public debates in China on the loss of traditional values and culture in the recent years, fuelled by occasional scandals of corruptions and social unfairness.

Similar to China, the transformation from centrally planned economy to market economy promoted achievement and individual performance in the Czech Republic. Observations are made of a growing influence of the masculine values since the Velvet Revolution. However, the
traditional Czech culture with its many feminine features, e.g. strong family-orientation (Republic, 2002) seems to harmonize with the impulse of recent social changes. The communism era is also believed to have an impact on the relatively strong influence of the feminine social values.

Altogether, the assertions of the expert panel coincide with the empirical findings of the cross-country comparison. Germany and China are moderately dominated by masculine values, while in the Czech Republic, the masculine and the feminine values have a similar degree of influence. Thus, Hypothesis 3d is supported both by the empirical findings and the data interpretation of the expert panel.

**Hypothesis 3d:** There is a moderate degree of masculinity in Germany and China. In the Czech Republic, there is a similar degree of influence of the masculine and the feminine social values.

e. Long-term orientation

The empirical findings in Section 5.5 indicate a tendency to long-term orientation among employees in all three countries. Furthermore, the long-term orientation seems higher in Germany and the Czech Republic than in China.

The general fluctuation rate is noticeably higher in China than in the other countries. The majority of the employees in Shenzhen (China) are migrant workers. China’s migrant workers leave their hometowns, mainly in the poorer countryside, and families behind for better job opportunities in the cities. The fact that their children and elderly are often left unattended to makes their employment unstable. These migrant workers usually decide every year anew between job opportunities and their families; with a substantial portion of the workers not returning from their home visits during the annual leave. Due to the averagely short term of the employment, the degree of long-term orientation among the Chinese employees is lower than for their counterparts in Germany and the Czech Republic, although the Chinese culture is often related to long-time orientation in the literature (Shi & Wang, 2011; Hofstede, 2007).
Another reason for the relatively low degree of long-term orientation among Chinese employees is the relatively low level of education. Hofstede has previously asserted that the education level has an impact on the long-term orientation in the cultural groups (Hofstede, 2007). Under the assumption that higher organisational positions (managers) correlate to higher level of education, the proportion of employees with higher educational level are substantially different in the three observed countries. Among the participants of the survey, the proportion of employees at a managerial level in Germany is 35.7%; in the Czech Republic, it is 5.9% and in China, 6.9%. However, the average educational level of employees at managerial level is lower in China than in Germany and the Czech Republic.

In spite of the relatively high degree of long-term orientation, the German employees exhibit clearly less interest for promotion opportunity than for the other attributes of long-term orientation. The expert panel explains this with the fact that the pay difference between the superior and the subordinates in a German SME is usually unsubstantial. Modest reward, higher pressure and workload related with the superior positions, as well as the commonly perceived importance of free time and private undertakings in the Germany society are seen by the expert panel as reasons for the declining interest of German employees for promotion opportunity.

As a whole, the panel confirms the tendency to long-term orientation among employees in all three countries as displayed by the empirical evidence. A further finding is that the long-term orientation is higher in Germany and the Czech Republic than in China. Thus Hypothesis 3e is supported both by the empirical findings and the data interpretation of the expert panel.

**Hypothesis 3e:** There is a tendency towards long-term orientation in Germany, the Czech Republic and China. However, the long-term orientation is stronger in Germany and the Czech Republic than in China.

*f. General pay perception*
The empirical findings in Section 5.6 suggest that the general pay perception is the strongest in the Czech Republic, lower in China and the lowest in Germany.

According to the panel, in an employment relationship, the pay is always of substantial importance to the employees. However, the degree of perceived importance of pay is believed to be influenced by the money pressure to secure the subsistence. In other words, a high income level indicates that a relatively big part of the money lies beyond the minimum subsistence level, therefore the money pressure is believed to be lower, which in turn leads to a potentially lower degree of general pay perception.

Compared with their colleagues in the Czech Republic and in China, the German employees earn several times as much. Besides, essential risks e.g. sickness, unemployment etc. are covered by the sophisticated social security system. Therefore, the moderate degree of general perception among the German employees is considered a phenomenon of an affluent society.

Currently, the pay level of the Chinese employees is approximately the half of that of the Czech colleagues. However, the concept of subsistence is also quite different in different countries. While the Czech employees often have to strive to “make both ends meet”, the Chinese migrant workers readily accept the hardship of their undemanding living conditions, e.g. family separation, collective dormitory, constant overtime, etc., in order to enable their family a more comfortable life with their savings. The lower money pressure of the Chinese employees is also reflected in their generosity. A wedding present to their good friends can be half a month’s wages; Chinese employees often use a substantial proportion of the bonus pay for inviting their colleagues to a dinner celebration.

Concluding the above, although the degree of general pay perception is relatively high in all three observed countries, it is the highest in the Czech Republic, lower in China and is the lowest in Germany. Thus Hypothesis 3f is supported both by the empirical findings and the data interpretation of the expert panel.
Hypothesis 3f: The degree of general pay perception is high in Germany, the Czech Republic and China. The general pay perception is the strongest in the Czech Republic, weaker in China and the weakest in Germany.

To illustrate the empirical findings on the influence of cultural factors on perceptions of target-based pay, the verified cultural factors, but also the employees’ perceptions of target-based pay, in Germany, the Czech Republic and China are expressed in ranks in the following table. Each cultural dimension has, as verified in Section 4.7, a positive effect on perceptions of target-based pay. In addition, the empirical findings on perceptions of target-based pay are also listed in rank orders.

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Effect on TBP (verified in Section 4.7)</th>
<th>Germany</th>
<th>The Czech Republic</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Individualism</td>
<td>positive</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>b</td>
<td>Small power distance</td>
<td>positive</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>c</td>
<td>Strong uncertainty avoidance</td>
<td>positive</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>d1</td>
<td>Masculinity</td>
<td>positive</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>d2</td>
<td>Femininity</td>
<td>positive</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>e</td>
<td>Long-term orientation</td>
<td>positive</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>f</td>
<td>General pay perception</td>
<td>positive</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>g1</td>
<td>Motivation effect</td>
<td></td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>g2</td>
<td>Task prioritising</td>
<td></td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 5-9  Cross-country comparison data: ranking

The ranking table indicates an impact of cultural factors on perceptions of target-based pay based on national cultures.

The empirical findings in Chapter 4 suggest that the effect of cultural influence on target-based pay is likely to be a moderating effect. This position is also in line with previous literature (Lertxundi & Landeta, 2011) and confirmed by the expert panel based on their observations in the practice.
According to the survey data, the Czech Republic has reached the highest rank in every cultural dimension. The expert panel confirms the empirical evidence for the most positive perceptions of target-based pay. According to the observations in the past, there is a distinctively positive effect of target-based pay in the Czech Republic, especially on employee motivation.

China scores higher than Germany in some of the cultural dimensions, but lower in the others. Thus, the numeric results are somehow ambiguous as which how the cultural factors have influenced the perceptions of target-based pay in those two countries.

In the practice, a similar effect of employee motivation as in the Czech Republic has also been observed in China. In the panel’s interpretation, the received pay does not only entertain the employees’ financial needs, but usually also causes admiration of the co-workers due to the transparency of individual pay information, which in turn constructs a higher social status of the high performer.

In Germany, the practitioners describe their perceptions of target-based pay as moderately positive. The relative moderate motivation effect is considered a result of the moderate general pay perception and the strong uncertainty avoidance, which seems to have caused a declining attitude towards target-based pay in Germany due to the uncertain level of reward. Besides, in contrast to China, should the pay information become public, the reward for high performers is expected to be associated with jealousy and negative reactions of the co-workers. However, the positive effect of target-prioritising seems to be higher. This effect is related to the high uncertainty avoidance of the Germany employees.

Concluding the above, Hypothesis 3g is supported both by the empirical findings and the data interpretation of the expert panel.

**Hypothesis 3g:** The cultural factors in Germany, the Czech Republic and China have a moderating effect on perceptions of target-based pay.
All aspects of Hypothesis 3 (H3a- H3g) are supported by the results of the panel discussions. Therefore, it may be concluded that Hypothesis 3 has been supported both by the empirical evidence and the data interpretation of the expert panel.

**Hypothesis 3:** The culture differences in Germany, the Czech Republic and China lead to regional differences in perceptions of target-based pay.

The outcomes of the panel discussions suggest that the culture differences are sometimes not necessarily results of social habits, but are more likely to be reactions of the individuals towards certain conditions of the existing political and economical environment. Moreover, the practitioners assert that perceptions of target-based pay are not only influenced by the national cultures, but also by further factors, e.g. organisational positions, age group, gender etc. The next chapter is dedicated to a comparison study based on organisational positions.

To summarize Chapter 5, the empirical findings on the influence of cultural factors on perceptions of target-based pay are analysed based on a cross-country comparison. The outcomes of the analysis are subsequently verified and validated by panel discussions. The results indicate a moderating effect of the cultural factors on perceptions of target-based pay.

Altogether, Hypothesis 3 is supported both by the results of the statistical analysis and by the panel discussions based on the observations and experiences in the practice.

**Hypothesis 3:** The culture differences in Germany, Czech Republic and China lead to regional differences in perceptions of target-based pay.

The results also indicate that the differences of cultural influence on perceptions of target-based pay are driven by further factors, e.g. organisational position, age group, gender, etc. rather than by the national cultures alone.

The next chapter will seek to analyse the influence of cultural factors on perceptions of target-based pay based on the organisational positions.
6 ORGANISATIONAL POSITION COMPARISON

In line with the research design, this chapter focuses on the impact of the organisational positions of general managers, intermediate managers, administration staff and production staff on perceptions of target-based pay. The differences in the cultural characteristics are examined based on the descriptive statistics on the cultural dimensions “Individualism vs. collectivism”, “power distance”, “uncertainty avoidance”, “masculinity vs. femininity”, “long-term orientation” and “general pay perception”. Moreover, the differences in the perceptions of target-based pay is analysed based on the descriptive statistics on the outcome variables “employee motivation” and “target-prioritising”. Finally, the empirical findings are also verified and validated by the outcome of panel discussions held in autumn 2013.

The researcher refrained from statistical analysis for the group of general managers due to the limited sample size (3). At the same time, those employees made an essential contribution to this research by acting as members of the expert panel.

6.1 INDIVIDUALISM VS. COLLECTIVISM

In order to assess the differences among the groups of the various organisational positions in the cultural dimension individualism vs. collectivism, the descriptive statistics on the attributes for this cultural factor as described in the research design were explored. As discussed in Section 4.3, there are altogether three attributes in the assessment instrument used to measure individualism. A high value of the independent variables suggests a high degree of individualism. The results are summarized in the following table.

<table>
<thead>
<tr>
<th>Organisational positions</th>
<th>N</th>
<th>Mean Statistic</th>
<th>Std. Error</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
<th>Median</th>
<th>Std. Deviation</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>general manager</td>
<td>3</td>
<td>2.63</td>
<td>.043</td>
<td>2.55</td>
<td>2.72</td>
<td>3</td>
<td>.897</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>intermediate manager</td>
<td>33</td>
<td>2.64</td>
<td>.184</td>
<td>2.26</td>
<td>3.01</td>
<td>3</td>
<td>1.055</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>administration staff</td>
<td>37</td>
<td>2.16</td>
<td>.157</td>
<td>1.84</td>
<td>2.48</td>
<td>2</td>
<td>.958</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>production staff</td>
<td>357</td>
<td>2.68</td>
<td>.046</td>
<td>2.59</td>
<td>2.77</td>
<td>3</td>
<td>.860</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>430</td>
<td>2.63</td>
<td>.043</td>
<td>2.55</td>
<td>2.72</td>
<td>3</td>
<td>.897</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

V27
intermediate manager
administration staff
production staff
Total

general manager
intermediate manager
V30
administration staff
production staff
Total

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>32</td>
<td>2.50</td>
<td>.196</td>
<td>2.10</td>
<td>2.90</td>
</tr>
<tr>
<td>administration</td>
<td>37</td>
<td>2.05</td>
<td>.169</td>
<td>1.71</td>
<td>2.40</td>
</tr>
<tr>
<td>production staff</td>
<td>360</td>
<td>2.74</td>
<td>.049</td>
<td>2.64</td>
<td>2.84</td>
</tr>
<tr>
<td>Total</td>
<td>432</td>
<td>2.65</td>
<td>.047</td>
<td>2.56</td>
<td>2.74</td>
</tr>
</tbody>
</table>

|                |       |     |     |     |     |
| general manager| 3     |     |     |     |     |
| intermediate manager | 34   | 2.50| .175| 2.14| 2.86| 3   | 1.022| 1   | 4   |
| V30 administration staff | 42   | 2.31| .134| 2.04| 2.58| 2   | .869 | 1   | 4   |
| production staff | 362   | 2.83| .043| 2.74| 2.91| 3   | .826 | 1   | 4   |
| Total           | 441   | 2.74| .041| 2.66| 2.82| 3   | .866 | 1   | 4   |

V27 I help nobody but will take help offered by others
V28 I help nobody. need also no help from others
V30 Group incentive - negative

Table 6-1 Organisational position comparison – individualism vs. collectivism

The relatively high medians (“2” or “3”) imply that there is a moderate individualism among all groups of organisational positions.

For all measures of individualism, while the minimums and maximums are identical for all groups, the medians for the administration staff are lower than for the other groups (“2” instead of “3”). In all three cases, the means for the administration staff are clearly lower than those for the intermediate managers and the production staff. The confidence intervals around the means appear similar for the intermediate managers and the production staff, but higher than for the administration staff.

Altogether, the individualism seems stronger for the production staff and the intermediate managers than for the administration staff.

The standard deviations are relatively high in all three measures, indicating individual differences within the groups.

6.2 POWER DISTANCE

In order to assess the differences in the groups of the various organisational positions in the cultural power distance, the descriptive statistics on the attributes for this cultural factor as described in Chapter 3 were explored. As discussed in Section 4.3, there are altogether two
attributes in the assessment instrument used to measure power distance. A high value of both variables for reference comparison suggests a tendency to small power distance. The results are summarized in the following table.

<table>
<thead>
<tr>
<th>Organisational positions</th>
<th>N</th>
<th>Mean Statistic</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>general manager</td>
<td>3</td>
<td>3.22</td>
<td>.036</td>
<td>3.15</td>
</tr>
<tr>
<td>intermediate manager</td>
<td>35</td>
<td>3.23</td>
<td>.109</td>
<td>3.01</td>
</tr>
<tr>
<td>administration staff</td>
<td>43</td>
<td>3.05</td>
<td>.115</td>
<td>2.81</td>
</tr>
<tr>
<td>production staff</td>
<td>354</td>
<td>3.21</td>
<td>.044</td>
<td>3.12</td>
</tr>
<tr>
<td>Total</td>
<td>444</td>
<td>3.20</td>
<td>.038</td>
<td>3.12</td>
</tr>
</tbody>
</table>

Table 6-2 Organisational position comparison – power distance

For both measures of small power distance, the minimums, the maximums and the medians are identical for all groups. The relatively high medians (“3”) suggest a relatively small power distance in all groups of organisational position.

The means for the groups of intermediate managers and production staff are similar, however clearly higher than for the administration staff. The confidence intervals around the means for the intermediate managers and the production staff are at a similar level and overlap with those for the administration staff. Thus compared with the other groups, the power distance seems to be slightly larger for the group of administration staff than for the other groups.

The standard deviations are moderately high.
6.3 **UNCERTAINTY AVOIDANCE**

In order to assess the differences among the groups of the various organisational positions in the cultural dimension *uncertainty avoidance*, the descriptive statistics on the attributes for this cultural factor as described in Chapter 3 were explored. As discussed in Section 4.3, there are altogether four attributes in the assessment instrument used to measure uncertainty avoidance. A high value of each of the four variables suggests a tendency to strong uncertainty avoidance.

The results were summarized in the following table.

<table>
<thead>
<tr>
<th>Organisational position</th>
<th>N</th>
<th>Mean Statistic</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Median</th>
<th>Std. Deviation</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>V18 general manager</td>
<td>3</td>
<td>3.32</td>
<td>.028</td>
<td>3.27</td>
<td>3.38</td>
<td>.589</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>intermediate manager</td>
<td>37</td>
<td>3.57</td>
<td>.099</td>
<td>3.37</td>
<td>3.77</td>
<td>.603</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>administration staff</td>
<td>43</td>
<td>3.28</td>
<td>.096</td>
<td>3.09</td>
<td>3.47</td>
<td>.630</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>production staff</td>
<td>362</td>
<td>3.29</td>
<td>.030</td>
<td>3.23</td>
<td>3.35</td>
<td>.579</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>445</td>
<td>3.32</td>
<td>.028</td>
<td>3.27</td>
<td>3.38</td>
<td>.589</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>V21 production staff</td>
<td>362</td>
<td>3.11</td>
<td>.038</td>
<td>3.04</td>
<td>3.19</td>
<td>.730</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>general manager</td>
<td>3</td>
<td>3.10</td>
<td>.034</td>
<td>3.04</td>
<td>3.17</td>
<td>.730</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>intermediate manager</td>
<td>35</td>
<td>3.14</td>
<td>.102</td>
<td>2.94</td>
<td>3.35</td>
<td>.601</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>administration staff</td>
<td>43</td>
<td>3.00</td>
<td>.110</td>
<td>2.78</td>
<td>3.22</td>
<td>.724</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>443</td>
<td>3.10</td>
<td>.034</td>
<td>3.04</td>
<td>3.17</td>
<td>.730</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>V23 production staff</td>
<td>361</td>
<td>3.24</td>
<td>.036</td>
<td>3.16</td>
<td>3.31</td>
<td>.685</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>general manager</td>
<td>3</td>
<td>3.25</td>
<td>.032</td>
<td>3.19</td>
<td>3.32</td>
<td>.690</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>intermediate manager</td>
<td>37</td>
<td>3.49</td>
<td>.100</td>
<td>3.28</td>
<td>3.69</td>
<td>.607</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>administration staff</td>
<td>44</td>
<td>3.23</td>
<td>.112</td>
<td>3.00</td>
<td>3.45</td>
<td>.743</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>445</td>
<td>3.25</td>
<td>.032</td>
<td>3.19</td>
<td>3.32</td>
<td>.690</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>V32 production staff</td>
<td>364</td>
<td>2.99</td>
<td>.040</td>
<td>2.91</td>
<td>3.07</td>
<td>.771</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>general manager</td>
<td>3</td>
<td>3.19</td>
<td>.101</td>
<td>2.98</td>
<td>3.39</td>
<td>.616</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>intermediate manager</td>
<td>37</td>
<td>3.12</td>
<td>.121</td>
<td>2.87</td>
<td>3.36</td>
<td>.793</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>administration staff</td>
<td>43</td>
<td>2.99</td>
<td>.121</td>
<td>2.87</td>
<td>3.36</td>
<td>.793</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>447</td>
<td>3.02</td>
<td>.036</td>
<td>2.95</td>
<td>3.09</td>
<td>.758</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 6.3 Organisational position comparison – uncertainty avoidance
The relatively high medians in all dimensions of uncertainty avoidance (“3” or “4”) demonstrate a strong tendency to strong uncertainty avoidance for all groups of organisational positions.

In two out of four cases, the medians for the intermediate managers are higher than those for the other groups (“4” instead of “3”); in the other two cases, the medians are identical for all groups. In three out of four cases, the minimums for the intermediate managers are higher than the other groups (“2” instead of “1”), while the maximums are identical for all groups of organisational positions. In all four cases, the means for the intermediate managers are higher than those for all the other groups. In three out of four cases, the confidence intervals around the means for the intermediate managers are higher than for the other groups of organisational positions.

For three out of four measures of uncertainty avoidance, the means for the administration staff and the production staff are similar. The minimums (“1”), the maximums (“4”) and the medians (“3”) are identical for those two groups.

The standard deviations of all groups are moderate.

Altogether, the descriptive statistics indicate a moderately high degree of uncertainty avoidance for all groups of organisations positions. Compared with the other groups, the degree of uncertainty avoidance seems higher for the group of intermediate managers.

6.4 MASCULINITY VS. FEMININITY

In order to assess the differences among the groups of the various organisational positions in the cultural dimension masculinity vs. femininity, the descriptive statistics on the attributes for this cultural factor as described in Chapter 3 were explored. As discussed in Section 4.3, there are altogether four attributes in the assessment instrument used to measure masculinity and femininity. While a high score in V40, V41 and V42 indicate a strong influence of the feminine values, a high score in V43 is interpreted as a strong influence of the masculine values. The results are summarized in the following table.
For all groups of organisational positions, the mean of the measure for masculinity (V43) is higher than those for the dimensions of femininity (V40, V41 & V42). Compared with the other groups, the means for the intermediate managers are higher both in the measures for femininity and in the measure for masculinity.

The confidence intervals of each group of organisational position are similar, and the standard deviations of all groups are moderate in all dimensions for femininity and masculinity.

The above findings suggest a moderate degree of masculinity in the groups of intermediate managers, administration staff and production staff.
6.5 LONG-TERM ORIENTATION

In order to assess the differences among the groups of the various organisational positions in the cultural dimension long-term orientation, the descriptive statistics on the attributes for this cultural factor as described in Chapter 3 were explored. As discussed in Section 4.3, there are altogether four attributes in the assessment instrument used to measure long-term orientation. A high value of each of the four variables suggests a tendency to strong long-term orientation. The results are summarized in the following table.

<table>
<thead>
<tr>
<th>Organisational position</th>
<th>N</th>
<th>Mean Statistic</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean Lower Bound</th>
<th>Upper Bound</th>
<th>Median</th>
<th>Std. Deviation</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>general manager</td>
<td>3</td>
<td>3.11</td>
<td>.111</td>
<td>3.08</td>
<td>3.53</td>
<td>3</td>
<td>.668</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>intermediate manager</td>
<td>36</td>
<td>3.31</td>
<td>.111</td>
<td>3.08</td>
<td>3.53</td>
<td>3</td>
<td>.668</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>administration staff</td>
<td>45</td>
<td>3.18</td>
<td>.107</td>
<td>2.96</td>
<td>3.39</td>
<td>3</td>
<td>.716</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>V50 production staff</td>
<td>356</td>
<td>2.93</td>
<td>.042</td>
<td>2.85</td>
<td>3.01</td>
<td>3</td>
<td>.786</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>440</td>
<td>2.99</td>
<td>.036</td>
<td>2.91</td>
<td>3.06</td>
<td>3</td>
<td>.773</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>general manager</td>
<td>3</td>
<td>3.25</td>
<td>.122</td>
<td>3.00</td>
<td>3.50</td>
<td>3</td>
<td>.732</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>intermediate manager</td>
<td>36</td>
<td>3.31</td>
<td>.122</td>
<td>3.00</td>
<td>3.50</td>
<td>3</td>
<td>.732</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>administration staff</td>
<td>45</td>
<td>3.18</td>
<td>.107</td>
<td>2.97</td>
<td>3.38</td>
<td>3</td>
<td>.684</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>V51 production staff</td>
<td>356</td>
<td>2.94</td>
<td>.041</td>
<td>2.86</td>
<td>3.02</td>
<td>3</td>
<td>.774</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>440</td>
<td>2.99</td>
<td>.036</td>
<td>2.92</td>
<td>3.06</td>
<td>3</td>
<td>.760</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>general manager</td>
<td>3</td>
<td>3.33</td>
<td>.120</td>
<td>3.09</td>
<td>3.58</td>
<td>3</td>
<td>.717</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>intermediate manager</td>
<td>36</td>
<td>3.33</td>
<td>.120</td>
<td>3.09</td>
<td>3.58</td>
<td>3</td>
<td>.717</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>administration staff</td>
<td>45</td>
<td>3.24</td>
<td>.117</td>
<td>3.02</td>
<td>3.47</td>
<td>3</td>
<td>.743</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>V52 production staff</td>
<td>356</td>
<td>2.90</td>
<td>.042</td>
<td>2.81</td>
<td>2.98</td>
<td>3</td>
<td>.798</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>437</td>
<td>2.97</td>
<td>.038</td>
<td>2.90</td>
<td>3.05</td>
<td>3</td>
<td>.793</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>general manager</td>
<td>3</td>
<td>3.22</td>
<td>.098</td>
<td>3.02</td>
<td>3.42</td>
<td>3</td>
<td>.591</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>intermediate manager</td>
<td>36</td>
<td>3.22</td>
<td>.098</td>
<td>3.02</td>
<td>3.42</td>
<td>3</td>
<td>.591</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>administration staff</td>
<td>44</td>
<td>2.84</td>
<td>.117</td>
<td>2.61</td>
<td>3.08</td>
<td>3</td>
<td>.776</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>V53 production staff</td>
<td>360</td>
<td>2.99</td>
<td>.040</td>
<td>2.92</td>
<td>3.07</td>
<td>3</td>
<td>.754</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>443</td>
<td>3.00</td>
<td>.035</td>
<td>2.93</td>
<td>3.07</td>
<td>3</td>
<td>.740</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 6-5 Organisational position comparison – long-term orientation

V50 New skills through new tasks
V51 New skills through internal trainings
V52 New skills through external trainings
V53 Promotion opportunity
The minimums (“1”), the maximums (“4”) and the medians (“3”) are identical for all groups of organisational groups. This implies a relatively strong long-term orientation of all groups.

The means for the group of the intermediate managers are clearly higher than for the other groups in all dimensions of long-term orientation. In three out of four cases, the means for the administration staff are lower than for the intermediate managers, but higher than for the production staff.

In three of four cases, the confidence intervals around the means are similar for the intermediate managers and the administration staff, however clearly higher than for the production staff. In the fourth case, the confidence interval is similar for the administration staff and the production staff, however clearly lower than for the intermediate managers.

Altogether, the empirical findings indicate a relatively strong long-term orientation in all groups of organisational positions. Moreover, the long-term orientation seems to be the strongest among the intermediate managers, followed by the administration staff and weaker for the group of production staff.

### 6.6 GENERAL PAY PERCEPTION

In order to assess the differences among the groups of the various organisational positions in the cultural dimension general pay perception, the descriptive statistics on the attributes for this cultural factor as described in Chapter 3 were explored. As discussed in Section 4.3, there are altogether five attributes in the assessment instrument used to measure general pay perception. A high value of each of the five variables suggests a tendency to a higher degree of general pay perception. The results are summarized in the following table.

<table>
<thead>
<tr>
<th>Organisational position</th>
<th>N</th>
<th>Mean</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Std. Deviation</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>V1 general manager</td>
<td>3</td>
<td>3.56</td>
<td>.093</td>
<td>3.37 to 3.74</td>
<td>.558</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>V1 intermediate manager</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V1 production staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V1 administration staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In all five measures for general pay perception, the minimums for the group of intermediate managers are higher than for the other groups (“2” or “3” instead of “1”). In three out of five cases, the means for the groups of intermediate managers and production staff are similar and clearly higher than for the group of administration staff. In a fourth case, the mean for the production staff is higher than for the intermediate managers, however both are higher than for the administration staff.
There are clear overlaps of the confidence intervals around the means for all groups of organisational positions. The standard deviations appear moderate.

As a whole, the degree of general pay perception seems to be the highest for the group of production staff, followed by the intermediate managers. The degree of general pay perception seems to be lower for the group of administration staff.

6.7 PERCEPTION OF TARGET-BASED PAY

In order to assess the differences among the groups of the various organisational positions in the perception of target-based pay, the descriptive statistics on the attributes for the outcome variable as described in the research design in Chapter 3 were explored. As discussed in Section 4.3, there are altogether two attributes in the assessment instrument used to measure perception of target-based pay. A high value of each of the both variables suggests a tendency to a more intensive perception of target-based pay. The results are summarized in the following table.

<table>
<thead>
<tr>
<th>Organisational position</th>
<th>N</th>
<th>Mean</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Statistic</td>
<td>Lower Bound</td>
<td>Upper Bound</td>
</tr>
<tr>
<td>general manager</td>
<td>3</td>
<td>3.22</td>
<td>3.01</td>
<td>3.43</td>
</tr>
<tr>
<td>intermediate manager</td>
<td>37</td>
<td>3.00</td>
<td>2.76</td>
<td>3.24</td>
</tr>
<tr>
<td>administration staff</td>
<td>42</td>
<td>3.03</td>
<td>2.96</td>
<td>3.10</td>
</tr>
<tr>
<td>production staff</td>
<td>369</td>
<td>3.06</td>
<td>2.98</td>
<td>3.11</td>
</tr>
<tr>
<td>Total</td>
<td>451</td>
<td>3.04</td>
<td>.033</td>
<td>2.98</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organisational position</th>
<th>N</th>
<th>Mean</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Statistic</td>
<td>Lower Bound</td>
<td>Upper Bound</td>
</tr>
<tr>
<td>general manager</td>
<td>3</td>
<td>3.17</td>
<td>2.89</td>
<td>3.44</td>
</tr>
<tr>
<td>intermediate manager</td>
<td>36</td>
<td>3.17</td>
<td>2.89</td>
<td>3.44</td>
</tr>
<tr>
<td>administration staff</td>
<td>42</td>
<td>2.67</td>
<td>2.41</td>
<td>2.92</td>
</tr>
<tr>
<td>production staff</td>
<td>354</td>
<td>2.86</td>
<td>2.78</td>
<td>2.94</td>
</tr>
<tr>
<td>Total</td>
<td>435</td>
<td>2.87</td>
<td>.038</td>
<td>2.80</td>
</tr>
</tbody>
</table>

Table 6-7 Organisational position comparison – perceptions of target-based pay
For the measure of employee motivation (V44) for perceptions of target-based pay, the mean for the group of intermediate managers is clearly higher than for the other groups. The mean for the production staff is slightly higher than for the administration staff. The minimum of the intermediate managers is higher than for the other groups (“2” instead of “1”). The maximums and the medians are identical for all groups. There are clear overlaps of the confidence intervals around the means for all groups. The standard deviation is moderately high for all groups.

For the measure of target-prioritising (V46) for perceptions of target-based pay, the mean for the group of intermediate managers is the highest among all groups, followed by the production staff. The minimums, the maximums and the medians for all groups are identical. The confidence interval around the mean seems higher for the group of intermediate managers and similar for the other groups. The standard deviations are moderate.

As a whole, the relatively high means imply that the target-based pay has a positive motivational effect on employees of all organisational positions, especially on the intermediate managers. Especially the degree of positive effect of target-prioritising appears clearly higher for the intermediate managers than among the junior staff.

### 6.8 VERIFICATION OF INFLUENCE OF ORGANISATIONAL POSITIONS

In autumn 2013, the results of the organisational position comparison were also presented to the expert panel. The following table contains an overview of the organisational position comparison study as described in the previous sections of this chapter. The content of the table was verified and validated by panel discussions.

<table>
<thead>
<tr>
<th>Description</th>
<th>General manager</th>
<th>Intermediate manager</th>
<th>Administration staff</th>
<th>Production staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Individualism vs.</td>
<td>Strong</td>
<td>Weak</td>
<td>Very strong</td>
<td></td>
</tr>
<tr>
<td>collectivism</td>
<td>individualism;</td>
<td>individualism;</td>
<td>individualism</td>
<td></td>
</tr>
<tr>
<td></td>
<td>relatively strong</td>
<td>individual differences</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>individual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>differences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Power distance</td>
<td>Small</td>
<td>Relatively large</td>
<td>Small</td>
<td></td>
</tr>
</tbody>
</table>

166
The panel discussions were guided by the structure of the survey instrument in the dimensions of: a. individualist vs. collectivism; b. power distance; c. masculinity vs. femininity; d. uncertainty avoidance; e. long-term orientation; f. general pay perception and finally in the outcome g. perception of target-based pay.

a. Individualism vs. collectivism

The empirical findings in Section 6.1 indicate that there is a certain degree of individualism in all groups of organisational positions. The degree of individualism seems higher among the production staff and the intermediate managers. The expert panel suggests a causal relationship between the functions of the groups of organisational positions and the degree of individualism within the groups.

According to the panel discussions, the intermediate managers, are responsible for the partial success of the business organisation in some specific fields. Their targets are sometimes in conflict with those of their manager colleagues. In favour of their individual achievements, the intermediate managers often need to compete with their colleagues for the limited resources, the recognition, or along the narrow path for potential career advancement. Their exposure to
constant pressure to perform is interpreted as the main cause of the relatively high degree of individualism.

The tasks of the administration staff often involve cross-departmental activities. Typically, the administration staff needs to collect information from co-workers of other departments or are dependant of the co-workers’ support to fulfil their own assignments. Furthermore, the cooperative attitude may be driven by the career concerns of the administration staff, since an extensive social network within the organisation is considered especially advantageous for career advancement of this group of employees. It seems that such circumstances lead to more cooperative behaviour habits, which are interpreted as signs for low degree of individualism in this thesis, in this group of employees.

In an industrial plant, normally the link between performance and reward for the production staff is relatively transparent. In contrast to the administration staff, the individual achievements of the production staff require less support of the co-workers. In some cases, they even compete with the co-workers for the use of the limited production facilities to achieve better personal performance. The relatively high fluctuation among this group of employees especially in China is regarded as a further cause for the production staff to be less considerate to the colleagues. Therefore, a strong individualism can be observed among this group of employees.

Concluding the above, Hypothesis 4a is supported both by the empirical findings and by the data interpretations of the expert panel.

**Hypothesis 4a:** There is a moderate individualism among all groups of organisational positions. However, the individualism is stronger for the production staff and intermediate managers than for the administration staff.

b. **Power distance**
The empirical evidence in Section 6.2 suggests a trend to small power distance for all groups of organisational positions. Compared with the other groups, the power distance among the administration staff seems to be slightly larger.

In the general managers’ point of view, the pay level needs to reflect the individual achievement, in order to encourage better performance of the employees. When setting up the payroll structure, the general managers tend to do their best to reward the employees according to their scope of responsibilities, as well as the individual performance. This attitude mirrors Hofstede’s description of small power distance.

The intermediate managers have a similar perception of power distance as the general managers. Similarly, the achievements of the intermediate managers are dependent on the performance of their subordinates. Therefore, like the general managers, the intermediate managers, too, support a reward system that reflects the individual achievements so as to encourage better performance. However, compared with the general managers, there seems to be some status thinking among this group of employees. This is interpreted as justification of the intermediate managers for the privileges they enjoy.

Although the administration staff also prefers a reward system that reflects the individual achievements, the interests for reference comparison seem to be lower compared with the other groups of organisational positions. This attitude is interpreted in the assessment instrument as larger power distance. One important cause of the large power distance is believed to be the higher sensibility of privacy regarding the individual pay information. Unlike the managers, the junior staff members usually have no access to the pay information. Compared with the production staff, more of the administration staff prefers to keep the information on their individual pay to themselves. Another reason for the larger power distance among the administration staff is presumed to be a slightly higher level of status thinking, which is explained by the expert panel with the working environment. Typically in an SME, the administration staff members are often confronted with multiple tasks in their daily operations. The priority of the single tasks is usually identified with the hierarchical level of the internal
clients. A higher degree of status thinking is believed to emerge under such circumstances, causing larger power distance among this group of employees. The missing transparency of the assessment of the individual performance seems to further promote the status thinking.

The production staff members in the observed business organisation come from the Czech Republic and China. In both countries, the pay level of this group of employees is substantially orientated on the regional minimum wages. Therefore, the differences in the individual incomes are mainly driven by the performance evaluation. In both countries, there is a high degree of readiness of the production staff to share the information on their individual pay with the co-workers. Previous wage discussions between the production staff and their superiors clearly indicate the demand of the production staff of equal pay for equal performance, but also higher pay for better performance. Such signs for very small power distance among the production staff are believed to be a combined result of the free market economy and the simplicity of the assessment of the individual performances.

Altogether, the expert panel verified a trend to small power distance for all groups of organisational positions. Compared with the other groups, there is a slightly larger power distance among the administration staff. Thus Hypothesis 4b is supported by both the survey findings and by the panel discussions.

**Hypothesis 4b:** The power distance is relatively small in all groups of organisational positions. However, the power distance is slightly larger for the group of administration staff than for the other groups of organisational positions.

c. **Uncertainty avoidance**

The empirical findings in Section 6.3 indicate a tendency to strong uncertainty avoidance for all groups of organisational positions. However, the uncertainty avoidance seems stronger for the group of intermediate managers than for the other groups of organisational positions.
One major task of the managers is to recognise the opportunities for the business in the changing environment. Therefore, there is a certain degree of acceptance of uncertainty for this group of employees. On the other hand, it is also essential for the general managers to take steps to secure the existence of the organisation at the market. In this sense, the managers are motivated to avoid uncertainty, in order to reduce risks. As a whole, the general managers exhibit a moderate degree of uncertainty avoidance.

The position of the intermediate managers is described as a “sandwich” during the panel discussions. On one hand, they are obliged to justify their decisions to their superiors with objective arguments. On the other hand, for the implementation of the plans, they need to give detailed instructions to the subordinates. Since high uncertainty increases the complexity of their tasks, the intermediate managers tend to display relatively strong uncertainty avoidance.

Typically for SMEs, the administration staff is a group of “multi-functional” employees. Compared with their colleagues in big-scale businesses, the administration staff in the SMEs are less specialised, but have a broader scope of responsibilities. Being used to being confronted with new assignments, the administration staff can adapt relatively quickly to new situations. Therefore, the administration staff has relatively weak uncertainty avoidance.

The nature of the tasks of the production staff is relatively simple compared with that of the other groups of employees. Therefore, in spite of their demand for a clear definition of their tasks, the production staff can relatively easily adapt to a new situation. Therefore, the production staff displays a moderate degree of uncertainty avoidance.

Summarizing the above, Hypothesis 4c is supported by both the empirical evidence and by the panel discussions.

**Hypothesis 4c:** There is a tendency to strong uncertainty avoidance for all groups of organisational positions. However, the uncertainty avoidance is stronger for the group of intermediate managers than for the other groups of organisational positions.

d. **Masculinity vs. femininity**
The empirical evidence in Section 6.4 indicates a moderate degree of masculinity in the groups of intermediate manager, administration staff and production staff. The masculine and the feminine values, on the other hand, seem to have a similar degree of influence on the group of general managers.

According to the expert panel, in any successful business organisation, high performance is commonly appreciated, so that the employees are motivated to assert more efforts in their work. Therefore, there is a relatively strong influence of masculine values in each group of employees, since achievement and success are typical masculine values in Hofstede’s definition (Hofstede, 2007).

Compared with the other groups of employees, the general managers have a higher demand on risk-sharing. This is related to the observations by the expert panel that general managers often identify themselves with the business organisation under their leadership. Furthermore, the general managers seem to pay more attention to the social status of the employees than the other groups of organisational positions. The reason behind this is supposed to be the dependence of the general managers on the senior staff who as a rule enjoy a relatively high social status in the business organisation.

The promotion of high performance is believed to guide the decisions of the intermediate managers, which leads to the domination of masculinity in their evaluation. Compared with the other groups of employees, the intermediate managers display a high degree of readiness for risk-sharing. Besides, presumably based on the dependence of their key personnel, the intermediate managers also give much consideration to the private needs and social status of the employees.

Besides the high evaluation of individual performance, the administration staff also exhibits a high degree of readiness for risk-sharing. However, it seems that some feminine values like social status, private needs etc. are of less importance. During the panel discussions, the experts point out that the administration staff are often still at an early stage of their professional
development and there is a higher motivation to pursue career advancement through better individual performances.

Compared with the other groups of employees, the production staff exhibits the lowest degree of readiness for risk-sharing. To the expert panel, this is because the pay structure of the production staff is often guided by the regional minimum wages; therefore, this group of employees enjoy less profit of benefit-sharing with the business organisation. Besides, the relatively high fluctuation loosens their commitment toward the company. The moderate degree of masculinity observed among the production staff is related to the perception of organisational justice by this group of employees and is weaker than that of the administration staff.

As a whole, the assertions of the expert panel match the empirical evidence. Concluding the above, Hypothesis 4d is supported by both the empirical evidence and by the panel discussions.

**Hypothesis 4d:** There is a moderate degree of masculinity in the groups of intermediate manager, administration staff and production staff.

e. Long-term orientation

The empirical findings in Section 6.5 suggest a moderate long-term orientation for all groups of organisational positions. However, the long-term orientation for the intermediate managers and the administration staff appears stronger than for the other groups of organisational groups, although the general managers seem to be especially interested in career opportunities.

The panel discussions confirm the assertion of the previous literature that the degree of long-term orientation is higher among the employees with higher level of education (Hofstede, 2007). Thus, a higher degree of long-term orientation is expected from the employees of higher organisational positions, since at the average, those employees have a higher level of education.

However, for the general managers, the long-term orientation is especially strong in respect of job opportunities (promotion opportunity), but not in terms of obtaining new knowledge or learning new skills. In the interpretation of the expert panel, this is because for this group of
employees, obtaining new knowledge and new skills are not considered of substantial importance for the further career advancement.

In contrast to the general managers, the intermediate managers exhibit a high degree of long-term orientation in all measures for this cultural factor in the assessment instrument. At an average, their interest to obtain new knowledge or to learn new skills is even higher than that for direct promotion opportunities. In the interpretation of the experts, this is because in a long run, further qualifications are often of more benefits than one step further on the career ladder.

The attitude of the administration staff is very much similar to that of the intermediate managers. Further qualifications in terms of obtaining new knowledge and learning new skills is often more advantages to the professional development of the administration staff than slow promotions. Some administration staff members are even ready to accept lower payments in favour of opportunities for further qualifications.

At an average, the production staff members have a lower level of education compared with the other groups of employees. Although there is a moderately high interest in obtaining new knowledge and learning new skills, the interest in promotion opportunities is higher. In the interpretation of the expert panel, this is because the benefit of further qualifications takes longer for this group of employees due to the relatively low level of education. Besides, for the production staff in the Czech Republic and in China, a promotion frequently leads to a substantial improvement of the incomes.

Thus, a tendency to long-term orientation exists in every group of organisational positions. Besides, the degree of long-term orientation is higher among the intermediate managers and the administration staff. In other words, Hypothesis 4e is verified by both empirical findings and by the panel discussions.

**Hypothesis 4e:** There is a moderate long-term orientation for all groups of organisational positions; however, the long-term orientation for the intermediate managers and the administration staff is stronger than for the production staff.
f. General pay perception

The empirical findings in Section 6.6 suggest a relatively high degree of general pay perception for all groups of employees. Moreover, the general pay perception seems to be stronger for the intermediate managers and the production staff than for the other groups of organisational positions.

To the experts, there are two main driving factors for the degree of general pay perception: a. money pressure and b. desire for recognition of the individual performance.

Being on the top of the pay structure, the general managers are expected to face no money pressure. To them, the perception of pay is mainly related to the recognition of the individual performance. This explains the concentration on net pay and expected bonus in their pay perceptions. The very high values in those measures of general pay perception indicate the strong ambitions of the general managers.

The high degree of general pay perception of the intermediate managers is also interpreted as expressions of their strong ambitions for recognition of the individual performances. However, in contrast to the general managers, the intermediated managers are also interested in further aspects of general pay perception, e.g. if the payments are made punctually. This is explained by the lower pay level compared with the general managers.

The administration staff’s general pay perception is weaker compared with the other groups of organisational positions. In the interpretation of the expert panel, although the average income level of the administration staff is lower than that of the managers, their financial expectations and needs are also lower. Therefore, the money pressure is not essentially higher than for the intermediate managers. Besides, the desire of the administration staff for recognition is also lower than that of the managers. It is believed that the pursuit of career advancement shifts the attention of the administration staff partially from pure financial benefits to opportunities of future development. Therefore, the degree of general pay perception of this group of employees
is relatively low. However, the individual attitudes are relatively heterogeneous among the administration staff.

The average pay level of the production staff is the lowest among all groups of organisational positions. Consequently, the money pressure is relatively high.

Concluding the above, the degree of general pay perception is relatively high for all groups of organisational positions. However, the degree of general pay perception is higher among the intermediate managers and the production staff than for the administration staff. Thus Hypothesis 4f is supported both by the empirical findings and the data interpretation of the expert panel.

Hypothesis 4f: The degree of general pay perception is relatively high for all groups of employees. However, the general pay perception is stronger for the intermediate managers and the production staff than for the administration staff.

g. **Perception of target-based pay**

To illustrate the influence of cultural factors on perceptions of target-based pay, the cultural characteristics of the different groups of organisational positions are expressed in ranks in the following table. As described with more details in Section 4.7, each of the following factors is related to a positive effect on perceptions of target-based pay. Additionally, the rank order of the perceptions of target-based pay according to the empirical evidence is also implemented in the list.

<table>
<thead>
<tr>
<th>Description</th>
<th>General manager</th>
<th>Intermediate manager</th>
<th>Administration staff</th>
<th>Production staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Individualism</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2 Small power distance</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3 Strong uncertainty avoidance</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>4a Masculinity</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>4b Femininity</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>5 Long-term orientation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
The ranking table suggests an impact of cultural factors based on organisational positions.

The intermediate managers exhibit a relatively high rank in every cultural dimension. Their relatively high ranks in both measures of perceptions of target-based pay support the hypothesis that the cultural factors have a positive effect on perceptions of target-based pay.

Observations are made in the past that the intermediate managers are usually driven by self-fulfilment and tend to identify themselves with their assignments. A substantial percentage of the employees of this group of organisational positions are ambitious and intend to pursue further career opportunities. For the intermediate managers, the positive effect is instinctive in both measures of perceptions of target-based pay. On one hand, the pay is perceived as recognition of individual achievements, thus motivates the employees to assert more efforts. On the other hand, understanding the priorities of the tasks enables them to handle the job with higher efficiency which potentially leads to career advancement.

On the contrary, the administration staff displays a relatively low rank in most cultural dimensions which are positively related to perceptions of target-based pay. Their relatively low ranks in both measures of perception of target-based pay seem to support the hypothesis that perceptions of target-based pay are positively related to the cultural factors.

The expert panel confirms the positive effect of target-based pay among the administration staff, although the effect is weaker compared with the other groups of organisational positions. To the panel, the effect of target-based pay is weakened by several cultural characteristics of this group of employees. First, the weak individualism indicates that the behaviour of the administration staff is not affected alone by the consideration of their immediate benefits. This indicates a relatively weak influence of the target-based pay. Second, the relatively large power distance
suggests the acceptance of status pay among the administration staff. As a result, the link between the pay and the performance is relatively weak. Third, the relatively strong individual differences in general pay perception suggest that to a substantial percentage of the administration staff members, the pay is not the main influence factor of their decisions. The strong long-term orientation suggests that the behaviour of the administration staff seems to be significantly driven by their career concerns instead of by the target-based pay.

Compared with the administration staff, the production staff appears to reach higher ranks in most of the cultural factors. Also the ranks of the production staff in both measures of perceptions of target-based pay seem higher than those for the administration staff. Due to the relatively low complexity of their tasks, it is considered more appropriate to measure the effect of target-based pay on the production staff by the degree of employee motivation than by task prioritising.

In the opinion of the expert panel, cultural factors have a positive effect on perceptions of target-based pay to employees of all organisational positions. However, this effect is most likely to be a moderating effect.

**Hypothesis 4g**: The cultural factors in all groups of organisational positions have a moderating effect on perceptions of target-based pay.

As the findings of all aspects of Hypothesis 4 (H4a – H4g) are supported by the panel discussions, it may be concluded that both empirical evidence and the panel discussions have supported Hypothesis 4.

**Hypothesis 4**: The culture differences in the different organisational positions lead to differences in perceptions of target-based pay.

In addition, the panel discussions suggest further parameters for the constellation of cultural factors, e.g. gender, tenure, age group, etc. Due to the limited capacity, the above parameters shall not become objects of this thesis.
To summarize Chapter 6, the empirical findings on the influence of cultural factors on perceptions of target-based pay are analysed based on an organisational position comparison. The outcomes of the analyses are subsequently verified by panel discussions. The results indicate a moderating effect of the cultural factors on perceptions of target-based pay.

Altogether, Hypothesis 4 is supported by both the results of the statistical analysis and the panel discussions based on the observations and experiences in the practice.

**Hypothesis 4:** *The culture differences in the different organisational positions lead to differences in perceptions of target-based pay.*

The results also indicate that the differences of cultural influence on perceptions of target-based pay are driven by further factors other than organisational positions and national cultures, e.g. gender, tenure, age group etc. which shall not become objects of this thesis due to limited capacity.

The last part of this thesis will comprise the findings on the influence of cultural factors on perceptions of target-based pay and subsequently, the implications for both practitioners and academics and finally, draw conclusions for this research.

---

**Box 6 Summary of organisational position comparison**

---
Part III  DISCUSSION, IMPLICATIONS AND CONCLUSIONS

As introduced in Section 1.4, Part III focuses on discussion of the findings, the implications and the conclusions of this study. Chapter 7 is designated to discuss the results of the empirical studies in Part II in relation to the findings of the literature review in Part I and the emergent implications of the results of the empirical studies in Part II. Finally, the conclusions for this study are drawn in Chapter 8.
7 DISCUSSION OF FINDINGS AND IMPLICATIONS

This chapter aims to highlight the findings of the literature review in Part I, as well as the results of the empirical studies in Part II and finally, to draw implications based on the outcomes of both parts of this thesis. All observations and implications are verified and validated through feedbacks during discussions with the expert panel from early summer till winter, 2013.

The first section focuses on the literature of the contemporary time on influence factors on perceptions of target-based pay. The second section focuses on the literature on cultural influence on target-based pay, with special attention to Hofstede’s Model and how this model was extended for the research purpose of this thesis. The third and fourth sections focus on the empirical findings of the cross-country comparison and the organisational position comparison. The fifth section highlights all relevant implications drawn from the empirical research in Part II of this thesis and focuses on the discussions on the outcomes of the comparison studies. Finally, a few suggestions are made for future research.

7.1 IDENTIFYING INFLUENCE FACTORS

The literature review on perceptions of target-based pay in Section 2.1 provides three important observations. Each observation has been discussed, verified and validated through panel discussions in early summer 2013.

The first important observation from the literature review concerning the effect of target-based pay is that this type of incentive plays an important role in the modern HRM practice. However, this instrument carries not only the predominant advantages, but also some potential disadvantages.

Numerous field studies suggest that target-based pay has become a popular instrument in the HR practice in various parts of the world (John et al., 2012; Jeffrey & Adomdza, 2011; Kuesel, 2004). The implementation of this incentive system took place already more than a decade ago in some of the world-leading companies, e.g. Microsoft, Hewlett Packard, Fujitsu (Shaw, 2004;
The advantages of target-based pay are profoundly described in the previous literature. The employees may be aligned with the strategic planning with aid of target-based pay (Bromley, 2004; Pfau & Kay, 2002). Successful implementation of target-based pay may lead to a high-performance corporate culture (Budden, 2003), motivating the managers to recruit more capable employees (Bandiera, Barankay & Rasul, 2007) and attracting highly qualified personnel (Gordon & Kaswin, 2010; Banker, Lee & Gordon, 2000).

However, some researchers also warn of possible disadvantages of this type of incentives. One major critique on target-based pay is that it reduces intrinsic motivation (Ordóñez et al., 2009). Some studies indicate such financial incentives may mislead employees to cheating (Cadsby, Fei & Tapon, 2010). There are also clear indications that target-based pay has obvious limits when the focus of the performance lies in service quality due to the difficulty to measure quality (Ueno, 2013; Moav & Neeman, 2010).

Altogether, there seems to be a consensus among the academics that the positive effect of target-based pay overweighs the potential disadvantages. Even the critics do not seem to object the application of target-based pay, but simply emphasize a careful dosing (Gerhart et al., 2009; Ordóñez et al., 2009).

The panel discussions confirmed a predominantly positive effect of target-based pay. However, the practitioners also brought to attention some aspects of the practical implementation, which, if not considered thoroughly, may lead to unexpected negative effects.

A second and related observation from the review of the literature concerning the practice of target-based pay in the modern human resources management is that, in addition to the classic form of target-based pay which links the incentive with a number of predefined individual achievements, the research interest in this field has been extended to further variant forms in the last decades. Such variants of target-based pay include “team incentive” (Brown & Heywood, 2009; Rey-Biel, 2008; Liu & Batt, 2010; Zenger & Marshall, 2000), “rank reward” (Judiesch & Schmidt, 2000; Casas-Arce & Martínez-Jerez, 2009; Bhattacharya & Dugar, 2013;

The findings of the literature on the variant forms of target-based were subsequently confirmed by the expert panel, although there were some disputes about the effect of certain forms of target-based pay, e.g. the effect of team incentive (Brown & Heywood, 2009; Rey-Biel, 2008 Liu & Batt, 2010; Libby & Thorne, 2009), both among the academics and the practitioners. As an exception, the form of “penalty-framed contract” was rejected by the practitioners of the observed business organisation, due to anticipation of negative effect of this special type of target-based pay.

The third and last observation from the literature review regarding influence factors on perceptions of target-based pay is that the researchers have identified a plethora of influence factors in the previous studies. The main influence factors identified by the literature review are: “employee empowerment” (Kochan, 2004; Batt, 2002; Haar & Spell, 2009; Wolf & Zwick, 2008; Leong & Woo Gon, 2002), “career concerns” (Foerster & Martinez, 2006; Bryson, Buraimo & Simmons, 2011; Batt, 2002; Parent, 2009), “organisational justice” (Morrell, 2011; Arnold et al., 2009; Haar & Spell, 2009), “objective/subjective performance evaluation” (Topjian, Buck & Kozlowski, 2009; Bol, 2008), “reference comparison” (Arnold et al., 2009; Schaubroeck et al., 2008), “coaching” (Liu & Batt, 2010; Marshall & Heffes, 2005), “team incentive” (Wynder, 2010), “social value” (Brickson, 2000; Rey-Biel, 2008; Stajkovic & Luthans, 2001; Chen, Scott & Shaw, 2001), “national culture” (Fong & Shaffer, 2003; Hui et al., 1991; Jing & Jin Nam, 2010) and “organisational position” (Drake, Wong & Salter, 2007; Janssen, 2001). In the subsequent panel discussions, the practitioners confirmed the assertions in the literature and in addition revealed some further insight of the practical implementation, e.g. difficulties in involving junior staff with low education level in setting up their own goals as
a measure of employee empowerment, or negative effect of offers for further education to the employees if failing to provide opportunities for the application of the acquired knowledge. The practitioners emphasized especially the influence of national cultures and organisational positions on perceptions of target-based pay.

As a whole, the literature review of Section 2.1 provides a thorough overview of the current research trends in target-based pay studies.

### 7.2 MEASURING CULTURAL INFLUENCE

Concerning the literature review on cultural influence on perceptions of target-based pay in Sections 2.2 & 2.3, the following relevant observations emerged. Again each observation was verified and validated by the expert panel during discussions in early summer, 2013.

The first important observation from the literature review on current research status on cultural influence on perceptions of target-based pay is that there is a consensus among the researchers that the cultural has an impact on perceptions of target-based pay (Bae, Chen & Rowley, 2011; Merriman, 2010; Milikić, Janićijević & Petković, 2008; Onyemah, Rouziès & Panagopoulos, 2010; Rajagopal, 2007).

The second important observation from the literature on cultural influence on perceptions of target-based pay, is that there are only very few holistic models for the measurement of cultural factors. Among those, Hofstede’s Value Survey Model (VSM) seems to be the most popular and is employed by many researchers as the main framework for their own investigations. This model is favoured for its precise definition, the simplicity, as well as the popularity among academics (de Mooij & Hofstede, 2010). The VSM describes cultures in five dimensions: “individualism vs. collectivism”, “power distance”, “uncertainty avoidance”, “masculinity vs. femininity” and “long-term orientation” (Hofstede, 2007). The structure of this model also found consensus among the practitioners upon presentation at the panel discussions. However, the practitioners asserted that perceptions of target-based pay were also substantially influenced
by the individually perceived importance of pay. Thus a further dimension “general pay perception” was added to VSM for the further research in this thesis.

A third and related important observation is that the influence factors on perceptions of target-based pay which are identified in Section 2.1 may be mapped with the framework of VSM. The mapping process is described in detail in Section 2.4. The results of the mapping were verified and validated by the expert panel. Based on this systematic, a 6-dimensional assessment tool was constructed to measure the influence of cultural factors on perceptions of target-based pay.

The fourth significant observation from the literature review on the influence of cultural factors on perceptions of target-based pay is that although there is a consensus among the researchers on the cultural influence on perceptions of target-based pay, there are some disputes as how the cultural factors affect the perceptions (Muduli, 2011; Lertxundi & Landeta, 2011; Eby et al., 2000; Kirkman & Shapiro, 2001; Steensma et al., 2000; Merriman, 2010; Schmidt, 2007: 47).

The panel discussions confirmed that perceptions of target-based pay were influenced by the cultural factors. Based on the findings of the literature review and the assertions of the panel discussions, the research hypotheses were established in Section 3.4. In General, there is a consensus among both the academics and the practitioners that the effect of cultural factors on perceptions of target-based pay is a moderating effect (Lertxundi & Landeta, 2011).

7.3 CROSS-COUNTRY COMPARISON

The empirical study in Chapter 5 provides evidence for the observations concerning regional cultural characteristics in Germany, the Czech Republic and China. Each observation was contrasted to the previous literature. Subsequently, the results were verified and validated through personal discussions with the expert panel from autumn till winter 2013.

The first observation from the empirical investigation into the cultural dimension “individualism vs. collectivism” is that there seems to be a weak individualism in Germany and a moderate
individualism in the Czech Republic and China. Moreover, this result was verified, validated and interpreted by the expert panel.

The low degree of individualism in Germany was related to the environmental influence of the welfare state system by the expert panel. In the Czech Republic, the degree of individualism was reported to have increased since the establishment of democracy. An above average degree of individualism was reported to be detected among the young generations growing up in the post-communism era. Similarly, the degree of individualism in China was reported to have increased after the economic reform. The one-child policy left the new generation as the only child in the family, which made a further cause for the above average degree of individualism among the younger generations.

The second observation from the empirical investigation into the cultural dimension “power distance” is that the power distance is relatively small in Germany, the Czech Republic and China. However, the power distance in Germany is larger than in the Czech Republic and China. This result was verified, validated and interpreted by the expert panel.

In the Czech Republic, in spite of common pay inequality in the past (Ioakimidis, 2012; Eriksson, Pytlíková & Warzynski, 2013; Jurajda & Paligorova, 2009; Jurajda, 2005; Jurajda, 2003), the power distance was decreasing since the establishment of democracy (Reber & Auerrizzi, 2004). In China, the large power distance in the tradition was observed to have drastically reduced after the economic reform (Chia et al., 2007; Lee & Oh, 2007). Thus, a small power distance was observed in both countries. In Germany, the moderately higher power distance was related to the sensibility for privacy regarding individual pay among the population, which had in turn led to a social habit, partially due to the lack of information.

The third observation from the empirical investigation into the cultural dimension “uncertainty avoidance” is that there is a tendency to strong uncertainty avoidance in Germany, the Czech Republic and China. However, the uncertainty avoidance is stronger in Germany and the Czech Republic than in China. This result was verified, validated and interpreted by the expert panel.
Based on previous literature, as well as the practitioners’ observations, the high uncertainty avoidance in Germany was traced back to the tradition (Hofstede, 2001; Portz & Lere, 2010). On the other hand, a similar high degree of uncertainty avoidance in the Czech Republic was interpreted as an aftertaste of the centralised command system, although the uncertainty avoidance was reported to have eased off in the post-communism era due to constant social changes (Reber & Auer-Rizzi, 2004). The relatively weak uncertainty avoidance in China was related to two factors. First, the Chinese culture is flexible to adapt to environmental changes (Shi & Wang, 2011). Second, the practitioners reported on a common readiness to accept new rules, due to a general lack of standards.

The fourth observation from the empirical investigation into the cultural dimension “masculinity vs. femininity” is that there is a moderate masculinity in Germany and China. In the Czech Republic, there is a similar degree of influence by the masculine and the feminine social values. This result was verified, validated and interpreted by the expert panel.

The masculinity of the German culture was interpreted as a common character of the industrialised countries. In spite of the traditional feminine values in the Chinese culture, the 10-year-long Cultural Revolution in Mainland China shook up the deep roots of the traditions. A big shift of social values was observed since then, characterized by a stronger influence of masculine social values (King-Metters & Metters, 2008). The changed family structure due to the one-child policy was also made responsible for the changes in the social values in China. The feminine characteristics of the Czech culture were interpreted as a combination of the tradition and the impact of the communism history. In spite of the increasing influence of the masculine values since the Velvet Revolution, the feminine values seem to harmonize with the impulse of recent social changes, therefore, remain a substantial element of the culture.

The fifth observation from the empirical investigation into the cultural dimension “Long-term orientation” is that there is a tendency to long-term orientation in Germany, the Czech Republic and China. However, the long-term orientation is stronger in Germany and the Czech Republic than in China. This result was verified, validated and interpreted by the expert panel.
Long-term orientation is related to a high level of education (Hofstede, 2007). Although the Chinese culture is often related to long-time orientation in the literature (Shi & Wang, 2011; Hofstede, 2007), due to the high percentage of participants with low educational level in China, the long-term orientation of the Chinese employees in the research is relatively weak. The general fluctuation rate among the Chinese migrant workers is supposed to have added to the weak long-term orientation. Compared with China, the long-term orientation was observed to be stronger in the Czech Republic and Germany. Interestingly, in spite of the relatively high degree of long-term orientation, the German employees showed clearly less interest for promotion opportunity than for the other attributes of long-term orientation. The panel relates this to the usually unsubstantial pay difference between the superiors and the subordinates in a German SME and a general high living standard.

The sixth observation from the empirical investigation into the cultural dimension “general pay perception” is that the general pay perception is relatively strong in Germany, the Czech Republic and China. Compared with the other countries, the general pay perception is the strongest in the Czech Republic, weaker in China and is the weakest in Germany. This result was verified, validated and interpreted through panel discussions.

Although the pay is always of high importance in an employment relationship, the panel asserted that the degree of general pay perception was influenced by the money pressure to secure the subsistence. The general pay perception is weaker in Germany, due to the relatively high income level and the sophisticated social security system in a welfare state. However, money pressure is not alone related to the income level, but also to the common concept for subsistence. Thus, although the income level in China is much lower than that in the Czech Republic, the money pressure is lower in China, due to the undemanding attitude towards material life of the Chinese employees.

A further important observation from the empirical investigation into the effect of cultural influence on target-based pay is that the cultural factors in Germany, the Czech Republic and China have a moderating effect on perceptions of target-based pay. The moderating effect is in
line with previous literature and this result has been verified, validated and interpreted through panel discussions (Lertxundi & Landeta, 2011). the Czech Republic exhibits the verified highest rank in every cultural dimension which has a positive effect on perceptions of target-based pay according to the results of chapter 4. The positive effect is supported by the empirical evidence and verified and validated by the expert panel. China scores higher than Germany in some of the cultural dimensions, but lower in the others. Altogether, the positive effect of cultural influence on target-based pay is slightly higher in China than in Germany.

Combining the above observations, it may be said that the culture differences in Germany, the Czech Republic and China lead to regional differences in perceptions of target-based pay.

The last significant observation from the investigation into the comparison of previous literature on the influence of the national cultures on perceptions of target-based pay with the empirical evidence in this research is that the empirical findings sometimes contradict the previous studies. The panel discussions led to two explanations on the deviations. First, national cultures are not static, but are subject to changes in time. Such dynamic developments in cultures have been described in some prior studies (Jing & Jin Nam, 2010). Second, national cultures are not homogeneous and there are alternative dimensions to divide cultural groups with, e.g. organisational positions, age group, gender etc.

Therefore, in addition to the cross-country comparison, a comparison study based on organisational positions was also conducted in this thesis.

7.4 ORGANISATIONAL POSITION COMPARISON

The empirical study in Chapter 7 provides evidence for the observations concerning the cultural characteristics of the organisational positions grouped by general managers, intermediate managers, administration staff and production staff. The empirical findings were verified and validated through personal discussions with the expert panel.
The first observation from the empirical investigation into the cultural dimension “individualism vs. collectivism” is that there is a moderate individualism among all groups of organisational positions. However, the individualism is stronger for the production staff and the intermediate managers than for the administration staff.

The strong individualism of the intermediate managers was mainly explained by their targets which were in conflict with those of their manager colleagues and by the competition relationship among the managers in respect of resource allocation, career advancement, etc. The dependence of the administration staff on the cooperation of the co-workers, as well as the importance of a strong social network for future career development were identified as causes for the weak individualism among this group of employees. Finally, the strong individualism among the production staff was related to the independence from the co-workers due to the nature of the tasks, the competition relationship among the staff and a relatively weak commitment of the staff to the organisation.

The second observation from the empirical investigation into the cultural dimension “power distance” is that there is a small power distance in all groups of organisational positions. However, the power distance is slightly larger for the group of administration staff.

The small power distance for the intermediate managers was related to their intention to reward the individual performances with little regard of social status of the employees, so as to achieve the best possible overall success. However, the intermediate managers were also observed to apt to status thinking. The relatively large power distance for the administration staff was related to two causes. First, there seemed to be a higher sensibility of privacy regarding the individual pay information among the administration staff. Second, the nature of the activities of the administration staff in an SME was believed to promote status thinking. Finally, the small power distance of the production staff was regarded an effect of the transparency in individual performance and pay.
The third observation from the empirical investigation into the cultural dimension “uncertainty avoidance” is that there is a relatively high degree of uncertainty avoidance for all groups of organisational positions. However, the degree of uncertainty avoidance is higher for the group of intermediate managers.

To the intermediate managers, uncertainty would increase the complexity of their tasks. On one hand, their decisions due to the changed environment needed to be justified to their superiors. On the other hand, they were obliged to adapt to the changes and coordinate the modifications of the business operations with their subordinates. The administration staff in an SME was often confronted with new assignments, therefore this group of employees could adapt relatively quickly to new situations with a moderate attitude towards uncertainty avoidance. Due to the nature of the tasks of the production staff, it was relatively easy for them to adapt to new situations. Therefore, this group of employees were expected to exhibit a moderate degree of uncertainty avoidance.

The third observation from the empirical investigation into the cultural dimension “masculinity vs. femininity” is that there is a certain degree of masculinity in the groups of intermediate manager, administration staff and production staff.

Due to the tasks of the intermediate managers, the individual performance was believed to have higher priority to this group of employees, although they also seem to appreciate the feminine values based on their belief in the hierarchical order in the organisation and dependence on their subordinates. The administration staff was believed to be at an early stage of the professional development, therefore highly motivated to pursue career advancement through better individual performances. However, also the feminine values were thought to have also a certain impact on this group of employees, demonstrated by for example their readiness to risk-sharing. In general, the production staff was thought to benefit less from the business success. Therefore, there seemed to be a weaker identification with the organisation among this group of employees. The concept of organisational justice of the production employees seemed to consist
mainly of fair assessment of the individual performance, in addition to certain feminine values related to social justice.

The fourth observation from the empirical investigation into the cultural dimension “long-term orientation” is that there is a moderate long-term orientation for all groups of organisational positions; however, the long-term orientation for the intermediate managers and the administration staff is stronger than for the production staff.

The intermediate managers exhibited a high degree of long-term orientation, including interests to learn new skills or to obtain new knowledge. This was interpreted as higher benefit of further qualifications to this group of employees. There seemed to be a similar long-term orientation among the administration staff as for the intermediate managers. This was also related to the benefit of further qualification in the professional development of this group of staff. The long-term orientation seemed to be weaker among the production staff. This was explained by the lower education level of this group of employees.

The fifth observation from the empirical investigation into the cultural dimension “general pay perception” is that there is a relatively high degree of general pay perception for all groups of employees. However, the degree of general pay perception is higher for the intermediate managers and the production staff than for the administration staff.

The general pay perception was related to the driving factors “money pressure” and “desire for recognition of the individual performance”. The very strong general pay perception of the intermediate managers was explained by the desire for recognition as well, however with seemingly more interest in money itself. Compared with the other groups of organisational positions, the degree of general pay perception seemed to be lower among the administration staff. This was explained by two reasons. First, the financial expectation of the administration staff was lower than that of the managers, so that the money pressure was relatively low. Second, the desire of recognition was also lower than that of the managers. It was also believed that the pursuit of career advancement shifted the attention of the administration staff partially from pure financial benefits to opportunities of future development. As for the last group of
organisational positions, the production staff, the high degree of general pay perception was related to the low pay level and consequently, the higher money pressure.

A further important observation from the empirical investigation into the effect of the cultural factors on perceptions of target-based pay is that the cultural factors in the groups of organisational positions of intermediate managers, administration staff and production staff have a moderating effect on the perceptions of target-based pay.

The effect of the cultural factors on perceptions of target-based pay is measured by the readiness of the employees to assert more efforts and an improvement of task prioritising.

The intermediate managers exhibited relatively high rank in every cultural dimension. Their relatively high ranks in both measures of perceptions of target-based pay supported the hypothesis that the cultural factors had a positive effect on perceptions of target-based pay. The administration staff with the relatively low scores in the most cultural dimensions achieved relatively low scores in both measures of perceptions of target-based pay. However, there was still a positive effect of target-based pay on the administration staff, although the effect was weaker compared with the other groups of organisational positions. Compared with the administration staff, the production staff reached higher ranks in most of the cultural factors. The relatively high score in perceptions of target-based pay was interpreted as a further evidence for the link between the cultural factors and perceptions of target-based pay.

Combining the above observations, it may be said that the culture differences in the different organisational positions lead to differences in perceptions of target-based pay. However, the cultural factors have only a moderating effect, as asserted in previous literature (Lertxundi & Landeta, 2011).

### 7.5 IMPLICATIONS OF COMPARISON STUDIES

The empirical findings in Part II and the subsequent discussions based on the comparison studies as described in Sections 7.3 & 7.4 resulted in the following implications of cultural
influence on perceptions of target-based pay. Each implication was briefly discussed with the expert panel through personal interviews held in winter 2013.

First, the cultural factor scale developed in Chapter 5 can be used as an assessment tool to examine the influence of national cultures in business organisations, so that new incentive schemes can be reviewed for fitness before final launching. Based on the results of cross-country comparison using the six-dimensional assessment instrument, the policy-maker can eventually develop diversified target-based pay scheme for different countries to match the features of various cultural environment from the very beginning.

Second, the assessment tool can also be used to examine individual perceptions of target-based pay. The six-dimensional scale allows assessment of outcome of target-based pay, as well as the individual mindset as magnitude along each cultural dimension. This information may help with the choice of the HR tool that best fits each individual employee.

Next, cultures are subject to continuous development (Jing & Jin Nam, 2010). Deriving from the overall business strategy, the policy-maker can aim at steering the corporate culture in a certain chosen direction. The assessment tool can be used to benchmark the cultural constellation and to monitor the cultural development in the organisation.

Subsequently, the assessment tool developed in Chapter 5 can also be deployed to examine the cultural influence of various groups of organisational groups. The outcomes of the examinations can deliver important information for the decision-makers to construct diversified target-based pay scheme for different groups of organisational position.

Finally, with reference to cultural clustering in the various groups of organisational positions, the results of the comparison study in Chapter 6 clearly indicate the existence of cultural clusters among various groups or organisational positions. The findings of organisational position comparison seem comparably revealing as studies on national cultures and established a further dimension for future research on cultural influence on perceptions of target-based pay.
Similar comparison studies can also be conducted with the assessment tool based on gender, age group, tenure, etc.

7.6 LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Combining the empirical findings in Part II and the discussions with the expert panel, the following limitations of this research are identified. Improvements, as well as directions for future researches are subsequently suggested.

First, this work has been organised as a single case study. Therefore, there is a limitation to the generalisation of the study findings. This may be improved by repeating the research procedure in other comparable test environments, so as to increase the data set. Also, in interpreting the current findings, consideration should be given that due to the limited size of the sample, the results achieved should not yet be considered universal, until validation has been made through further studies.

This thesis has explored the cross-country differences in Germany, the Czech Republic and China. In order to generalise the findings on the above national cultures, the research procedure needs to be repeated in further business units in the above-mentioned or further geographic regions. Similarly, in order to generalise the findings on the cultural influence on the various groups of organisational positions, the research procedure shall be repeated sufficiently. Considerations may be given to standardise the categories of organisational positions to facilitate future researches.

Second, the survey study is constructed based on self-stated perception ratings, implying subjectivity in the assessment which may potentially lead to reliability and validity errors. It is left to the future researcher to develop more reliable methods for data collection.

In addition, the panel discussions suggest further parameters for the constellation of cultural factors, e.g. gender, tenure, age group, etc. Cultural influence in those dimensions may also be interesting directions for future studies.
To summarize Chapter 7, target-based pay plays an important role in the modern human resources management. Meanwhile, numerous variant forms of this type of incentive pay can be found in the practice. Most variants of the target-based pay seem appropriate also for SMEs.

Perceptions of target-based pay are influenced by a plethora of factors, although there are still disputes about the effect of certain influence factors. There seems to be a consensus among both academics and practitioners that cultures have an impact on perceptions of target-based pay. The influence factors on perceptions of target-based pay identified in the previous literature may be mapped with a holistic model which describes the characteristics of a culture. Hofstede’s Value Survey Model (VSM) is such a model used by many researchers for their studies on cultural influence. An extended form of VSM was applied for this study as the main framework.

The cross-country comparison indicates the link between the cultural differences in Germany, Czech Republic and China and the different perceptions of target-based pay in those countries.

The organisational position comparison suggests that the different perceptions of target-based pay are also influenced by the different organisational positions. In other words, differences in perceptions of target-based pay caused by cultural influences exist not only among different national cultures; organisational position is a further alternative dimension to determine different cultures.

Subsequently, the most important implications of the research findings of this thesis are described. Some suggestions are made for possible directions of future research.
8 CONCLUSIONS

This chapter underlines the most important aspects of the research on perceptions of target-based pay in this thesis. First, the most relevant conclusions are drawn by referring the empirical findings to the research propositions. Next, the contribution of this research to knowledge is highlighted. Finally, a closing note is comprised to summarize the outlook of the study.

8.1 MOST RELEVANT CONCLUSIONS

During the empirical study of this thesis, conclusions are drawn in seeking answers to the research questions introduced in section 1.3.

RQ 1: What are the cultural factors that influence perceptions of target-based pay?

Hypothesis 1: All cultural factors defined in this thesis are distinctive dimensions of cultural influence.

The literature review in Chapter 2 delivered the information on the cultural factors that influence perceptions of target-based pay. The identified cultural factors were confirmed and further developed by the expert review in Section 2.5. The distinctiveness of the modified cultural factors is tested by Hypothesis 1, which is supported by the factor analysis, the reliability assessment and the validity assessment based on the survey data in this thesis, as well as by verification and validation through the discussions with the expert panel in Chapter 4.

RQ 2: Why are these cultural factors an important influence on the perceptions of target-based pay?

Hypothesis 2: The cultural factors have an impact on perceptions of target-based pay.

The results of the literature review in Chapter 2 also indicate the impact of the cultural factors on perceptions of target-based pay. The importance of the cultural factors was initially confirmed by the expert review in Section 2.5 and tested by Hypothesis 2. The results of the regression analysis and the correlation analysis based on the survey data in Chapter 4 indicate a
moderate, yet significant influence of the cultural factors on perceptions of target-based pay. Therefore, Hypothesis 2 is positively supported.

**RQ 3: How do these cultural factors influence perceptions of target-based pay?**

**Hypothesis 3:** The culture differences in Germany, the Czech Republic and China lead to regional differences in perceptions of target-based pay.

**Hypothesis 4:** The culture differences in the different organisational positions lead to differences in perceptions of target-based pay.

Based on the findings of the literature review in Chapter 2 and the subsequent panel discussions, Hypotheses 3 & 4 were established in seeking the answer to Research Question 3. Both hypotheses are positively supported by the comparison studies in Chapter 5 & Chapter 6, which clearly indicates a relation between the difference cultural characteristics based on national cultures and groups of organisational positions towards the employees’ perceptions of target-based pay.

Furthermore, the empirical evidence suggests that the differences of cultural influence on perceptions of target-based pay are also driven by further factors, e.g. age group, gender, tenure, etc.

### 8.2 CONTRIBUTION TO KNOWLEDGE

This thesis provided the following contributions to knowledge.

First, a conceptual framework was developed to measure the influence of cultural factors on perceptions of target-based pay.

Second, the conceptual framework was extended with the underlying attributes to an assessment instrument to measure the influence of cultural factors on perceptions of target-based pay.
Third, recent real-world data were raised in an international SME in context of cultural influence on perceptions of target-based pay and subsequently, those data were successfully verified and validated by statistical methods, as well as by practitioners from the expert panel established for this research.

Finally, the comparison studies provide valuable insights out of the practice of the cultural influence on perceptions of target-based pay.

Conceptual framework. The conceptual framework derived from Hofstede’s Value Survey Model (VSM). Based on new insights out of the practice, the framework was extended with a further cultural factor “general pay perception” and the outcome factor “positive effect of target-based pay” (see Section 2.5).

The literature review of this study indicates that previous research lacks of systematic analyses of the cultures and that previous studies have concentrated on some specific aspects of the target-based pay. Thus, the conceptual framework developed in this study has closed this research gap.

Extended assessment instrument. The conceptual framework was enriched with the attributes out of real-world business practice and extended to an assessment instrument to measure perceptions of target-based pay (See Section 4.2). Such an assessment instrument for the study of cultural influence on perceptions of target-based pay was not detected during the literature review in this thesis.

First, based on salient literature and expert panel discussions, a survey was designed to capture cultural influence on perceptions of target-based pay. The survey consists of 56 items on a 4-point Likert scale for perceived importance. Out of the 56 items, two were designated to measure the positive effects of target-based pay, five to measure general pay perception and the rest to measure the other cultural factors.
Second, a factor analysis improved the dimensionality through a selection of the attributes for cultural influence. The result of the factor analysis was a five-factor-structure with the underlying attributes.

Subsequently, the content of the refined dimensionality was compared with the conceptual framework of this thesis and each dimension was allocated to a cultural factor in the conceptual framework. Thus, an assessment instrument was developed with measures for each cultural factor in the conceptual framework, as well as for the outcome factor “positive effect of target-based pay”.

**Empirical findings and data verification and validation.** The reliability and the validity of the data were carefully tested. Moreover, the empirical data were verified and validated by the practitioners of the expert panel along the research process. Such elaborate test design for the data reliability and validity in the research of cultural influence on perceptions of target-based pay was not detected during the literature research of this thesis.

After a factor analysis which improved the structure of data dimensionality, the reliability of the chosen measures for cultural factors was examined by the reliability coefficient Cronbach’s alpha. In the next step, the results of a simple regression analysis confirmed the internal consistency of the data and the data structure. Finally, the correlation analysis revealed the relationship between the independent and the dependent variables.

**Real-world data.** The empirical data collected in this research can be used for future researches, especially in the field of manufacturing SMEs.

The basic data often used by previous researchers to calibrate cultural influences have been gathered by Hofstede. Those data are meanwhile partially decades old, which implies that they will not reflect the recent cultural developments. Some data were gathered in university classrooms and therefore may not be perfectly representative for the average workforce. The data collected in this thesis, on the contrary, portrayed the contemporary cultural characteristics in the manufacturing SMEs.
Cultures are influenced by many parameters, e.g. time, business sector, etc. (Stockhammer & Onaran, 2009), thus data from different field studies are often not directly comparative. The data used in this thesis were collected in the same organisation simultaneously, thus offered a special quality for future studies in this research field.

The debates among previous researchers on the effect of target-based pay (Gerhart et al., 2009; Ordóñez et al., 2009) indicate that the field studies are yet insufficient to achieve an overall consensus. This study has made a contribution to closing this gap in the research of target-based pay.

**Comparison studies.** The raised empirical data were explored for the cultural factors and their relationship with perceptions of target-based pay.

First, the cross-country comparison of cultural influence on perceptions of target-based pay outlined the differences of the national cultures in Germany, the Czech Republic and China in the present time. The results of the cross-country comparison captured the current development of those national cultures. In spite of the consensus of cultural influence on perceptions of target-based pay in the literature, this kind of comparison research has so far been rare. The results of the comparison study based on the national cultures confirmed the implication of some previous studies that national cultures have an impact on the individual reactions on target-based (Fong & Shaffer, 2003; Hui et Al., 1991).

Moreover, some authors suggest that organisational positions have a similar influence on perceptions of target-based pay as national cultures (Drake, Wong, & Salter, 2007). However, such assumptions yet needed to be substantiated. The empirical findings of the comparison study based on organisational positions in this research shed light on the cultural influence related to the various organisational positions and therefore closed this research gap.

**Practical benefits to management practice.** The findings of this research, especially of the comparisons studies, contribute to the effective administration of target-based pay in the practice.
First, the assessment of the comparison studies identifies the groups of employees, among which the target-based seems to relate to an above average level of positive perception of the employees. In the observed organisation of this case study, the target-based pay seems to achieve better effect among the production staff and the intermediate managers, especially in the Czech Republic and China. Such knowledge is rather useful especially for SMEs, in order to invest their limited financial resources more efficiently.

Second, the findings of the comparison studies imply that under circumstances, certain alternatives to target-based pay may be more effective. For example, the focus on long-term career plans of the administration staff suggests, appropriate educational or training programmes may achieve better results with this group of employees than incentive pay.

Third, the employees’ feedbacks provide a guideline to the executives for the administration of target-based pay, so as to achieve the optimal results, e.g. the employees’ perception of tangible rewards; if leniency biases shall be included in the performance evaluation, etc.

Finally, the findings of the comparison studies deliver an image of the corporate culture. This information helps the executives to design strategy and tactics to consciously direct the development of the corporate culture as the circumstances require.

In general, this research makes a contribution to knowledge by developing a methodology for the study of cultural influence on perceptions of target-based pay and by providing valuable real-world data for future research. The theoretical understanding based on the findings of this study also contributes to the effective administration of target-based pay in the practice.

8.3 CLOSING NOTE

This thesis examines the influence of cultural factors on employees’ perceptions of a popular instrument of the modern human resource management - the target-based pay. As the positive effect of this instrument can only be expected when the employees perceive individual benefits
(Rehu, Lusk & Wolff, 2005), this research focuses specifically on cultural influences on employees’ perceptions of target-based pay.

Initially, this research set out to conduct a thorough systematic literature review on the previous studies in the relevant research field. The results of the literature review revealed that:

a. Target-based pay is an important instrument in the modern human resource management;

b. Meanwhile, many variant forms of target-based pay incentives have been developed in the human resource practice;

c. Previous research has identified a plethora of influence factors on perceptions of target-based pay; and

d. Hofstede’s Value Survey Model (VSM) was identified as an appropriate theoretical framework to describe cultural influences.

In the further process of this research, the influence factors on perceptions of target-based pay, as defined by previous researchers, were mapped with Hofstede’s VSM framework. During the verification of the findings of the literature review, through discussions with a practitioner expert panel, a further cultural factor “general pay perception” was added to the original form of Hofstede’s model.

A survey was then designed to examine the influence of the cultural factors on the employees’ perceptions of target-based pay in a multi-national manufacturing SME. Among 707 contacted employees, 477 participated at the survey. In the survey, the participants were asked to identify their locations in Germany, the Czech Republic and China, as well as their organisational positions grouped by general manager, intermediate managers, administration staff and production staff. In addition, the employees were asked to give answers to the 56 items directly related to the cultural influence on target-based pay. Subsequently, the survey data were entered in an SPSS database for further analysis.
The database was initially explored by means of a factor analysis, which refined the scale of the survey data into a 6-dimensional structure detailing the cultural factors at play. These 6 dimensions were in line with the extended VSM framework determined previously in this study. This framework, with its underlying attributes, was employed as an assessment instrument of the cultural influence on perceptions of target-based pay in further research round. The reliability and validity of the assessment instrument was successfully tested by various statistical procedures and subsequently, the results were verified and validated through panel discussions. The survey data were also explored in two comparison studies using descriptive statistics: the cross-country comparison and the organisational position comparison. While the cross-country comparison captured the influence of the national cultures of Germany, the Czech Republic and China on the employees’ perceptions of target-based pay in the present time, the organisational position comparison shed light on the cultural influence of the organisational positions and introduced a new dimension to cluster cultural influence for target-based pay studies.

Concluding the above, this research makes a contribution to knowledge by developing a methodology for the study of cultural influence on perceptions of target-based pay and by providing valuable real-world data for future research. In addition, this theoretical understanding also contributes to the effective administration of target-based pay in the practice.

To close, continued efforts are still needed in this challenging research field. A few directions for future researches have been identified by this thesis, including: to accumulate further empirical evidence on the validity of this study; to enhance the methodology to overcome the weakness of the self-stated perception ratings and to analyse the cultural influence in further dimensions. Future researches in the above and further directions will improve the knowledge of the effect of target-based pay.
To summarize Chapter 8, answers to the research questions are delivered by the test results of the research hypotheses which have been supported by the empirical evidence and verified and validated by panel discussions.

The contribution to knowledge of this thesis is summarized as follows.

- The development of a framework to measure the cultural factors and their impact on perceptions of target-based pay;
- Extending the framework to measure cultural factors and perceptions of target-based pay;
- Raising recent real-world data in context of cultural influence on target-based pay in a manufacturing SME; and
- Providing valuable insights out of the practice of the cultural influence on perceptions of target-based pay.

Box 8  Summary of conclusions
BIBLIOGRAPHY


APPENDIX I-1   SURVEY-English

A. General Information

a. My gender
   a. male  b. female

b. I am based in
   a. Germany  b. The Czech Republic  c. China

c. My Position
   a. General manager  b. Intermediate manager
      c. Administration staff  b. Production staff

d. My target-based pay
   a. I receive no target-based pay
      b. My target-based pay makes up approximately ____% of
         my total income.

e. I wish my target-based pay could make up ___% of my total income.

B. Please choose your answer to each question from the scale 1-4 for the
   importance of the topic. The values of the scales are described as follows:

   1 very unimportant
   2 unimportant
   3 important
   4 very important

   i   My pay

   1 My net salary/ wage

   2 The amount of raises I expect (e.g. according to the last raises I received)

   3 The amount of target-based bonus I expect (e.g. according to the last bonuses I received)

   4 How punctual the company makes the pay

   5 Non-monetary rewards, e.g. events at vacation resorts paid by the company

   ii  Information on my pay

   Information the company provides about pay issues of concern to me, e.g. development of minimum wage regulations

   7 How well the company keeps my pay data confidential

   iii My pay compared with others
My total pay compared with pay of similar jobs in other companies  

1 2 3 4

My pay compared with pay of other jobs in our company  

Differences in pay amount different jobs in the company (e.g. the difference in pay of the department head and his subordinates)  

1 2 3 4

C. Please choose your answer to each question from the scale 1-4 for the importance of the topic. The values of the scales are described as follows:

1 very unimportant
2 unimportant
3 important
4 very important

i My targets

1 I prefer a bigger number of targets, so that I can distribute my “risks” better.  

1 2 3 4

2 I prefer a small number of targets, so that I can concentrate on the key issues.  

1 2 3 4

3 I don’t like risks and prefer to have no target-based bonus. I would rather accept a fixed wage which lies much lower than the bonus I could expect.  

1 2 3 4

4 The minimum performance for my target-based bonus can be reached without efforts.  

1 2 3 4

5 The maximum performance for my target-based bonus can be reached without efforts.  

1 2 3 4

6 The maximum performance for my target-based bonus is realistic and can be reached with some efforts.  

1 2 3 4

7 The maximum performance for my target-based bonus is unrealistic and simply out of reach.  

1 2 3 4

ii My supervisor

8 … evaluates my achievements and my performance objectively without prejudice  

1 2 3 4

9 … evaluates my achievements and my performance under consideration of circumstances that have made my job difficult which are not under my control  

1 2 3 4

10 … evaluates my achievements and my performance in consideration of social aspects, e.g. my standing in the company, my financial needs etc.  

1 2 3 4

11 … provides timely feedback regarding his evaluation of my achievements and the reasons for his opinion  

1 2 3 4

12 … treats me kindly and with respect  

1 2 3 4
… takes steps to deal with me in a truthful manner

iii  **My Co-Workers**
14 Even if I have not done that well, the kind colleagues will help me so that I will receive a good portion of my bonus.
15 I would also like to help my colleagues who have not done that well out, so that they can also receive a good part of the bonus.
16 Giving and taking among the colleagues ought to be balanced.
17 I help nobody, but will take help offered by others.
18 I help nobody, need also no help from others.
19 Group incentives make sense, because they contribute to the group's and the company's success.
20 Group incentives make no sense, because my efforts alone have no influence on the results.

iv  **The Process**
21 On request I can receive additional information on the evaluation of my achievements and the decision on the amount of my bonus payout.
22 If I am not satisfied with the above decisions made, I may ask for a further review.
23 The principle for making decisions on my bonus payouts remains unchanged in foreseeable time.
24 The important data as info for decision-making are accessible for me all the time.

v  **Gain-sharing**
25 Regardless of my own performance, I receive a part of my bonus according to the company's success.
26 At difficult times, the managers should make the same sacrifice as the other employees.
27 At difficult times, the managers should make bigger sacrifice as the other employees, since they also profit more at good times.
28 At difficult times, the managers should make less sacrifice as the other employees, since they often work much more and harder than the others.
29 At difficult times, everybody should give up a part of their money, so that everybody can keep their job.
30 At difficult times, I am ready to give up a part of my money, but only if I will get something back when things go well again.
31 At difficult times, the organisation needs to be rationalized and those in need (married with children, bad chance for a new job etc.) should then be favoured to stay.
At difficult times, the organisation needs to be rationalized and those with higher status (age, standing, years of service in the company etc.) should then be favoured to stay.

At difficult times, the organisation needs to be rationalized and those with better performance should then be favoured to stay.

The effects

My target-based incentive plan makes me work harder.

If I perform well, there will be a payout from the company’s target-based incentive plan.

The target-based incentive plan is useful. It helps me to recognize the priorities of my work.

The target-based incentive plan is counter-productive. It misleads me to ignore some of my important tasks that are not rewarded by the incentive plan.

D. Please choose your answer to each question from the scale 1-4 for the importance of the topic. The values of the scales are described as follows:

1 very unimportant
2 unimportant
3 important
4 very important

1 The opportunity to extend my horizon through co-operation with overseas colleagues

2 The opportunity to extend my horizon through visit of overseas business locations

3 My opportunity to obtain new knowledge or skills through new assignments on the job

4 My opportunity to obtain new knowledge or skills through internal training programmes

5 My opportunity to obtain new knowledge or skills through external training programmes

6 My opportunity to be promoted in the company

7 The job security

8 The good atmosphere among the colleagues is more important than more money for me.

9 The company’s long-term health programme to maintain the employees’ health
A. Allgemeine Info

1. Geschlecht
   a. männlich
   b. weiblich

2. Land
   a. Deutschland
   b. Tschechien
   c. China

3. Meine Position
   a. Geschäftsleitung
   b. Mittleres Management
   c. Sachbearbeiter
   d. Fertigungskraft

4. Ziel-bezogene Bonusvereinbarung
   a. Ich erhalte keinen ziel-bezogenen Bonus.
   b. Mein erwarteter Bonus aus der Zielvereinbarung entspricht ca. 
      __________% meines Gesamteinkommens.

5. Idealerweise sollte der ziel-bezogene Bonusanteil __________ % meines 
   Gesamteinkommens ausmachen.

B. Bitte wählen Sie jeweils eine Antwort aus einer Skala von 0-4 für die Wichtigkeit
   des Themas. Der Skala sind folgende Werte zugeordnet:

   1 sehr unwichtig
   2 unwichtig
   3 wichtig
   4 sehr wichtig

i. Mein Einkommen

1. Die Höhe meines fixen Gehalts/Lohns

2. Die Höhe der Gehalts erhöhung, die ich erwarte (z.B. entsprechend der Erhöhungen, die ich in der Vergangenheit typischerweise erhielt)

3. Die Höhe der Auszahlung meines ziel-bezogenen Bonus, die ich erwarte (z.B. entsprechend den Boni, die ich in der Vergangenheit typischerweise erhielt)

4. Wie pünktlich die Gehaltszahlungen getätigt werden.


ii. Information über mein Einkommen

6. Konsistenz der Gehaltspolitik, d.h. das Unternehmen betreibt eine nachvollziehbare, auf Dauer ausgerichtete Gehaltspolitik.

7. Wie gut das Unternehmen die Daten über die individuellen Einkommen vertraulich hält.
Mein Einkommen im Vergleich zu anderen

Mein Gesamteinkommen im Vergleich mit ähnlichen Jobs in anderen Unternehmen 1 2 3 4

Mein Gesamteinkommen im Vergleich mit gleichwertigen Jobs in unserem Unternehmen 1 2 3 4

 Unterschiede im Einkommen für unterschiedliche Jobs im Unternehmen (z.B. der Unterschied zwischen dem Abteilungsleiter und den Mitarbeitern) 1 2 3 4

C. Bitte wählen Sie jeweils eine Antwort aus einer Skala von 0-4 für die Wichtigkeit des Themas. Der Skala sind folgende Werte zugeordnet:

1 sehr unwichtig
2 unwichtig
3 wichtig
4 sehr wichtig

Meine ziele

1 Ich bevorzuge eine Vielzahl von Zielen, so dass ich mein "Risiko" besser verteilen kann. 1 2 3 4

2 Ich bevorzuge eine kleine Zahl von Zielen, so dass ich mich besser auf die Schwerpunkte konzentrieren kann. 1 2 3 4

3 Ich möchte in kein Risiko eingehen bzw. keinen zielbezogenen Bonus haben. Lieber würde ich ein fixes Gehalt akzeptieren, das deutlich unter dem zu erwartenden Bonus liegt. 1 2 3 4

4 Die Minimum-Leistungen für meine zielbezogene Bonusvereinbarung sind für mich mühelos erreichbar. 1 2 3 4

5 Die Maximum-Leistungen für meine zielbezogene Bonusvereinbarung sind für mich mühelos erreichbar. 1 2 3 4

6 Die Maximum-Leistungen für meine zielbezogene Bonusvereinbarung sind realistisch und mit etwas Mühe erreichbar. 1 2 3 4

7 Die Maximum-Leistungen für meine zielbezogene Bonusvereinbarung sind unrealistisch und schier unerreichbar. 1 2 3 4

Mein Vorgesetzter

8 … beurteilt meine Leistungen unvoreingenommen und sachlich nach meinem Erfolg bzw. meinen Leistungen. 1 2 3 4

9 … beurteilt meine Leistungen unter Berücksichtigung der Umstände außer meinen Einflüssen, die meine Arbeit erschwert haben. 1 2 3 4

10 … beurteilt meine Leistungen unter Berücksichtigung der sozialen Aspekte, z.B. meines Ansehens im Betrieb, meiner finanziellen Bedürfnisse etc. 1 2 3 4
11 … gibt mir zeitliche Feedbacks über seine Beurteilung über meine Zielerreichung sowie deren Begründung.
12 … behandelt mich freundlich und mit Respekt.
13 … zeigt mir durch sein Verhalten, dass er ehrlich mit mir umgeht.

iii  
**Meine Kollegen**

14 Auch wenn meine Leistung nicht besonders stark war, die netten Kollegen helfen mir, so dass ich einen guten Teil meines Bonus erhalten kann.
15 Ich helfe auch gerne den nicht besonders leistungsstarken Kollegen, damit sie auch einen guten Teil ihres Bonus bekommen.
16 Das Geben und Nehmen unter den Kollegen muss ausgeglichen sein.
17 Ich helfe keinem; aber Hilfe von anderen würde ich gerne annehmen.
18 Ich helfe keinem; ich brauche auch keine Hilfe von anderen.
19 Gruppenziele sind sinnvoll, weil sie den Erfolg der Gruppe bzw. des Unternehmens fördern.
20 Gruppenziele sind nicht sinnvoll, weil meine Bemühungen allein das Ergebnis nicht beeinflussen können.

iv  
**Der Prozess**

22 Wenn ich mit der obigen Entscheidung nicht zufrieden bin, kann ich das Ergebnis noch ein Mal überprüfen lassen.
23 Das Prinzip, wie die Entscheidungen über meinen Bonus getroffen werden, bleibt in absehbarer Zeit gleich.
24 Die wichtigen Daten als Grundlage für die Entscheidung über meine Leistung bzw. meinen Bonus ist mir stets zugänglich.

v  
**Erfolgsbeteiligung**

25 Ich erhalte ein Teil meines Bonus entsprechend dem Unternehmenserfolg, unabhängig von meinen eigenen Leistungen.
26 In schwierigen Zeiten sollen die Führungskräfte gleiche Einschnitte hinnehmen wie die anderen Mitarbeiter.
27 In schwierigen Zeiten sollen die Führungskräfte tiefere Einschnitte hinnehmen als die anderen Mitarbeiter, dafür profitieren sie mehr in guten Zeiten.
28 In schwierigen Zeiten sollen die Führungskräfte mildere Einschnitte hinnehmen als die anderen Mitarbeiter, dafür arbeiten sie oft weit mehr und härter als die anderen.
29 In schwierigen Zeiten sollen alle auf ein Teil seines Einkommens verzichten, damit alle Jobs im Unternehmen erhalten bleiben.
30 In schwierigen Zeiten bin ich bereit dazu, auf ein Teil meines Einkommens verzichten, aber nur wenn ich etwas zurück bekomme, wenn es dem Unternehmen wieder gut geht. 1 2 3 4
31 In schwierigen Zeiten soll die Organisation rationalisiert werden und die besonders bedürftigen (verheiratet mit Kindern, schlechte Aussicht für eine neue Stelle etc.) sollen vorrangig bleiben. 1 2 3 4
32 In schwierigen Zeiten soll die Organisation rationalisiert werden und die mit höherem Status (Alter, Ansehen, Betriebszugehörigkeit etc.) sollen vorrangig bleiben. 1 2 3 4
33 In schwierigen Zeiten soll die Organisation rationalisiert werden und die leistungsstarken sollen vorrangig bleiben. 1 2 3 4

vi Die Wirkungen

34 Meine zielbezogene Bonusvereinbarung motiviert mich, härter zu arbeiten. 1 2 3 4
35 Wenn ich gute Arbeit geleistet habe, werde ich aufgrund der zielbezogenen Bonusvereinbarung belohnt. 1 2 3 4
36 Die zielbezogene Bonus-Vereinbarung ist sehr hilfreich. Diese hilft mir, die Schwerpunkte an meinem Arbeitsplatz zu erkennen. 1 2 3 4
37 Die zielbezogene Bonus-Vereinbarung ist contra-produktiv. Diese verleitet dazu, dass ich manche wichtige Aufgaben ignoriere, da diese nicht oder nicht entlohnt werden. 1 2 3 4

D. Bitte wählen Sie jeweils eine Antwort aus einer Skala von 0-4 für die Wichtigkeit des Themas. Der Skala sind folgende Werte zugeordnet:

1 sehr unwichtig
2 unwichtig
3 wichtig
4 sehr wichtig

1 Gelegenheiten meinen Horizont zu erweitern durch Zusammenarbeit mit ausländischen Kollegen. 1 2 3 4
2 Gelegenheiten meinen Horizont zu erweitern durch Besuch von den ausländischen Standorten. 1 2 3 4
3 Die Gelegenheiten auf meinem Arbeitsplatz, neues Wissen bzw. Fähigkeiten durch neue Aufgaben zu erwerben. 1 2 3 4
4 Das Angebot auf meinem Arbeitsplatz, durch interne Betreuungen bzw. Schulungen neues Wissen bzw. Fähigkeiten zu erwerben. 1 2 3 4
5 Das Angebot auf meinem Arbeitsplatz, durch externe Schulungen neues Wissen bzw. Fähigkeiten zu erwerben. 1 2 3 4
6 Meine Chance, im Unternehmen aufzusteigen. 1 2 3 4
7 Die Job-Sicherheit. 1 2 3 4
8 Die gute Stimmung unter den Kollegen ist mir wichtiger als mehr Geld. 1 2 3 4
9 Das Langzeit-Programm des Unternehmens zur Erhaltung der Gesundheit der Mitarbeiter. 1 2 3 4
APPENDIX I-3  SURVEY-Czech

A. Všeobecné informace

1. Pohlaví  
   a. Muž  
   b. Žena
2. Místo výkonu práce  
   a. Německo  
   b. Česká republika  
   c. Čína
3. Pracovní pozice  
   a. Hlavní management  
   b. Střední management  
   c. Administrativní pracovník  
   b. Dělnická pozice
4. Mě osobní ohodnocení  
   a. Nedostávám žádné odměny  
   b. Mě odměny odpovídají zhruba ____% z mého celkového příjmu.
5. Přál/la bych si, aby mé odměny tvořily ___% z mého celkového příjmu.

B. Prosím, vyberte svou odpoveď ke každé otázce ze stupnice 0 – 4 podle důležitosti. Hodnoty jsou následující:

   1 naprosto nepodstatné  
   2 nepodstatné  
   3 důležité  
   4 velmi důležité

i. Můj příjem

<table>
<thead>
<tr>
<th>Čistý příjem/ mzda.</th>
<th>1 2 3 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Očekávaná výše zvýšení platu (např. podle posledního zvýšení platu).</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Očekávaná výše odměn (např. podle posledních obdržených odměn plynoucích z osobního ohodnocení).</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Dochvilnost firmy ve vyplácení mezd.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>Nepeněžní odměny, např. příspěvek na dovolenou.</td>
<td>1 2 3 4</td>
</tr>
</tbody>
</table>

ii. Informace o mé příjmu

| Informace poskytnuté firmou ohledně mého platu, např. ve Směrnici vývoje minimální mzdy. | 1 2 3 4 |
| Jak důsledně udržuje důvěrné informace týkající se mého platu v tajnosti. | 1 2 3 4 |

iii. Můj příjem ve srovnání s ostatními
Můj příjem ve srovnání s příjmy podobných pozic v jiných firmách.

Můj příjem ve srovnání s příjmy jiných pozic v naší firmě.

Rozdíly v příjmech různých pozic ve firmě (např. rozdíly v příjmu vedoucího oddělení a jeho podřízených).

C. Prosim, vyberte svou odpověď ke každé otázce ze stupnice 0 – 4 podle důležitosti. Hodnoty jsou následující:

1 naprosto nepodstatné
2 nepodstatně
3 důležité
4 velmi důležité

i Mé cíle

1 Upřednostňuji větší počet cílů, tak abych rozložil lépe riziko. 1 2 3 4
2 Upřednostňuji menší počet cílů, tak abych se mohl soustředit na klíčové problémy. 1 2 3 4
3 Nerad riskuji a neproměnuji osobní ohodnocení. Raději příjmu pevně stanovený příjem, který je mnohem nižší než odměna, kterou bych mohl dostat na základě osobního ohodnocení. 1 2 3 4
4 Minimální hranice výkonů pro splnění nároků na odměnu dosáhnu bez vynaložení úsilí. 1 2 3 4
5 Maximální hranic výkonů pro splnění nároků na odměnu dosáhnu bez vynaložení úsilí. 1 2 3 4
6 Maximální hranice výkonů pro splnění nároků na odměnu je reálná a dá se ji dosáhnout s vynaložením patřičného úsilí. 1 2 3 4
7 Maximální hranice výkonů pro splnění nároků na odměnu je nereálná a jednoduše nedosažitelná. 1 2 3 4

ii Můj nadřízený

8 … hodnotí mé dosažené výkony a úspěchy objektivně bez předsudků 1 2 3 4
9 … při hodnocení mých dosažených výkonů a úspěchů se berou v úvahu okolnosti, jež znesnadňují mou práci a které nemohu ovlivnit 1 2 3 4
10 … při hodnocení mých dosažených výkonů a úspěchů se přihlíží k sociálním aspectům, např. postavení ve společnosti, mé finanční potřeby, atd. 1 2 3 4
11 … poskytuje včasnou zpětnou vazbu ohledně vyhodnocení mých úspěchů s odůvodněním jeho názorů 1 2 3 4
12 … jedná vstřícně a s respektem 1 2 3 4
13 … svým chováním dokazuje, že se chová čestně 1 2 3 4
Moji spolupracovníci
14 Přestože nesplním objem výkonů, kolegové mi pomohou a díky nim dosáhnu na určitou část odměn.
15 Také já rád pomáhám svým kolegům, keří nesplní zadaný objem výkonů, tudíž i oni mohou dosáhnout na část odměn.
16 Měla by fungovat týmová spolupráce- poskytování a přijímání pomoci mezi kolegy by mělo být využíváno.
17 Nikomu nepomáhám, ale od ostatních pomoc přijmu.
18 Nikomu nepomáhám a také nepodražuji žádoucí pomoc od ostatních.
19 Skupinová pobídková odměna dává smysl, protože přispívá k úspěchům skupiny a firmy.
20 Skupinová pobídková odměna nedává smysl, protože moje úsilí samotné nemá vliv na výsledky.

Průběh
21 Na žádost mohu dostat dodatečné informace o hodnocení mých úspěchů a rozhodnutí o výši motivačního příspěvku.
22 Když nejsou spokojen s rozhodnutím uvedeným výše, mohu požadat o další přezkoumání a posouzení.
23 Zásady při učinění rozhodnutí ohledně příspěvku zůstávají po nějakou dobu nezměněna.
24 Důležité informace jakožto informace pro učinění rozhodnutí jsou pro mě dostupné po celou dobu.

Sdílení zisku
25 Bez ohledu na můj vlastní výkon, dostávám část odměn podle úspěchů firmy.
26 V době krize by se měli manažéři obětovat stejně jako ostatní zaměstnanci.
27 V době krize by měli manažéři učinit větší oběť než ostatní zaměstnanci, protože mají větší příjem v době, kdy je firma v zisku.
28 V době krize by měli manažéři učinit menší oběť než ostatní zaměstnanci, protože často pracují mnohem více a usilovněji.
29 V době krize by se měl každý vzdát část z jeho příjmu, aby si každý tak mohl udržet svou práci.
30 V době krize jsem připraven vzdát se části svého příjmu, ale pouze v případě, že mi to v době ziskovosti bude vráceno zpět.
31 V době krize by měli být upřednostňováni ti, kteří to potřebují nejvíce a těmto lidem by mělo být umožněno zůstat (rodiny s dětmi, špatná vyhlídka na novou práci, atd.).
32 V době krize se musí upřednostnit vyšší zásluhy a vyšší status (věk, postavení, doba působnosti ve firmě) a těmto lidem by mělo být umožněno zůstat.
33 V době krize by měla organizace upřednostnit zaměstnance s lepšími výkony a tím by mělo být umožněno zůstat.  

Dopady

34 Moje odměny mě motivují k lepšímu výkonu.  
35 Jestliže je má práce kvalitní, dostanu vyplacenou částku z motivačního plánu firmy.  
36 Motivační plan je užitečný. Pomáhá mi rozpoznat priority na pracovišti.  
37 Motivační plan odměn není produktivní. Mylně mě informuje a vede k ignorování některých důležitých úkolů, které nejsou ohodnoceny motivačním plánem.

D. Prosím, vyberte svou odpověď ke každé otázce ze stupnice 0-4 podle důležitosti.
Hodnoty jsou následující:

1 naprosto nepodstatné
2 nepodstané
3 důležité
4 velmi důležité

1 Příležitost rozšířit si své schopnosti v rámci spolupráce s kolegy v zahraničí.  
2 Příležitost rozšířit si své schopnosti v rámci návštěvy zahraničních firem.  
3 Příležitost získat nové znalosti nebo dovednosti v rámci nových úkolů.  
4 Příležitost získat nové znalosti nebo zkušenosti v rámci podnikových zaškolovacích programů.  
5 Příležitost získat nové znalosti nebo zkušenosti v rámci externích zaškolovacích programů.  
6 Příležitost povýšení ve firmě.  
7 Bezpečnost práce.  
8 Dobrá atmosféra mezi kolegy je pro mě důležitější než peníze.  
9 Program dlouhodobé zdravotní péče k zajištění zdraví pracujících.
A. 基本信息

1. 性别
   a. 男
   b. 女

2. 工作国家
   a. 德国
   b. 捷克
   c. 中国

3. 职位
   a. 总经理
   b. 中层管理者
   c. 行政人员
   d. 生产人员

4. 绩效工资（基于目标设定）
   a. 我没有绩效工资。
   b. 我的绩效工资约占总收入的 ________%。

5. 我希望我的绩效工资占总收入的 ________%。

B. 请根据目前状况选择你的答案。“重要性”分1-4个等级。各个等级的描述如下：

   1 无关紧要
   2 不重要
   3 重要
   4 非常重要

i. 我的工资

   1. 我的净工资。
   2. 期望加薪值（参考上年度加薪数据）。
   3. 期望的绩效奖金（参考上年度奖金）。
   4. 工资发放准时程度。
   5. 除金钱奖励外，公司通过其他方面奖励，比如组织职员工旅游度假。

ii. 关于个人工资信息

   6. 公司会通知员工关于工资制度的信息，如本市最低工资标准的调整。
   7. 公司对个人工资实行保密制度。

iii. 我的工资与其他人相比
我的总收入与其他公司同种职位相比。

我的工资与其他公司其他岗位相比。

公司内部不同职位的收入差异（例如，部门经理与下属的收入差异）

C. 请根据目前状况选择你的答案，“重要性”分1-4个等级。各个等级的描述如下:

1. 无关紧要
2. 不重要
3. 重要
4. 非常重要

i 我的目标

1. 我愿意接受更多项目的目标考核，这样可以更好地分摊“风险”。
2. 我希望考核的目标数量少一些，这样我可以集中精力解决关键问题。
3. 我宁愿没有绩效奖金，也不愿承担责任。我宁愿接受一个远低于预期奖金的固定工资。
4. 最小绩效目标可以轻易实现。
5. 最大绩效目标可以轻易实现。
6. 最大绩效目标的设置符合实际，通过一定努力可以达到。
7. 最大绩效目标的设置不符合实际，根本无法达到。

ii 我的上司

8. 能够以客观的、公平的态度来评价我的工作业绩和表现。
9. 能够在评价我的工作业绩和表现时考虑实际困难，比如有些工作因不受本人控制的原因无法完成。
10. 从社会因素方面，例如，我在公司的职位，以及我的财务需求等来评价我的工作业绩和表现。
11. 及时反馈对我工作表现的评价并对评价的理由加以说明。
12. 对我友善并且尊重我。
13. 在实际行动上以真诚的态度与我共事。
我的同事

14 虽然我工作表现欠佳，但通过同事的帮助，也可以获得一部分奖金。
15 我愿意帮助那些工作遇到困难的同事，通过我的帮助他们也可以获得一部分奖金。
16 同事之间的帮助和被帮助应基本对等。
17 我没有帮助过任何人，但是会接受其他人对我提供的帮助。
18 我没有帮助过任何人，也不需要其他人帮助。
19 集体奖励值得推崇，因为这样可以提高公司和部门的效益。
20 集体奖励毫无意义，因为个人的努力没有直接回报。

奖金评定程序

21 应要求我可以收到关于评估我工作表现以及确定奖金金额的具体信息。
22 如果我对上述决定不满意，可以要求复审。
23 确定奖金金额的基本原则在一段时间内不会改变。
24 作为我奖金评定的基础的相关数据我可以随时查阅。

利润分享

25 无论我个人表现如何，只要公司业绩好，我都能得到一部分奖金。
26 在公司发展困难时期，管理者应该与其他员工做同样的牺牲。
27 在公司发展困难时期，管理者相比其他员工应该做出更多的牺牲，因为他们对公司发展顺利时获得了更多的奖励。
28 在公司发展困难时期，管理者应比其他员工做较少的牺牲，因为他们平时已经比其他人付出了更多的努力。
29 在公司发展困难时期，每人应该放弃一部分工资来维系公司的生存而保住自己的工作。
30 在公司发展困难时期，我做好了放弃一部分工资的准备，但前提是公司业绩回转时我应得到更多的回报。
31 在公司发展困难时期，组织架构应进行精简，一些有困难的职员工（已婚并育有小孩，新工作机会少等）应优先照顾留下。
32 在公司发展困难时期，组织架构应进行精简，一些老员工（根据年龄、身份，在公司服务的年限等）理应优先照顾留下来。
33 在公司发展困难时期，组织架构应进行精简，工作表现优秀的员工工理应优先照顾留下来。

vi 效果
34 基于目标的绩效工资方案使我工作更努力。 1 2 3 4
35 如果我表现好，就会收到较高的绩效工资。 1 2 3 4
36 基于目标的绩效工资方案非常有用，它帮助我理清工作思路，分清工作重点。 1 2 3 4
37 基于目标的绩效工资方案起到反作用，它误导我忽略一些重要的任务，这些任务并未列入绩效工资方案，也不进行奖励。 1 2 3 4

D. 请根据目前状况选择你的答案，“重要性”分1-4 个等级。各个等级的描述如下:

1 无关紧要
2 不重要
3 重要
4 非常重要

1 与国外同事共事的机会使我开阔了眼界。 1 2 3 4
2 参观国外工厂的机会使我开阔了眼界。 1 2 3 4
3 通过接受工作中分配的新任务使我有获得新知识和技能的机会。 1 2 3 4
4 通过内部培训计划使我有获得新知识和技能的机会。 1 2 3 4
5 通过外部培训计划使我有获得新知识和技能的机会。 1 2 3 4
6 公司提供给我个人的晋升机会。 1 2 3 4
7 工作有保障。 1 2 3 4
8 同事之间良好的工作氛围对我来说比获得更多的金钱重要。 1 2 3 4
9 公司制定的长期健康计划帮助员工保持健康。 1 2 3 4
Dear colleagues,

For the final thesis of my study of Doctor of Business Administration at the University of Gloucestershire (England), I would like to conduct a survey study among the employees in our company. The topic of the survey study is:

*The perceptions of employees for the target-based pay*

The aim of my survey study is to examine the employees’ opinions on the above-mentioned topic, so as to recognize the wishes of the employees (especially to discover the regional differences caused by the cultural differences). This information shall not only contribute to knowledge of management science, but also help to improve such motivational measures in the practice (also in our company).

For this purpose, I would like to ask you kindly for your help:
Please fill out the attached questionnaire and submit it in the foreseen pigeon hole. Spare copies of the questionnaire are available at the Human Resources Office. In case of any further questions, please do not hesitate to contact me under the e-mail address: dathe@erich-jaeger.de.

The participation on the survey is on a voluntary basis.

*I herewith explicitly guarantee the anonymity of all data entries made and will use such for my intended doctorate study only. No data which might reveal the identity of the participants will be released to any third party.*

Certainly, I will be glad to report on the survey results.

I would like to thank everybody in advance for your support and the timely response.

Yours sincerely,
Tracy Dathe
APPENDIX II-2  INTRODUCTION LETTER FOR SURVEY-German

Liebe Kolleginnen und Kollegen,
im Rahmen meiner Doktorarbeit an der Universität Gloucestershire (England) im
Fachbereich Betriebswirtschaftslehre, möchte ich gern eine Umfrage in unserem
Unternehmen durchführen. Das Thema der Umfrage lautet:

*Die Empfindung der Mitarbeiter gegenüber ziel-bezogener Bonusvereinbarung*

Ziel meiner Umfrage ist es, die Meinung der Mitarbeiter bezüglich des o.g. Themas
abzufragen, um die Wünsche von allen Mitarbeitern festzustellen (vor allem regionale
Unterschiede, die auf die kulturellen Unterschiede zurückzuführen sind). Dieses Wissen
soll nicht nur einen Beitrag für die Wissenschaft leisten, sondern auch in der
Praxis helfen, derartige Maßnahmen zur Mitarbeitermotivation optimal zu gestalten
(auch in unserem Unternehmen).

In diesem Zusammenhang bitte ich Euch/Sie um Eure/Ihre Mithilfe:
Bitte den beigefügten Fragebogen ausfüllen und diesen anschließend in mein Postfach
legen. Ersatzexemplare sind ausreichend verfügbar. Bei Rückfragen bin ich unter der E-
Mail-Adresse: dathe@erich-jaeger.de erreichbar.

Die Teilnahme an die Umfrage ist freiwillig.

*Die Anonymität der gemachten Angaben und deren Verwendung für meine eigene Promotionsarbeit sichere ich hiermit ausdrücklich zu bzw. keine Daten, die zur Identifikation des Teilnehmers führen könnten, werden freigegeben.*

Selbstverständlich werde ich gerne über die Auswertung der Umfrage unterrichten.
Für die unterstützende Hilfe und die schnelle Rücksendung möchte ich mich schon jetzt bei allen bedanken.

Mit freundlichen Grüßen
Tracy Dathe
APPENDIX II-3  INTRODUCTION LETTER FOR SURVEY-Czech

Drazí kolegové,

V rámci mé doktorské práce na Univerzitě Gloucestershire (Anglie), obor ekonomika podniku, bych ráda provedla dotazníkové šetření mezi zaměstnanci v naší společnosti. Předmětem dotazníkového šetření je:

_Vimání osobního ohodnocení samotnými zaměstnanci_

Cílem mého dotazníkového šetření jsou názory zaměstnanců týkající se výše uvedeného tématu, s cílem poznat přání všech zaměstnanců (zejména regionální rozdíly vyvolané kulturními rozdíly). Tato informace by neměla být jen příspěvkem pro vědecké účely, ale měla by pomoci také v praxi při vytváření vhodných opatření pro zvýšení motivace pracovníků (rovněž v naší společnosti).

Z tohoto důvodu bych Vás ráda požádala o Vaši pomoc:
Vyplňte prosím přiložený dotazník a vložte jej do mé, k tomu vyhrazené, poštovní schránky. Kopie dotazníků jsou k dispozici na personálním oddělení. V případě dalších dotazů mne prosím neváhejte kontaktovat na e-mailové adrese: dathe@erich-jaeger.de.

Vyplnění dotazníku je zcela dobrovolné.

_Timto zaručuji výslovnou garanci anonymity všech záznamů, které budou použity pouze v souvislosti s vypracováním doktorské studie. Nebudou zveřejněna žádná data, která by mohla vést k identifikaci účastíků._

Samozřejmě ráda poskytnu výsledky dotazníkového šetření.

Již nyní bych ráda poděkovala všem za podporu a včasnou reakci.

Se srdečným pozdravem
Tracy Dathe
APPENDIX II-4  INTRODUCTION LETTER FOR SURVEY-Chinese

各位尊敬的同事们:

我现在英国 Gloucestershire 大学攻读商业管理博士学位，并希望为毕业论文课题在我公司进行一项追踪调查。调查题目为:

**员工对绩效工资的感受**

此项追踪调查旨在研究员工对上述题目的意见及愿望(尤其在于由于文化差异造成的地域性差别)。调查结果除对管理理论方面的贡献，亦应帮助改善作为激励员工所采用的绩效工资在实践中的施行方法 (包括在我公司的施行方法)。

为达到预定目标，我在此请求大家提供以下帮助:

请将信中所附的追踪调查问卷填好后放进指定信箱。如有需要，人事部可提供更多的空白问卷。如有其它问题，请用电子邮件和我直接联系:

dathe@erich-jaeger.de,

参加追踪调查为自愿行为。

我在此郑重保证所有采集的信息将被匿名处理并只用于学习研究目的。所有能显示填表人身份的信息将不被泄漏给第三方。

当然，我会很乐意向大家汇报调查结果。

对大家提供的支持和尽快的反馈本人不尽感谢。

此致敬礼

Tracy Dathe
APPENDIX III  STATISTICAL CONCEPTS AND METHODS

This appendix provides an overview of the statistical methods and the terminologies considered relevant to this thesis. The content of the appendix relies largely on Andy Field’s book “Discovering statistics using IBM SPSS statistics” (Field, 2013).

**Statistic models**

In order to test the research questions, the hypothesis is usually described as a **statistic model**. In practice, linear models are much more popular than non-linear models.

Basically, there are two ways to test a hypothesis: **correlational research** – to observe correlation of variables in reality – and **experimental research** – to examine the cause-effect relationship between variables through manipulation of some variable and the effect of the changes on others.

The data set used for the research study may be described as the sum of predicted value according to the statistic model plus an amount of error:

\[
\text{outcome}_i = (\text{model}) + \text{error}_i
\]

A statistic model consists of variables and parameter. Parameters are usually estimated constants.

A linear statistic model may be described as follows:

\[
\text{outcome}_i = \sum b_iX_i + \text{error}_i
\]

\[b = \text{parameter}\]

\[X = \text{variable}\]

**Types of variables**

For the research study, the analysed variables are divided into independent and dependent variables. According to Field’s definition, an **independent variable** (also known as predictor variable) is a variable considered to cause effect. A **dependent variable** (also known as outcome variable), on the other hand, is one that reacts to the changes of an independent variable.

**Frequency distribution and distribution dispersion**

Ideally, all data are distributed symmetrically around the centre of all scores and the data frequency decreases as the score deviates stronger from the centre. Such distribution is called **Normal distribution**.

There are two major types of deviation from normal distribution: (1) lack of symmetry (**skew**) and (2) pointiness (**kurtosis**). A distribution with positive kurtosis (known as **leptokurtic**) is pointy and heavy-tailed. On the contrary, a distribution with negative kurtosis known as (**platykurtic**) is flat and thin-tailed.
The centre of a frequency distribution (central tendency) is usually measured by the mode, the median, and the mean.

The **mode** is the score that occurs most frequently in the data set. A data set may have more than one mode.

The **median** is the middle score when scores are ranked in order of magnitude.

The **mean** is the average score calculated by the sum of all scores divided by the total number of scores.

The dispersion of scores in a data set is often measured by the **range** of scores, which is the difference between the largest and the smallest score.

The dispersion in a distribution is often measured by the standard deviation. The following is the calculation method of standard deviation and some related measures:

- number of entities in the data set = \( N \)
- the mean = \( \bar{x} \)
- deviation = \( (x_i - \bar{x}) \)
- sum of squared errors (SS) = \( \sum_{i=1}^{n} (x_i - \bar{x})^2 \)
- Variance (\( s^2 \)) = \( \frac{\sum_{i=1}^{n} (x_i - \bar{x})^2}{N-1} \)
- Standard deviation (\( s \)) = \( \sqrt{\frac{\sum_{i=1}^{n} (x_i - \bar{x})^2}{N-1}} \)

The standard deviation shows how well the mean represents the sample data.

The normal distribution is often used to calculate the probability of occurrence of a given value in a data set. To simplify the calculation, the data set is usually converted into a data set with a mean of 0 and a standard deviation of 1 (known as standard normal distribution).

Basically, the above conversion is done in two steps. First, to centre the data around 0, the mean is subtracted from each score \( (x_i - \bar{x}) \). Second, to ensure the standard deviation of 1, the result of step 1 is divided by the standard deviation \( (s) \). The result of the second step is known as **z-score**.

\[
z = \frac{x_i - \bar{x}}{s}
\]

The probability of the occurrence of the value \( X_i \) can then be looked up in the table of standard normal distribution. This table provides a density \( (y) \) of a list of values of \( z \). The density may be interpreted as the probability of occurrence of each value \( z \).

**Confidence intervals**

Based on the following description of a statistic model,

\[
\text{outcome}_i = (\text{model}) + \text{error}_i
\]
the error of the model may be described as:

\[
\text{Total error} = \sum_{i=1}^{n} (\text{observed}_i - \text{model}_i)^2
\]

\[
\text{Mean squared error} = \frac{SS}{df} = \frac{\sum_{i=1}^{n}(x_i-x)^2}{N-1}
\]

\(X = \text{the mean}\)

\(df = \text{degree of freedom (= number of observations that are free to vary)}\)

In reality, samples are often used for statistical studies, since the total population is usually for various reasons - e.g. the large size of data - not accessible. However, different samples values vary because they contain different members of the population. The standard deviation of sample mean is called the standard error of the mean (SE) or standard error.

In order to determine how representative the sample mean is for the population, the sampling distribution is used. Based on the central limit theory, under the precondition, that the sample is large enough (usually larger than 30), the sampling distribution is supposed to have a normal distribution with a mean equal to the population mean and a standard deviation of:

\[
\delta_x = \frac{s}{\sqrt{N}}
\]

The confidence interval of a chosen confidence level with large samples (thus normal distribution) may be calculated as follows:

The confidence level is to be translated into a z-score;

\[-Z_{1-\rho/2} \leqslant \frac{X_i - X}{s} \leqslant Z_{1-\rho/2}\]

Therefore, the boundaries can be calculated as follows:

Lower boundary of confidence interval = \(X - (Z_{1-\rho/2} \times SE)\)

Upper boundary of confidence interval = \(X + (Z_{1-\rho/2} \times SE)\)

\(\rho = \text{the probability value for the confidence interval.}\)

For smaller samples, instead of normal distribution, t-distribution shall apply.

**Correlation**

The correlation coefficient referred to in this thesis is defined as Person’s correlation coefficient and is defined as follows:

\[
\text{Correlation coefficient } r = \frac{\sum_{i=1}^{n}(X_i - X)(Y_i - Y)}{(N-1)S_xS_y}
\]

\(X = \text{mean of } X_i\)

\(Y = \text{mean of } Y_i\)

\(N = \text{number of observations}\)
$S_x = \text{Standard deviation of } X$

$S_y = \text{Standard deviation of } Y$

Pearson’s correlation coefficient measures the strength of relationship between two variables and can take any value between -1 (when one variable changes, the other variables changes in the opposite direction by the same amount) and +1 (when one variable changes, the other variables changes in the same direction by the same amount). If $r=0$, it means when one variable changes, the other variable does not change at all.

**Simple linear model of regression analysis**

The regression analysis in this thesis is organised as a simple regression analysis based on a linear model. That means, the model estimates the outcome as follows.

$$\text{outcome}_i = b_0 + \sum b_Xi + \text{error}_i$$

($b =$ regression coefficients; $X =$ variable)

The total error of the model can be computed as the sum of squared residuals (or “residual sum of square”):

$$\text{Total error} = \sum_{i=1}^{n} (\text{observed}_i - \text{model}_i)^2$$

The value R Square is computed by dividing the total sum of the model ($SS_m$) with the total sum of squares” ($SS_t$). R Square indicates how much of the variance in the outcome can be explained by the regression model.

$$R^2 = \frac{SS_m}{SS_t}$$

SPSS computes besides the R Square also an “adjusted R Square”. The adjusted R Square considers the shrinkage which is the loss of power of a regression model if the model derived from the population from which the sample was taken, rather than from the sample itself.

**Regression coefficient B** is the change in the outcome with a unit change in the predictor. This value indicates the strength of relationship between the predictor and the outcome in the unit of outcome.

Standardized regression coefficient (Beta coefficient) is the change in the outcome in standard deviation with a one standard deviation change in the predictor. This value is a standardized measure for the strength of relationship between the predictor and the outcome in the unit of outcome.

**Measurement error and variation**

A measurement error is discrepancy between the actual values and the measured values. In order to control measurement errors, it is necessary to examine validity and reliability of the research measures.

Validity means if the instrument used for the research study actually measures what it is supposed to measure. Based on the point of time of observation, assessment of validity may be conducted for concurrent validity or predictive validity.
Reliability means if the instrument is valid across different circumstances. This is given if the measure always produces the same results under the same conditions.

In reality, however, there is often a variation in experimental conditions although identical conditions are to be produced. Such variation shall be divided into systematic variation and unsystematic variation. A systematic variation is caused by some influence that is available in one condition but not in the other. An unsystematic variation is caused by random factors.

Repeated-measure experiment design is expected to help to minimize unsystematic variation. This means, the same group of test participants are observed when the independent variable is manipulated.

Randomisation of participants to test conditions is often used by researchers to bring down systematic variation.

Statistic tests are aimed to estimate the amount of variation and the proportion of systematic and unsystematic variations.