

Comparative location advantages,
employment relations and US-multinational companies in
Germany, Switzerland and the UK

Dissertation
zur Erlangung des Doktorgrades
der Wirtschafts- und Sozialwissenschaftlichen Fakultät
der Eberhard Karls Universität Tübingen

vorgelegt von
Marlies Eva Kluike
aus Karlsruhe

Tübingen
2012

Tag der mündlichen Prüfung:

19.02.2013

Dekan:

Prof. Dr. Josef Schmid

1. Gutachter:

Prof. Dr. Kerstin Pull

2. Gutachter:

Prof. Dr. Martin Schneider

Acknowledgements

The author wishes to thank the DFG (Deutsche Forschungsgemeinschaft) and the SNF (Schweizerische Nationalfonds) for financial support (Ref. PU204/8-1/Project No. 1000181_134510).

Overview

List of abbreviations	VIII
List of figures	IX
List of tables	X
1 Introduction	1
2 Data and methodological approach	11
3 Re-examining the host-country effect to include hybrid market economies: Is it sufficient to consider host- and home-country, and what role do the subsidiary size and incorporation type play?	36
4 Similar, but still different: How US-MNCs in Germany and Switzerland use host-country training & skill practices	58
5 Within country variation of US-subsidiaries' host-country fit and staff ad- justment practices	78
6 Human resource management configurations of radically innovative US- subsidiaries in Germany, Switzerland and the UK	98
7 The location of the creative class and US-subsidiaries in the coordinated market economy Germany	116
8 Conclusions	132
References	141
Appendix	156

Contents

List of abbreviations	VIII
List of figures	IX
List of tables	X
1 Introduction	1
1.1 Context and research questions	1
1.2 Methodological approach	3
1.3 Proceeding: The chapters to follow	6
2 Data and methodological approach	11
2.1 The survey base population and a first plausibility check	11
2.2 The conducted survey	17
2.2.1 <i>The questionnaire designed for the survey</i>	17
2.2.2 <i>Survey design</i>	19
2.2.3 <i>Main survey response rate, mode and timing</i>	21
2.2.4 <i>Further data collection in the UK</i>	24
2.2.5 <i>Main survey representativeness check and characteristics of the response sample</i>	25
2.3 The conducted interviews.....	32
2.3.1 <i>Interview design</i>	33
2.3.2 <i>Setting up and conducting the interviews</i>	34
3 Re-examining the host-country effect to include hybrid market economies: Is it sufficient to consider host- and home-country, and what role do the subsidiary size and incorporation type play?	36
3.1 Introduction	36
3.2 Theoretical framework and hypotheses	39
3.3 Data, operationalisation and host-country practices definition	44
3.3.1 <i>Data</i>	44
3.3.2 <i>Variable operationalisation and definition of typical host- country practices</i>	45
3.4 Results	48
3.4.1 <i>Host-country effects</i>	48

3.4.2 <i>Extent of host-country practices uptake and the role of subsidiary size and incorporation type</i>	52
3.5 Discussion	54
3.6 Conclusion	56
4. Similar, but still different: How US-MNCs in Germany and Switzerland use host-country training & skill practices	58
4.1 Introduction	58
4.2 Differentiating subsidiaries on the country level and within country locations	61
4.2.1 <i>Choice of home- and host-country locations: US-subsidiaries in Germany and Switzerland</i>	61
4.2.2 <i>MNC location choices and the role of employment relations</i>	63
4.2.3 <i>Host-country fit and the use of local training & skill practices</i>	65
4.3 Data and operationalisation	68
4.3.1 <i>Data</i>	68
4.3.2 <i>Variables</i>	70
4.4 Results	72
4.4.1 <i>Differences between US-subsidiaries in Germany and Switzerland & host-country fit</i>	72
4.4.2 <i>US-subsidiaries' training & skill practices in view of their host-country location fit</i>	74
4.5 Conclusions	75
5 Within country variation of US-subsidiaries' host-country fit and staff adjustment practices	78
5.1 Introduction	79
5.2 Theoretical analysis and hypotheses: Different US-subsidiaries in Germany, Switzerland and the UK and staff adjustment practices	82
5.2.1 <i>Varieties of capitalism and employment relations comparative advantage in Germany, Switzerland and the UK</i>	82
5.2.2 <i>Subsidiary host-country fit and staff adjustment practices</i>	84
5.3 Data and variable operationalisation	86
5.3.1 <i>Data</i>	86
5.3.2 <i>Variable operationalisation</i>	87
5.3.3 <i>Control variables operationalisation</i>	91

5.4 Findings	91
5.4.1 <i>Descriptive statistics (dependent, explanatory and control variables)</i>	91
5.4.2 <i>Staff adjustment practices and host-country fit: Correlations and regressions</i>	93
5.5 Conclusions	96
6 Human resource management configurations of radically innovative US-subsidiaries in Germany, Switzerland and the UK	98
6.1 Introduction	99
6.2 Theory and hypotheses	102
6.3 Data and method	105
6.3.1 <i>Data</i>	105
6.3.2 <i>Method</i>	107
6.4 Results	108
6.4.1 <i>Variables and calibrations</i>	108
6.4.2 <i>Analysis</i>	111
6.5 Conclusion	114
7 The location of the creative class and US-subsidiaries in the coordinated market economy Germany	116
7.1 Introduction	116
7.2 Theory and hypotheses	118
7.2.1 <i>The location Germany and its skill system</i>	118
7.2.2 <i>The creative class concept and its application to the location Germany</i>	120
7.2.3 <i>Different US-subsidiaries' location choices</i>	121
7.3 Data and results	124
7.3.1 <i>Operationalisation</i>	124
7.3.2 <i>Descriptive statistics</i>	127
7.3.3 <i>Correlations</i>	128
7.3.4 <i>Regression analysis</i>	129
7.4 Conclusion	130
8 Conclusions	132
References	141
Appendix	156

List of abbreviations

CH	Switzerland
EPL	employment protection legislation
FDI	foreign direct investment
fsQCA	fuzzy set qualitative comparative analysis
GER	Germany
HR	human resources
HRM	human resource management
ICT	information and communication technology
IR	industrial relations
MNC	multinational company
NAICS	North American Industry Classification System
OECD	Organization for Economic Co-operation and Development
OLS	ordinary least squares
UK	United Kingdom
US	United States
USA	United States of America

List of figures

1 Vocational education & training and labour market flexibility	62
2 Stylised host-country fit elements and ideal predictions overview	84

List of tables

1	Base population: NAICS subsidiary sector distribution in percent	14/15
2	Base population and response sample: NAICS subsidiary sector distribution in percent	27/28
3	The entire response sample of US-subsidiaries from the UK: NAICS subsidiary sector distribution in percent	29
4	Subsidiaries that answered before and after the first reminder	30
5	Average characteristics of responding US-subsidiaries	31
6	Types of respondents filling out the questionnaires	32
7	Variable operationalisation and descriptive statistics	49
8	Subsidiary employment relations practices distinguished by spheres	50
9	Regression analyses: Extent of host-country practices uptake	53
10	Variables and descriptives	70
11	Logit regression of location – marginal effects	73
12	Correlations between training & skill practices and host-country fit	74
13	Variable operationalisation	88
14	Host-country fit index operationalisation	90
15	Descriptive statistics	92
16	Correlations: Staff adjustment practices and host-country fit	93
17	Regressions: Staff adjustment practices and host-country fit	94
18	Calibrations	110
19	Configurations for high values of CHANGES (many core changes and high frequency)	112
20	Configurations for CHANGES negated	113
21	Ranking of German State locations as per their creativity (2005)	125
22	Descriptive statistics	127
23	Correlation analyses: Subsidiaries' location creativity and attributes	128
24	OLS regression analysis: Subsidiaries in differently creative States	129

Chapter 1

Introduction

1.1 Context and research questions

The topic of competitiveness of different country locations for attracting foreign multinational companies (MNCs) is, especially in today's more and more connected and competitive business arena, often covered by media and has received considerable attention from academic research. Country rankings endeavour to capture each country's competitiveness and attractiveness, which are determined via a number of factors (e.g. see KÜTER 2009). Amongst those, one also finds criteria that correspond to employment relations, such as labour market regulation or skill levels. For example, for determining competitiveness, the world economic forum takes into account labour market efficiency, as well as training and higher education (e.g. see SCHWAB (ed.) 2011: 5f.).

Especially when considering Germany in terms of its location attractiveness, the so called *Standortdebatte* comes to mind (e.g. see TÜSELMANN 1998; TÜSELMANN/MCDONALD/HEISE 2003: 345). Often labour market related factors are a topic of discussion in Germany. For example, labour market regulations in Germany are regarded as lacking flexibility by half of the addressed international managers as found in a location competitiveness survey by ERNST & YOUNG, while human capital is rated positively (see ENGLISCH 2011: 12-13). In contrast, in a counterpart-survey by ERNST & YOUNG concerning the United Kingdom (UK), labour regulations are not a focus of discussion regarding country attractiveness. Labour skills are mentioned as rated of higher attractiveness than previously (see ERNST & YOUNG (eds.) 2011: 13). And in a similar survey for Switzerland, the flexibility of labour regulations is put forward as a dominant strength, as well as high levels of skills (see ERNST & YOUNG (eds.) 2006: 4, 9, 16).

However, the question arises whether all MNCs prefer the same type of host-country employment relations. In studies concerning the relationships of various employment relations factors with foreign direct investment (FDI) in different countries

(e.g. see COOKE 1997; COOKE/NOBLE 1998; JAVORCIK/SPATAREANU 2005; TRAXLER/WOITECH 2000), no clear picture emerges – only there is rather more coherence found regarding positive effects of education (e.g. see COOKE 1997; COOKE 2001). For example, co-determination is sometimes found to deter and other times to attract investment (e.g. see BOGNANNO/KEANE/YANG 2005; COOKE 1997). For other factors such as the centralisation of collective bargaining, this is the case also (e.g. see COOKE/NOBLE 1998; TRAXLER/WOITECH 2000). In this current literature, it is generally not accounted for what potentially different types of MNC investors with potentially different preferences are included in the analysis (e.g. see BOGNANNO/KEANE/YANG 2005; COOKE 2001; HAM/KLEINER 2007; TRAXLER/WOITECH 2000 etc.). An exception is PULL (2008) who differentiates between investors' human resource management (HRM) flexibility needs by analysing individual companies and finds systematic differences between subsidiary investments in different country locations.

These findings are complemented by the evidence that specific comparative advantages can be found in different market economies, also regarding employment relations (e.g. see BASSANINI/ERNST 2002; HARCOURT/WOOD 2007). MNCs can use these comparative advantages as a form of institutional arbitrage (see HALL/SOSKICE 2001:57), i.e. they can strategically use different country location advantages for specific subsidiary projects.

Following this train of thought, different types of investments, in the form of foreign subsidiaries, should benefit more or less from specific host-country environments – and thereby employment relations. Since MNCs should aim to maximise the competitive advantage they can gain from different country locations via their choice of subsidiary host-location – in regard to employment relations as well as various other factors, I suggest the following: Overall more subsidiaries that can gain comparative advantages in terms of employment relations from certain host-countries should respectively be located in countries offering these comparative advantages (and employment relations comparative advantages may well go together with other country-location comparative advantages). As a consequence, when comparing average characteristics or employment relations practices of MNC subsidiaries between countries of varying employment relations environments (or aspects of such), there should be differences observable.

Furthermore, one should detect within country variations as well. Subsidiaries should differ in their use of local host-country employment relations practices, depending on how much comparative advantage they can gain from host-country employment relations. This is because market motivated reasons may prevail for a subsidiary location choice (see CHAKRABARTI 2001) not complementary to host-country employment relations. This is an aspect not systematically analysed by the literature on MNCs and employment relations practices so far.

In summary: Investors in the form of MNCs establishing subsidiaries in different country locations might vary in their needs and strategic purpose of the subsidiary, and therefore find certain employment relations environments more or less attractive. Hence subsidiaries in different country locations are expected to – in comparison – differ to some extent in their characteristics. This should be the case despite variations within each country as well, as individual subsidiaries and their strategies vary. In consequence, it should be more or less attractive for a foreign subsidiary located in a given country to use host-country employment relations practices, depending on whether the subsidiary can gain comparative advantages from the local practices.

Therefore I will analyse the following overall research questions:¹

(1) In how far are foreign subsidiaries located in a country where they can profit from host-country employment relations, and (2) in how far do foreign subsidiaries use host-country employment relations practices according to how much they can profit from host-country employment relations?

1.2 Methodological approach

For analysing the proposed overall research questions regarding foreign subsidiaries, first of all the country of origin and host-countries of the foreign subsidiaries to be analysed need to be determined. Afterwards, I will briefly outline the overall methodological approach.

For the country of origin of the foreign subsidiaries to be analysed, I choose United States (US)-subsidiaries despite them having been researched considerably

¹ In the individual papers in the different chapters to follow, specific research questions are discussed. I will put the pieces together regarding the overall research questions in the conclusions part (chapter 8).

before in terms of employment relations practices. Concentrating on US-MNCs² offers the specific advantage that they are investors of enduring importance. And furthermore, a multiple home-country effect that may occur when subsidiaries with different parent company origins were analysed is excluded by only focusing on US-companies.

US-investments are also considerable in the three country locations in which subsidiaries are analysed, Germany, Switzerland and the UK (see DEUTSCHE BUNDESBANK (eds.) 2012: 62; INSTITUT FÜR WELTWIRTSCHAFT (eds.) 2012; OFFICE FOR NATIONAL STATISTICS (eds.) 2011: 11; SCHWEIZERISCHE NATIONALBANK (eds.) 2010: A14). This is also a first indication that US-MNCs seek advantages in all the three different country locations. I concentrate on MNC subsidiaries in Germany, Switzerland and the UK because these host-countries form an interesting comparison and gradual contrast regarding employment relations in terms of the varieties of capitalism approach (see HALL/SOSKICE 2001) and should offer specific employment relations comparative advantages to subsidiaries. Germany represents a rather typical coordinated market economy (see HALL/SOSKICE 2001) with a regulated labour market (see Organization for Economic Co-operation and Development (OECD) (eds.) 2010) and overall coordinated industrial relations (IR) (see HALL/SOSKICE 2001), whereas Switzerland, although commonly referred to as a coordinated market economy, e.g. has a rather flexible labour market (e.g. see OECD (eds.) 2010). The UK, a typical example of a liberal market economy (see HALL/SOSKICE 2001), also displays characteristics of a more flexible labour market (see OECD (eds.) 2010) and little coordination (especially in the here analysed private sector). However in terms of education & training, Germany and Switzerland are highly similar with a dominance of the dual apprenticeship system (see ESTEVEZ-ABE/IVERSEN/SOSKICE 2001). In contrast, the UK is different in this regard, with a training system geared towards producing general skills (of different levels, e.g. school versus university) and weak vocational training (see ESTEVEZ-ABE/IVERSEN/SOSKICE 2001: 170).

Advantages that the different market economies should typically offer and that would be complementary to host-country employment relations³ are for example

² Throughout this work, when the terminology US-MNC is used regarding my research, US-organisations with at least one overseas subsidiary (as analysed in this project) are referred to.

³ Employment relations are overall defined as encompassing IR (incl. labour market flexibility) and training & education related institutions and practices, including what may be referred to as HRM. As applicable, it is differentiated between national employment relations and company employment relations practices.

businesses relying on incremental, continuous improvements in Germany. This should be fostered by specific, broad occupational skills acquired via dual apprenticeships (see ESTEVEZ-ABE/IVERSEN/SOSKICE 2001: 170). In terms of sectors generally benefiting from such in Germany, an example would be (medium technology) ‘manufacturing’ (see HALL/SOSKICE (2001) for German patent examples). In the UK, for example, highly skilled staff that move around rather flexibly between companies would provide a comparative advantage for businesses in need of flexibility to accommodate to frequent business changes. An example could be ‘information technology’ (see HALL/SOSKICE (2001) for US-patent examples). For Switzerland, comparative advantages similar to Germany should be found in terms of skill related needs (e.g. in terms of ‘manufacturing’), but also partly similar to the UK, i.e. liberal economies, in terms of flexibility requirements.

However, industry classifications are broad distinctions; one can arguably find the major (sub-)sectors in most European countries, to a more or lesser extent. As can be illustrated by the example of the category ‘manufacturing’, this can encompass rather different types of businesses. These could be businesses relying on generally skilled employees where one trains staff for single, specific tasks as needed (e.g. food manufacturing), or relying on specialised, broad occupational skills for more advanced manufacturing (e.g. machine tools). As becomes clear via the example, for the two manufacturing-varieties different national employment relations environments should be more or less of advantage. Therefore differences within sectors need to be analysed and further distinctions applied to capture the within country variation of foreign subsidiaries and how much they can profit from host-country employment relations.

An original dataset is necessary for the proposed analyses given that subsidiaries need to be distinguished in more detail than commonly applied in existing surveys about MNC subsidiaries and their employment relations practices. Therefore, I designed and conducted a questionnaire survey to be sent to US-subsidaries in Germany, Switzerland and the UK.⁴ And also, in order to gain a deeper understanding of the subject matter and to be able to analyse the obtained results from the survey with more insight, I conducted a number of interviews.

⁴ This work is part of an international research project, a joint DFG/SNF project of Prof. Dr. Kerstin Pull and Prof. Dr. Uschi Backes-Gellner.

1.3 Proceeding: The chapters to follow

Having explained the general framework of this work, it remains to be outlined how the following chapters are structured and how they relate to each other to answer the overall research questions as posed on page 3. I will give a brief outline of each chapter to follow and illustrate how the different aspects analysed build on and complement each other.

Firstly, in chapter 2 ('Data and methodological approach'), I explain and describe the dataset acquired for this project. This includes both the conducted main survey and further data collection efforts in the UK, including the supplementary interviews that I administered. The survey related sections also contain a first plausibility check of the randomly drawn subsidiaries as a basis for the survey in terms of employment relations comparative advantages which clearly indicates a need for further analysis on the subsidiary level for which new survey data is required. Furthermore, the response sample is compared with the base population regarding representativeness, and other standard descriptives about the response sample are provided.

Secondly, in chapter 3 ('Re-examining the host-country effect to include hybrid market economies: Is it sufficient to consider host- and home-country, and what role do the subsidiary size and incorporation type play?'), I focus on the host-country effect for US-subsidaries in more or less coherently coordinated employment relations environments (assessed by differences in the employment relations spheres IR and education & training) in Switzerland, Germany and the UK (via chi-square/t-tests). And I analyse in how far the factors subsidiary size and type of incorporation play a role in determining the extent of possible host-country effects regarding IR and education & training (via ordinary least square (OLS) regression analyses). I detect country-level differences in terms of subsidiaries' employment relations practice use such as for collective agreements (the sphere of IR, US-subsidaries in Germany versus in Switzerland and the UK) or training apprentices (sphere of education & training, US-subsidaries in Germany and Switzerland versus in the UK). I also find partly different effects of subsidiary size and incorporation type on the extent of subsidiaries' host-country practices uptake when one distinguishes between practices relating to the different employment relations spheres. Thereby I go beyond

previously applied studies which do not differentiate in such detail and cannot account as well for findings in hybrid market economies such as Switzerland. In this paper, I apply an analysis related to the first overall research question of my project in so far that I compare US-subsiidiaries' host-country employment relations practice differences on the country level. This can be regarded as an extension of my argument put forward in the first overall research question that as a whole more subsidiaries that can benefit from certain host-country employment relations should be present in the respective host-countries (and thus overall use host-country employment relations, when different to home-country practices). Furthermore, that the host-country practices uptake varies in connection to individual subsidiary characteristics such as headcount and type of incorporation supports the idea of my second research question in so far that I demonstrate that a purposeful and fine-grained distinction of employment relations practices of US-subsiidiaries is required, which I analyse in detail regarding individual subsidiary differences in the following three chapters.

Thirdly, in chapter 4, in a joint work with Pull ('Similar, but still different: How US-MNCs in Germany and Switzerland use host-country training & skill practices?'), US-subsiidiaries in Germany and Switzerland are analysed in terms of characteristics (e.g. change and information and communication technology (ICT) intensity) that can be linked back to comparative advantages in terms of employment relations and how these differ (or not) in a country-level comparison (via a logit analysis). In a second step, it is then tested in how far – in terms of employment relations comparative advantage – more or less 'suitably' located subsidiaries *within* Germany and Switzerland use host-country training & skill practices. Methodologically, we use the predicted probability values of each subsidiary to be located in their country location as a country-fit value (i.e., how much the subsidiaries can profit from host-country employment relations), and subsequently correlate these with the analysed training & skill variables. In this paper, and building on the first one in so far that generally on the country-comparison level subsidiary differences linked to employment relations comparative advantage should be detectable but for the extent of specific employment relations practices a finer distinction is required regarding individual subsidiaries and their host-country fit, I refer to both overall research questions of my work. The finding is that even in partly similar market economies significant differences linked to employment relations comparative advantage can be

detected in our country comparison. And in turn, according to the extent of comparative advantage of individual subsidiaries, host-country training & skill practices are mostly used more or less according to host-country fit by US-subsidiaries in Germany (e.g. the amount of training provided), while for the subsidiaries in Switzerland no such relation is found, mostly as predicted. Most proposed practices there should not be significantly distinguishable from US-home practices due to the similarities of labour market flexibility (i.e. in the sphere of IR) in Switzerland and the United States of America (USA).

Fourthly, in chapter 5 ('Within country variation of US-subsidiaries' host-country fit and staff adjustment practices'), I analyse US-subsidiaries' host-country fit in terms of employment relations comparative advantage potential in Germany, Switzerland and the UK and focus on *within* country differences in the use of strategic practices related to staff adjustments. By applying theoretically derived host-country fit values for the subsidiaries and interacting this variable with country dummies in a regression analysis, I am able to measure the suggested relationship between host-country fit of US-subsidiaries in Germany and the extent of staff adjustments applied. This is in contrast to the US-subsidiaries in Switzerland and the UK where no host-country effect should occur due to sufficiently similar labour market flexibility environments (the sphere of IR) as in the USA and hence also no distinction should be applicable according to host-country fit. And indeed, in Germany host-country fit plays a role in determining how often staff numbers are adjusted, the more subsidiaries can profit from local employment relations the less are staff numbers adjusted. In this paper, I extend the analysis of the second overall research question, by applying a different approach to measuring subsidiary host-country fit, theoretical as opposed to empirical (as in chapter 4). And I concentrate on a different type of employment relations practice.

In chapter 6 ('Human resource management configurations of radically innovative US-subsidiaries in Germany, Switzerland and the UK'), in a joint work with Teuber, Backes-Gellner, Pull and Schneider, the employment relations practices use of radically innovative US-subsidiaries in Germany, Switzerland and the UK is analysed. Applying qualitative comparative analysis, it is possible to find out what employment relations practices these specific subsidiaries use in combination. The results indicate that for example flexible labour adjustments are of importance, however appear in different configurations. And we also find that most configurations are

not country-specific, thus rather against the varieties of capitalism approach predictions in that regard. With this paper I approach my second overall research question from a yet different perspective. Since it is focused on highly innovative subsidiaries' use of employment relations configurations no matter in which country they are located, it can be assessed what employment relations configurations subsidiaries that should profit more or less from different host-country environments in terms of radical innovation display, as opposed to in chapter 4 and 5 where subsidiaries are distinguished via the host-country fit concept in more detail regarding different key aspects and only in regard to single employment relations practices. And indeed, indications for subsidiaries that should be able to profit less from host-country employment relations for radical innovation in Germany and Switzerland are detected to rather use untypical host-country practices.

With chapter 7, joint work with Conway, I add a paper on US-MNCs in Germany and their within country locational differences according to staffing needs, as 'bonus material' ('The location of the creative class and US-subsidiaries in the coordinated market economy Germany'). It does not directly relate to the overall research questions, however it is closely related to the topic and offers a somewhat different take on the matters discussed. By employing macro-based indicators that are sufficient in this specific case and thus not relying on the survey information as all the previous papers but database and web search information, we consider US-subsidiaries in need of staff with skills *not* predominantly found in Germany as per the varieties of capitalism approach (see HALL/SOSKICE 2001) and build on FLORIDA's (2002) creative class concept. While focusing on only one chosen country-location, Germany, it is possible to analyse another aspect regarding location decisions, the within country variation of locations related to differences in subsidiary needs. We find indications of support for our hypotheses, rather non-'manufacturing' and organisationally higher rank subsidiaries with a need for urban infrastructure and connectedness are based in creative class State locations in Germany.

I end with conclusions in chapter 8 where I provide a brief overview of the different papers and explain how I can answer my overall research questions according to the results derived from the different papers in chapter 3 to 6. Furthermore, I deduct implications about the usefulness of the main theoretical concept I refer to, the varieties of capitalism (see HALL/SOSKICE 2001) approach, for employment rela-

tions research such as this work. And I formulate what implications I derive from the analyses in terms of MNC country location choices, employment relations comparative advantage and US-subsiary employment relations practices, as well as suggesting future research avenues.

Chapter 2

Data and methodological approach

In this chapter I outline how the data referred to for this project was acquired and illustrate and analyse some first response sample characteristics. In chapter 2.1 I analyse the base population of US-subidiaries in Germany, Switzerland and the UK for the conducted survey regarding what sectors the subsidiaries originate from and how this relates to the theoretical expectations, i.e. how plausible the sectors are in that respect. In chapter 2.2 I provide information about the survey. I outline the structure of the questionnaire used for the survey in chapter 2.2.1. In chapter 2.2.2 I illustrate the survey design, and then in chapter 2.2.3 I give an account of the response rate, mode and timing of the main survey, in chapter 2.2.4 I describe the specific efforts undertaken to gather further responses from US-subidiaries in the UK. In chapter 2.2.5 I outline which sector the subsidiaries in the sample originate from and perform a representativeness check for the main survey, outline what typical characteristics the subsidiaries from the three countries in the acquired sample have, and, where the survey was addressed to top management, in how far responding to the survey was delegated. In chapter 2.3 I give an account of the interviews conducted in the course of this project, in 2.3.1 regarding the interview design, and in 2.3.2 regarding how the interviews were set up and conducted.

2.1 The survey base population and a first plausibility check

Especially in relation to the first of the two overall underlying research questions of this work, in how far foreign subsidiaries are located in a country where they can gain comparative advantage from host-country employment relations, a first analysis of the base population of subsidiaries for the conducted main survey (see chapter 2.2) is useful. Analysing the base population in terms of what sector the subsidiaries originate from can provide first information about in how far the subsidiaries should be able to generally utilise host-country employment relations comparative advantages, and expectedly further substantiate the need for a more detailed analysis.

For the purpose of this first plausibility check, I refer to the varieties of capitalism approach (see HALL/SOSKICE 2001), the main theoretical basis of the project. I do this to detect in how far sectors in which companies should gain comparative advantage in terms of employment relations from their host-country (Germany, Switzerland or the UK) can be found in the base population. As briefly mentioned in chapter 1, according to the varieties of capitalism approach (see HALL/SOSKICE 2001), Germany is a typical coordinated market economy, and the UK is similarly liberal as the USA (see HALL/SOSKICE 2001). Switzerland is overall located somewhere in the middle of the coordination spectrum with liberal and coordinated elements (e.g. see HALL/GINGERICH 2009; SCHNEIDER/SCHULZE-BENTROP/PAUNESCU 2010), although it was originally classified as a coordinated market economy.

Germany should offer employment relations comparative advantages for companies in terms of offering staff with specific occupational skills acquired via dual apprenticeships (see ESTEVEZ-ABE/IVERSEN/SOSKICE 2001). Also, due to its rather long-term orientated labour market structures including employee co-determination, incremental and continuous improvement should be fostered rather than quick changes. This should generally fit well with sectors such as ‘manufacturing’ (e. g. for mechanical elements, see HALL/SOSKICE 2001). The *UK* should rather offer advantages for businesses that rely on highly skilled and/or generally skilled staff⁵ (see ESTEVEZ-ABE/IVERSEN/SOSKICE 2001 for liberal market economy skills), and where changes need to be implemented quickly. An example for one sector that would typically be strong in liberal market economies is ‘information technology’ (see HALL/SOSKICE 2001 for US-patent example). In *Switzerland*, advantages should prevail for companies in need of dual apprenticeship type skills (see ESTEVEZ-ABE/IVERSEN/SOSKICE 2001), due to a similar dominance of the dual apprenticeship system in Switzerland as in Germany. But Switzerland should also offer more flexibility one can argue, due to its comparatively flexible labour market. Therefore, both sectors similar to the ones in Germany should be strong, such as ‘manufacturing’, but potentially also others where flexibility is of importance.

Before assessing the base population of the survey in the three countries in terms of their sectoral origin, some background information about the origin of the

⁵ Generally skilled staff should be flexibly trainable for specific endeavours.

base population needs to be noted for an understanding of the base population setup. The Amadeus database (see BUREAU VAN DIJK (eds.) 2009) was referred to as the basis for obtaining information about US-subsidiaries in Germany, Switzerland and the UK to contact for the survey.⁶ The database was selected because similarly processed information could be obtained for the three different country locations in a coherent manner, thereby providing an appropriate basis for a random sample selection of subsidiaries to be contacted. With the database it was possible to for example query subsidiaries' North American Industry Classification System (NAICS) (see U.S. CENSUS BUREAU (eds.) 2011a) codes.⁷ The database query resulted in a large number of subsidiary companies,⁸ thousands of establishments in the case of Germany and the UK, and less than 1,000 for Switzerland. After conducting a number of screening mechanisms such as to exclude companies marked as inactive in the database and/or companies that were listed with zero employees, every subsidiary was assigned an identifier number.⁹ The identifier numbers were then randomly drawn, and in the order of the drawn numbers subsidiaries were identified to be contacted for the survey, resulting in the 500 subsidiaries per country location, the base population. This was done in order to allow for aiming at a large enough number of responses while at the same time keeping a constant number for each country. To avoid mistakes and due to a number of database irregularities and partly missing data, each of the randomly selected 500 subsidiary database entries was checked before proceeding with the survey. As needed, information was corrected and added.¹⁰ In the course of these quality control measures, replacements of subsidiaries were necessary. For example, it turned out that some non-profit clubs were included which are not the target of this research focusing on subsidiary companies, hence these were excluded and correspondingly a substitution put in place according to the above described randomly drawn order of subsidiaries. Also, for example for entries for

⁶ Foreign companies from different sectors can be found in the database but not banks and insurance companies – however other companies from the NAICS core code finance and insurance remain (e.g. see sector overview of base population).

⁷ This information was queried amongst other required information for the survey such as contact information and top management names (see more information in the following chapter).

⁸ I queried for US-subsidiaries where US-investors own more than 50 (i.e. 51 plus) percent of the subsidiary (see the OECD's (eds.) (2003) similar subsidiary definition).

⁹ Subsidiaries were separated in three different lists according to country.

¹⁰ For example, when further information (such as for the address) was required I complemented the information by referring to American Chamber of Commerce yearbooks for Germany and Switzerland (see AMCHAM GERMANY (eds.) 2010; SWISS-AMERICAN CHAMBER OF COMMERCE (eds.) 2009) as well as internet searches.

which the same manager contact for different subsidiaries with the same parent company was listed, only the first one (according to the identifier number draw) was kept and the other one substituted with the next randomly drawn subsidiary, in order to avoid sending the same person the questionnaire twice.

Table 1: Base population: NAICS subsidiary sector distribution in percent

Panel A: US-subsidiaries in Switzerland	
Sector	base population
administrative and support and waste management and remediation services	5
finance and insurance	5
health care and social assistance	1
information	3
management of companies and enterprises	10
manufacturing	19
other services (except public administration)	1
professional, scientific, and technical services	17
real estate and rental and leasing	1
retail trade	2
transportation and warehousing	1
wholesale trade	34
Panel B: US-subsidiaries in Germany	
Sector	base population
accommodation and food services	1
administrative and support and waste management and remediation services	5
arts, entertainment, and recreation	1
construction	1
educational services	1
finance and insurance	2
health care and social assistance	1
information	2
management of companies and enterprises	17
manufacturing	18
other services (except public administration)	1
professional, scientific, and technical services	22
real estate and rental and leasing	4
retail trade	3
transportation and warehousing	1
wholesale trade	19

Panel C: US-subsidiaries in the UK	
Sector	base population
administrative and support and waste management and remediation services	25
arts, entertainment, and recreation	2
construction	1
finance and insurance	7
health care and social assistance	1
information	7
management of companies and enterprises	8
manufacturing	16
mining, quarrying, and oil and gas extraction	1
other services (except public administration)	2
professional, scientific, and technical services	16
public administration ¹¹	1
real estate and rental and leasing	1
retail trade	2
transportation and warehousing	1
wholesale trade	8

Note: Values below 1 percent are excluded. Due to rounding not always a total of 100 percent results.

Source: Own compilation based on Amadeus data.

In table 1, I display what the NAICS (2007 ‘core codes’, the sector distinctions displayed refer to the first two digits of the NAICS numbers) sector distribution of the base population subsidiaries in Germany, Switzerland and the UK is. Before analysing the presented information in table 1, it should be noted that in very few cases the sector information for a subsidiary was missing, therefore is not included in the analysis. The base population with known NACIS codes is 498 for Germany, 495 for Switzerland and 498 for the UK.¹²

As can be observed from table 1, there are some differences in the US-subsidiary sector distribution between the different country locations, however at least two out of the top three sectors each are identical across the country locations.

For the US-subsidiaries in Switzerland, about a third of the subsidiaries are from ‘wholesale trade’. This is not a typical sector as per the theoretical expectations

¹¹ It may be counterintuitive on first sight that this category is present. However, on closer inspection of the subsidiaries labelled in this sector, it appears that these are private companies delivering to the public sector.

¹² Since this is an approximate measure, the few subsidiaries that were identified to be going out of business, not reachable or not US-owned in the course of the survey research process (see chapter 2.2.3) are not excluded in the base population analysis.

from the varieties of capitalism approach (see HALL/SOSKICE 2001, they rather provide certain, exemplary expectations in regard to sectors). The second strongest sector of the Swiss US-subsidary base population is ‘manufacturing’. Here, employment relations advantages should exist for subsidiaries due to the dominant dual apprenticeship skill base in Switzerland which should enable staff to have specific technical but also broad occupational skills, something not typically found to the same extent in the UK or the USA. The third strongest sector in the Swiss US-subsidary base population is ‘professional, scientific and technical services’.¹³ Also for companies in that sector apprenticeship skills could be of advantage, while the location Switzerland offers a flexible labour market at the same time.

Regarding the US-subsidaries in Germany the three strongest sectors are ‘professional, scientific and technical services’, ‘wholesale trade’ and ‘manufacturing’. These are the same three sectors found to be dominant in the base population in Switzerland. In light that the country location Germany should generally offer similar comparative advantages in terms of education & training employment relations, this finding is generally intuitive. This is less so for example regarding the subsidiaries from ‘wholesale trade’ which indicates a need for further analysis.

Finally, for the US-subsidaries in the UK, ‘administrative and support and waste management and remediation services’ constitute one quarter of the base population. This category includes rather general service categories and considering skills it fits with the proposition that rather general skills should be fostered in the UK. The second most prevalent sectors are on the one hand ‘manufacturing’ and on the other hand ‘professional, scientific and technical services’, for the latter the UK should provide a matching skill basis via high-quality university education and a flexible labour market. However, these two sectors are rather dominant in the other two country locations also, therefore a more detailed analysis is called for in terms of differentiating subsidiaries (see the following chapters).

In conclusion, according to the base population’s NAICS (2007) core sectors some first, but somewhat mixed, evidence regarding host-country employment relations comparative advantage is detected when comparing US-subsidaries in Germany, Switzerland and the UK. Certain sectors are found to be strong in all three country locations despite somewhat different theoretical predictions of comparative

¹³ This category can include various services including accounting, engineering, scientific and consulting (see U.S. CENSUS BUREAU (eds.) 2011b).

employment relations advantage for the US-subidiaries in the different countries. A certain similarity of sectors across the countries is to be expected as subsidiaries may be present in the different countries due to reasons not much complementary to host-country employment relations. However, the base population sectoral background detected here shows at least partly a somewhat different picture than one would expect according to the varieties of capitalism approach (see HALL/SOSKICE 2001). And as already alluded to (see chapter 1), within the same sector different specialisations may be possible which could respectively rather profit from liberal or coordinated employment relations environments. Further detailed analysis in the form of analysing subsidiaries below the sectoral level is therefore required to obtain an understanding about which subsidiaries should be able to gain more or less comparative employment relations advantage in their host-countries and consequently what employment relations practices they use.

2.2 The conducted survey

In order to analyse subsidiary differences across and within Germany, Switzerland and the UK (via assessing subsidiaries' characteristics) and their employment relations practices, specific US-subidiary company data from Germany, Switzerland and the UK is required. Despite the existence of some available survey data such as the IAB panel (see INSTITUT FÜR ARBEITSMARKT- UND BERUFSFORSCHUNG (eds.) 2012) in Germany and the WERS survey (see DEPARTMENT FOR BUSINESS INNOVATION AND SKILLS (eds.) 2012) in the UK, the information required for the project cannot be derived from these surveys, but other data is needed. Therefore, I developed a questionnaire and conducted an original survey. In the following I outline how the survey was conducted, starting with the questionnaire designed for the survey (see chapter 2.2.1), how the survey was set up (see chapter 2.2.2), to then outline the response rate, mode and timing (see chapter 2.2.3), further data collection in the UK (see chapter 2.2.4), and a survey representativeness check and first descriptive statistics (see chapter 2.2.5).

2.2.1 The questionnaire designed for the survey

I designed a questionnaire which includes 54 questions in total (see appendix). The different items were developed according to the theoretical propositions of the pro-

ject while referring to the main theoretical framework used, the varieties of capitalism (see HALL/SOSKICE 2001) – and additionally the employment systems approach (see MARSDEN 1999).¹⁴ Also, a number of typical variables such as subsidiary characteristics (e.g. the year of entry) are included; following the common practice in such surveys (e.g. see PULL 2003; SCHMITT 2002).

The questionnaire is set up as follows: Key information about the project and instructions for the person filling in the questionnaire are given before the questions start, at the top of the first page. The questionnaire consists of different sections. In section A, comprised of four questions, it is asked about general subsidiary characteristics such as the headcount of the subsidiary or how the subsidiary was established. Section B, consisting of twelve questions, is concerned with subsidiary business strategy (and i.e. characteristics), such as for example in how far the success of the main subsidiary business is price determined, or how often core changes occur in the business. Section C consists of 32 questions about employment relations factors. For example, it is enquired about whether there is a collective agreement in the subsidiary or whether jobs are mainly categorised according to occupational qualifications or not. The last section of the questionnaire, section D, consists of six questions in relation to the respondent, among other things for example the position of the job respondent is enquired about, and contact information in case of further questions. At the very end of the questionnaire, there is a thank you note and my contact information given in case of further questions from the respondent. Also, at the very bottom of the questionnaire, the questionnaire identifier number was printed. The questionnaires were printed on light yellow paper, in accordance with the questionnaire-survey by PULL (2003).¹⁵

I took the following additional measures in order to ensure as much user-friendliness of the questionnaire as possible: I confined to two A4 pages of questions since a short questionnaire should generally exhibit a higher response rate (see EDWARDS et al. 2002: 1183). Also, the questionnaire explicitly mentions that even if not all questions were answered we would be happy to receive it back. And, as an alternative choice, a link to an online questionnaire version was provided in the cover

¹⁴ Further information about specific theoretical predictions can be found in the different papers in the following chapters.

¹⁵ Also e.g. GREER/LOHITA (1994: 47) do not find significant response effects of differently coloured stationary.

letter, together with a one-time access key.¹⁶ Via the online option, it was also possible to choose between an English and German language version of the questionnaire (for the subsidiaries in Germany and Switzerland). Furthermore, a member of GESIS (see LEIBNIZ-INSTITUT FÜR SOZIALWISSENSCHAFTEN (eds.) 2011) kindly reviewed the questionnaire. About the same time, in the summer of 2010, I gathered further feedback about the questionnaire from an experienced human resources (HR) professional, to ensure that the questionnaire text was as understandable as possible and in the target population language (see SHERBLOM/SULLIVAN/SHERBLOM 1993: 60). And as a further quality assurance measure, I conducted two pre-tests, a first round in mid-August 2010 and a subsequent pre-test in the beginning of October 2010 (contacting the same randomly selected, initially ten subsidiaries). As a result of these measures, I applied some adjustments to the questionnaire.

2.2.2 Survey design

A postal survey¹⁷ was implemented because a mix of strategy and employment relations questions that should be obtainable most straightforwardly by asking top management members of US-subsidiaries for which email addresses can rarely be found out are required.

When preparing the cover letter¹⁸ to be sent with the questionnaire, I used techniques that should assist responses as much as possible (e.g. see ROGELBERG/STANTON 2007: 197). The cover letter printed on university letterhead briefly explains the project, topic relevance and confirms the confidential treatment of the replies. Also an executive project summary was offered in case of a response.¹⁹ All letters were signed by hand, thereby adding a personal touch to the letters,²⁰ and this should generally increase survey response (see EDWARDS et al. 2002: 1183; DILLMAN et al. 2007).

¹⁶ This was an alternative identifier number to the one provided on the questionnaire. Identifiers were used, the survey not kept anonymous, so that further information from the database such as the sector could be combined with the response information. Also, identifier numbers have been found to be associated with a higher response rate (see ROTH/BEVIER 1998: 97).

¹⁷ This including a written and one phone reminder is referred to as the main survey.

¹⁸ In the appendix, a sample copy of the first letter sent out can be found.

¹⁹ It was refrained from offering any other incentive such as a gift (e.g. BARUCH/HOLTOM (2008: 1139) do not find incentives to be connected to rates of response). This was also due to the target population, e.g. CYCYOTA/HARRISON (2002: 151) find that generally offering incentives is not effective with top-level organisational members.

²⁰ The letters were signed by the HRM and Organization department head, Prof. Dr. Kerstin Pull, and myself, Marlies Kluike.

Furthermore, with respect to the language used, it should be mentioned that the cover letter was written in German for the subsidiaries in Germany. For the subsidiaries in Switzerland and the UK, the letters were in English.

After two pre-tests, for the main survey 500 survey letters per country location (see further information about the base population in chapter 2.1) were sent in the end of October 2010. The letters were sent out from Tübingen, Germany, and should have arrived a few days later in the different locations in Germany, Switzerland and the UK. Subsequently, a number of letters were returned unopened by the postal service because for example there was a mistake with the address or the company had moved, or the person the letter was addressed to did not work in the addressed establishment anymore. Further letters with updated information were subsequently sent out, whenever alternative information could be obtained.

Due to financial constraints, it was not possible to send the letters via recorded delivery or provide stamped return envelopes which have been found to increase response rates (see EDWARDS et al. 2002: 1183). However, I also followed ‘key principles of social exchange’ (AXFORD/CARTER/GRUNWALD 1997: 392)²¹ which techniques such as the total design method that encompasses specific design principles and sequential steps when conducting surveys (see DILLMAN 1978: 20) stipulate.

A reminder letter to the subsidiaries that had by then not answered the survey – excluding the ones that had contacted us that they did not want to/could not take part – was sent out one month later, in the end of November 2010,²² based on findings that a reminder increases the chance to receive a reply (e.g. see EDWARDS et al. 2002: 1183; ROTH/BEVIER 1998: 97; YAMMARINO/SKINNER/CHILDERS 1991: 613). The cover letter of the reminder emphasised the importance of subsidiaries’ participation and thanked the participants who already took part (in case there was an overlap of sending/receiving letters).²³

As a further step, I conducted a telephone reminder of 150 randomly selected US-subsiidiaries in each country location for which telephone contact information was available. Where requested, I mailed or emailed another copy of the survey to potential respondents. This concluded the main survey undertaken for the project.

²¹ Examples of this are sending reminders and offering a summary of the findings for a response.

²² The timing was chosen to avoid e.g. the (school-)holiday season, and hence provides the opportunity to respond (e.g. see ROGELBERG/STANTON (2007: 197) for the importance of response opportunities), besides that top-level organisational members are expected to be generally pressed for time.

²³ The same approach to letters returned undeliverable as the first time was subsequently employed.

2.2.3 Main survey response rate, mode and timing

I start with outlining the response rate of the pre-tests of the postal survey: For the first pre-test (August 2010), the survey was sent to ten subsidiaries in each country.²⁴ I received one response, from Switzerland. For the second pre-test (October 2010) the same companies were contacted – except for the one that had responded and ones for which no alternative address could be identified if the letter had been returned unopened beforehand – resulting in sending nine letters to Switzerland and the UK, ten in Germany. One subsidiary responded from the UK in the second pre-test round.²⁵ Therefore a response rate of 10 percent was realised when one response was received in the first round from Switzerland and a response rate of 11 percent for the second pre-test round in case of the UK. In the other instances the response rate was zero for the different countries. This alluded to some potential address data issues, however, for the main survey many more questionnaires were to be sent out and hence no changes made to the survey design. Also previous research shows that US-headquartered companies tend to have comparatively low response rates (e.g. see HARZING 2000: 246).

Now I turn to the response rate of the survey: Overall, after an initial letter and reminders (mail and phone, the main survey), 74 responses were received.²⁶ Of these, 33 are from US-subidiaries in Germany, 33 from US-subidiaries in Switzerland, and 8 from US-subidiaries in the UK.²⁷ As briefly mentioned already, in each country location some companies informed us or it got apparent during the conducted phone or address follow ups via internet searches that they were either not a US-company (six in Germany, two in the UK, five in Switzerland), not in business anymore or at the time not acting/without staff (six in Germany, three in Switzerland, two in the UK). During the telephone calls – especially in the UK – in a number of instances it was mentioned that the company had a policy not to take part in any sur-

²⁴ Also in this instance some letters were returned unopened as something seemed to be incorrect with the address used, one from each country. Where possible, updated contact details for the second round were utilised in these cases.

²⁵ And one letter from pre-test two was returned undeliverable from Germany.

²⁶ This excludes entirely empty online-questionnaire responses or where less than six questions were answered. For the UK the returned pre-test questionnaire (round two, almost same questionnaire as final one) was included as via an interview the missing items from the final questionnaire were obtained.

²⁷ Further specific efforts were undertaken at a later stage and more responses from US-subidiaries in the UK gathered to increase the response rate.

veys, which fits to e.g. the findings of HARZING (2000: 252) that an increasing amount of big MNCs have non-response policies. And as already mentioned, in each location a number of letters were returned undeliverable at least once, due to an address error or e.g. an incorrectly identified contact person. Even after sending letters out a second time – with corrected address details where these were obtainable – in many cases the letters were returned undeliverable again.

Overall, cases where the subsidiary was no longer active or not acting, no further contact information was available after an undeliverable return of a letter (first or second round) or the company was not a US-subsiary were detected 52 times in Germany, 26 times in Switzerland, and eight times in the UK. Deducting these numbers from the initially contacted population of 500 subsidiaries in Germany and Switzerland, the result is a response rate of about 7 percent in Germany (7.4) and Switzerland (7.0). For the UK, a response rate cannot easily be identified. It remains unclear in how many cases generally the Royal Mail will send undeliverable answers back abroad, for example. However, if applying the same approach for calculating a response rate as for the subsidiaries in Germany and Switzerland, one can cautiously estimate a response rate of the main survey of around 1.5 percent regarding the contacted US-subsiaries in the UK.²⁸

In comparison to other studies, the response rate of 7 percent is at the lower end of the spectrum. For example, PULL (2008: 320), in her survey addressed to US-headquarters in the USA, yielded a response rate of about 19 percent. SCHMITT (2002: 128) had a response rate of about 26 percent regarding US- and UK-subsiaries in Germany. VITOLS (2001a: 1), surveying foreign subsidiaries in Germany, had a response rate of 10 percent. The large-scale CRANET (eds.) (2009) survey of the Cranfield School of Management and various international partners generally yields 12-25 percent of responses. SHOHAM (1996: 59) reports a response rate of 5 percent for his US-study.

However, merely comparing response rates has its limitations as a number of factors that interact play a role in the end result. For example, PULL (2003: 141) and SCHMITT (2002: 120) were able to utilise stamped return envelopes. And, as BARUCH/HOLTOM (2008) note in their study in terms of top-executive level organisational research, there ‘appears to be a tacit recognition of the increased difficulty in

²⁸ See chapter 2.2.4 where further issues with the initial address data used to mail the US-subsiaries in the UK are outlined.

obtaining responses from this population.’ (BARUCH/HOLTOM 2008: 1154). Furthermore, CYCYOTA/HARRISON (2002) generally do not find commonly used techniques to increase survey responses working in case of high-level organisational members and conclude that there is a need for further survey technique exploration in this regard.²⁹

In terms of the response mode, from the total amount of 74³⁰, 26 (about 35 percent) were returned by post, 17 were returned via email (about 23 percent), and 31 (42 percent) were filled out online.³¹ This is surprising in the sense that mail surveys have been found to elicit more responses than web surveys (e.g. see SHIH/FAN 2008: 249), which could lead one to expect that where there is a choice of answer mode such as in this survey, mail would be preferred also as a response option.

Regarding the timing of the responses for the main survey, only an approximate assessment can be made. This is due to a potential overlap of sending and receiving letters which takes a few days in international mail. Before the postal reminder was sent out, 34 responses had been received (about 47 percent of all responses in the main survey).³² After the postal reminder and before the telephone reminder 23 responses arrived (about 32 percent of the total response). After the phone follow up, another 16 responses arrived (about 22 percent).

The overall modest number of survey responses of in total 74 responses for the main survey limits the techniques possible to analyse the data. Of course also non-response bias³³ can be an issue, although ‘empirically there is no simple relationship between non-response rates and non-response biases’ (GROVES 2006: 670). And findings such as the ones by YUN/TRUMBO (2000) illustrate that multi-mode survey techniques – which in the main survey are utilised in respect to the response options – can enhance representativeness. Different survey techniques were also utilised in the further efforts to collect UK data, as can be found in the following chapter.

²⁹ For my project traditional methods, if found applicable, were implemented to enhance response rates (see reminders and telephone follow ups).

³⁰ This includes the usable pre-test case from the UK.

³¹ The option to answer the questionnaire in German language was utilised 18 times.

³² This analysis excludes the pre-test case in the UK since it was received somewhat earlier in October.

³³ The concept of nonresponse bias is here defined as per the OECD (eds.) (2005), ‘the bias resulting from limiting the survey analysis to the available data’.

2.2.4 Further data collection in the UK

Given the especially modest response rate from the UK in comparison to the responses from Germany and Switzerland, it was decided to engage in further endeavours to gather responses from US-subidiaries in the UK.

It got apparent from the first telephone follow up (as part of the main survey, December 2010 where 150 companies were targeted) that in a number of instances, in case of surveys sent to the UK for example, a number of top-management which the letters had been addressed to resided in the USA. Therefore it was not clear who and whether in such instances anyone had received the survey at that point (as also got apparent from company representatives enquired with in regard to the matter).

Therefore, in a first endeavour to gather more data from the UK, a second postal reminder (addressed to the same US-subidiaries as in the main survey) was sent from the UK to the UK without addressing specific staff, but rather local top management (the subsidiary manager).³⁴ Despite research generally finding a personalised survey yielding more results (see EDWARDS et al. 2002: 1183) the approach of mailing letters without a specific contact name appeared the best option. Two more responses were received in this instance.

Subsequently, a researcher native from the UK was engaged to call and follow up with the remaining subsidiaries that had not yet answered the questionnaire originally sent via the main survey (where the telephone number was known, and where one had not declined participation in the survey previously or where participation was not possible due to other reasons) in the UK in May and June 2011. The idea was that a native speaker may increase response rates as findings such as by HARZING (2000: 243) illustrate that geographical and cultural closeness play a role in responding to international mail surveys, especially as the survey includes a number of questions that could be regarded as sensitive information which has been found to deter responses generally (see EDWARDS et al. 2002: 1183). Via this method also two more responses were gathered.

Moreover, it was sought to establish contact with further subsidiaries via respondents from US-subidiaries that had already participated in the other countries, Germany and Switzerland, and where the parent company had subsidiaries in the UK

³⁴ On these letters, the response address in Germany was given but since the letters were sent by Royal Mail in the UK, undelivered mail would not be forwarded back to the sender abroad.

as well (in the fourth quarter of 2011). This may be referred to as pre-selection or screening in so far that the subsidiaries were approached via a contact obtained from another subsidiary, and where this contact may have already spoken to the potential UK-respondent about the survey participation before giving out their contact information. This should generally be effective regarding top-level executives (see CYCYOTA/HARRISON (2002: 171) for suggestions). Via this method another seven answers were obtained from UK subsidiaries.

And last but not least, further US-subsubsidiaries based in the UK not previously contacted (obtained from the originally queried list for US-subsubsidiaries in the UK from the Amadeus database) were emailed when an email address was obtainable (e.g. to a general contact email address or an HR contact, via further internet searches).³⁵ Here the response mode option was only via the online questionnaire. The last fourteen responses were gathered via this technique in 2012.³⁶

Overall therefore, a total number of 33 responses constitute the sample of US-subsubsidiaries originating from the UK. In total, the sample size is therefore 99, 33 responses from Germany, Switzerland and the UK each. Although the sample size is still somewhat modest if compared to large established surveys, for a survey of the scale as undertaken in the course of this project it constitutes a sufficient sample for analysing the posed research questions.

2.2.5 Main survey representativeness check and characteristics of the response sample

After having established the response rate, mode and timing, the sample size and what further measures were taken to gather more data in the UK, to obtain a first picture of the response population, some key descriptive analyses of the response data are outlined.³⁷ First of all the question arises from which sectors the sample response population originates and how that compares to the base population in case of

³⁵ This could indicate that rather bigger subsidiaries were contacted that have an internet presence, next to that for replies gathered at these later stages, naturally for some answers a time effect exists.

³⁶ In the last two efforts (addressing subsidiaries in the UK via contacts from Germany or Switzerland and emailing further US-subsubsidiaries listed in the Amadeus database), student research assistants – mainly from the University of Zurich – were involved in data collection efforts. One response was also obtained via a personal contact.

³⁷ After the data was gathered, plausibility checks were conducted for the different question responses and in few cases data items adjusted (e.g. if no apprentices were trained, and nothing for the share of apprentices of staff indicated, the logical conclusion was to input zero percent for the share of apprentices) or single items excluded when logically impossible.

the data collected via the main survey, what typical characteristics the responding subsidiaries have and who answered the questionnaire.

In the following, in table 2, the sector distribution of the US-subsidiaries that have responded in Germany, Switzerland and the UK is listed next to the sectoral distribution of the base population (of the main survey, as only for this part of the survey a base population as such exists) since this is the relevant basis for determining whether this survey response sample is representative in this regard.³⁸

In terms of US-subsidiaries in Switzerland, the response sample is generally representative. Regarding the dominant category ‘wholesale trade’ the base and sample population are not that different, also in terms of ‘professional, scientific and technical services’. Regarding ‘manufacturing’, a rather prevalent base population sector, there is an overrepresentation in the response sample with 30 percent of subsidiaries from ‘manufacturing’.

Regarding US-subsidiaries in Germany, there is a fair amount of congruence between the base and sample population. ‘Manufacturing’ is again overrepresented with 30 percent of the sample (practically as in Switzerland), the opposite applies for ‘professional, scientific and technical services’ and ‘wholesale trade’ – these sectors are less present in the response sample.

And, in terms of the US-subsidiaries in the UK (responses gathered via the main survey),³⁹ ‘administrative and support and waste management and remediation services’ are overrepresented. The share of ‘manufacturing’ in both the main survey sample and base population is rather similar. Also there are no subsidiaries from the sector ‘professional, scientific and technical services’ in the response sample.

³⁸ A representative sample is defined here as when results can – without systematic error – be extrapolated and match the population (see GABLER WIRTSCHAFTSLEXIKON (eds.) 2011).

³⁹ Since this only applies to the US-subsidiary responses in the UK from the main survey, seven responses (here excluding the one from the pre-test not drawn from the same base population), not the additionally acquired responses, are taken into account.

Table 2: Base population and response sample: NAICS subsidiary sector distribution in percent

Panel A: US-subsidiaries in Switzerland		
sector	base population	response sample
administrative and support and waste management	5	0
finance and insurance	5	3
health care and social assistance	1	0
information	3	0
management of companies and enterprises	10	9
manufacturing	19	30
other services (except public administration)	1	0
professional, scientific, and technical services	17	12
real estate and rental and leasing	1	0
retail trade	2	6
transportation and warehousing	1	0
wholesale trade	34	39
Panel B: US-subsidiaries in Germany		
sector	base population	response sample
accommodation and food services	1	0
administrative and support and waste management and remediation services	5	6
arts, entertainment, and recreation	1	0
construction	1	3
educational services	1	0
finance and insurance	2	3
health care and social assistance	1	3
information	2	3
management of companies and enterprises	17	12
manufacturing	18	30
other services (except public administration)	1	0
professional, scientific, and technical services	22	12
real estate and rental and leasing	4	3
retail trade	3	6
transportation and warehousing	1	6
wholesale trade	19	12

Panel C: US-subsidiaries in the UK sector	base population	response sample
administrative and support and waste management and remediation services	25	43
arts, entertainment, and recreation	2	0
construction	1	0
finance and insurance	7	0
health care and social assistance	1	0
information	7	14
management of companies and enterprises	8	14
manufacturing	16	14
mining, quarrying, and oil and gas extraction	1	0
other services (except public administration)	2	0
professional, scientific, and technical services	16	0
public administration	1	0
real estate and rental and leasing	1	0
retail trade	2	0
transportation and warehousing	1	0
wholesale trade	8	14

Note: Values below 1 percent (rounded) are excluded in the base population. Due to rounding not always a total of 100 percent results.

Source: Own compilation based on Amadeus data and own data.

While table 2 already illustrates that e.g. for the response sample of US-subsidiaries in Germany ‘manufacturing’ is not too far off from national indicators of importance, which is the case also to some extent for the US-subsidiaries in Switzerland (the second strongest response sample sector is also ‘manufacturing’) (see EUROSTAT (eds.) 2012), it remains to be outlined what the entire response sample of US-subsidiaries from the UK looks like. Therefore in the following, in table 3, a full overview of the response sample from the UK is given.⁴⁰ Almost a third of the US-subsidiaries are from ‘manufacturing’, a sector currently not of dominant importance in the UK overall (see EUROSTAT (eds.) 2012). However, there is a range of other sectors present that one may expect to find, such as ‘professional, scientific and technical services’ and ‘administrative ... services’. All in all, the overall response samples from the three different countries therefore constitute both similarities and differences in terms of subsidiary sectoral origin.

⁴⁰ Only for four subsidiaries in the UK, the sector is not known.

Table 3: The entire response sample of US-subidiaries from the UK: NAICS subsidiary sector distribution in percent

US-subidiaries in the UK sector	response sample
administrative and support and waste management and remediation services	14
finance and insurance	10
health care and social assistance	7
information	10
management of companies and enterprises	3
manufacturing	28
professional, scientific, and technical services	21
retail trade	3
wholesale trade	3

Source: Own compilation based on Amadeus data and own data.

Furthermore, following other surveys, it is of interest to compare attributes of responding subsidiaries according to response timing,⁴¹ as analysed by SCHMITT (2002). Therefore, table 4 displays which subsidiaries (in terms of key characteristics such as headcount, year and type of incorporation) responded before any reminder and which ones after at least one reminder.

A few trends can be established from table 4: One is that in all three countries on average bigger subsidiaries in terms of headcount responded before a reminder. Also, US-subidiaries which in comparison have not existed for that long, in Switzerland and the UK, answered after the first reminder. This could be linked to subsidiary headcount also; the bigger US-subidiaries may have been established a longer time ago. And big MNCs have been found to oftentimes have policies of not taking part in surveys (see HARZING 2000: 252), therefore these subsidiaries may have either taken part straight away or not at all, one may suspect. Regarding the type of incorporation, there are some differences according to response timing regarding the subsidiaries in Switzerland, and less so in Germany and in the UK.

It becomes evident that a somewhat – on average – different type of subsidiary, according to these characteristics, has responded to the survey at specific times. However, that does not necessarily mean that there is a bias introduced. E.g., the time interval between sending out the first and second letter (reminder) was one month

⁴¹ It only makes sense to compare the response timing in terms of the initial main survey, not the additional UK cases resulting from subsidiaries contacted later, in 2011/2012.

only, which in terms of the busy schedules and travelling of high-level managers is not a long time. During some of the phone follow ups for example it got apparent that the recipient of the mail survey was travelling for a few weeks, thereby it could well be the case that the recipient of the mail survey got the first letter and reminder at about the same time, when returning back to his/her office. For this reason, and that gathering further answers in the UK was undertaken over the course of another 1.5 years after the initial survey via different methods I do not apply tests to determine statistical differences.⁴² Furthermore, subsidiaries of different characteristics answering the survey should generally increase the representativeness of the sample and not reduce it.

Table 4: Subsidiaries that answered before and after the first reminder

Panel A: US-subsidiaries in Germany	before	after
number who answered	16	17
average headcount	550	394
incorporation as a start-up	47 %	63%
average incorporation year	1999	1998
Panel B: US-subsidiaries in Switzerland	before	after
number who answered	13	20
average headcount	855	89
incorporation as a start-up	33 %	63%
average incorporation year	1975	1991
Panel C: US-subsidiaries in the UK	before	after
number who answered	5 ⁴³	2
average headcount	1111	26
incorporation as a start-up	40 %	50 %
average incorporation year	1986	2005

Note: When answers are missing in some categories, the percentage is calculated based on the remaining answers. Years and headcount are rounded to full numbers.⁴⁴

Source: Own data.

To complete this first account of the responding subsidiaries, an overview regarding what kind of subsidiary typically answered in the three countries, regardless

⁴² In other studies with a different data gathering set-up such as SCHMITT's (2002), tests to detect potential statistical differences regarding what type of company answered a questionnaire before or after a reminder were applied, however, due to the named reason it does not make sense to follow this approach here.

⁴³ Here, the pre-test answer from the UK is not included.

⁴⁴ This applies throughout the text. For other figures in the following chapters, rounding applies as of the respectively adopted standard.

of timing, is given⁴⁵ in table 5, referring to the previously identified key characteristics. It becomes clear that differences exist regarding the average incorporation year of US-subidiaries. The subsidiaries in Switzerland have existed the longest.⁴⁶ The incorporation form is fairly equally spread between start-ups and mergers/acquisitions in Germany and Switzerland, however almost two thirds of the US-subidiaries in the UK are start-ups. Regarding the average headcount per subsidiary, the ones in the UK are somewhat smaller, the ones in Germany are at the opposite end of the spectrum with the average US-subidiary in Switzerland having the middle position in terms of size.⁴⁷ Overall, the responding subsidiaries are of relatively small headcount size, going hand in hand with the findings of HARZING (2000: 243) that respondents in international mail surveys tend to be rather from smaller subsidiaries. In comparison, SCHMITT (2002: 128) finds an average headcount of foreign subsidiaries in Germany of 610 employees; however he also did not contact subsidiaries below a headcount threshold of 70 staff (see SCHMITT/SADOWSKI 2003).

Table 5: Average characteristics of responding US-subidiaries

characteristic	in Germany	in Switzerland	in the UK
headcount	470	376	267
incorporation (start-up vs. merger/acquisition)	55% start-up	52% start-up	67 % start-up
incorporation year	1998	1985	1996

Source: Own data.

Lastly, it is of interest who answered the survey since a choice was given to delegate filling out the questionnaire in the accompanying cover letter. This analysis is possible regarding the main survey where only high-level management members were contacted and who had the option to rather delegate answering the survey, if they wished, or not. At the end of the questionnaire the respondent is asked to indicate his/her job title, hence it is known what function the respondent belongs to if

⁴⁵ The data refers to the subsidiary responses from all gathered cases (due to some non-item response the actual amount of responses regarding each item may slightly vary).

⁴⁶ In some cases, few rather extreme but generally possible answers were given (resulting in a rather large standard deviation).

⁴⁷ A statistically significant difference can only be detected regarding the year of incorporation between US-subidiaries in Germany and Switzerland and the UK and Switzerland when applying t-tests; and the type of incorporation regarding US-subidiaries in Germany versus Switzerland.

they answered that question. Table 6 illustrates the share of respondents per job category for the main survey.

Table 6: Types of respondents filling out the questionnaires

job position	percent
CEO/Director/Managing Director	43
Controller/Director of Finance	9
General Manager	7
HR Management	3
other high-level management	23
other, not (high-level) management	7
missing	8

Note: Some job titles were given in German, these were translated. Generally job positions were grouped according to apparent similarity, not all had the exact same title. The answers by HR Management were not included in the category ‘other high-level management’ but kept separately.⁴⁸

Source: Own data.

One can observe that in the majority of the time, top-level management has answered,⁴⁹ as originally addressed. It also becomes evident that the questionnaire, which included many HR related questions, was nevertheless rarely filled out by human resource professionals. That 7 percent of non-(high-level) management have answered the questionnaire is, having asked the survey recipients to delegate answering the questionnaire, also not surprising. In view of the survey recipients, high-level managers, generally being pressed for time I regard this as a rather low percentage.

This completes the first descriptive analysis of survey responses. Now I turn to the second methodological part of this research, the interviews.

2.3 The conducted interviews

Obtaining further detailed information about a number of surveyed companies via conducting an interview in addition to the survey and thereby applying a triangulation approach (see FLICK 2009) can be fruitful. This is because the interviews should implicitly aid the understanding of empirical results derived from the survey and

⁴⁸ Table 5 only refers to the responses gathered in the main survey since for the newly acquired UK data the survey was not coherently sent to top management in the first place. However, most of the additionally acquired answers from the UK were filled out by (high-)level management also (where the title is known).

⁴⁹ Top-level management of different subsidiaries, e.g. in terms of the subsidiary size, means that a certain variation is present in this group.

provide an understanding how items from the questionnaire were understood. In the following I will outline how I designed (chapter 2.3.1) and conducted (see chapter 2.3.2) the supplementary interviews to develop a deeper understanding of the questions analysed.⁵⁰

2.3.1 Interview design

The interview setup was based on the questionnaire; therefore no further pre-tests were administered for this part of the research. I developed interview guidelines in which I asked the responding managers to exemplify a number of selected aspects of the questionnaire in a structured fashion. For example, I enquired about the reasons for not having a collective agreement, if there was none. And I asked for example to explain in how far the subsidiary main business was (not) price and quality determined, and which one was the dominant success determinant, if one had to name one. Via this approach I attempted to stay as concrete as possible and avoid abstractions (see BEWLEY 2002: 346).

In order to conduct the interviews as effectively and reliably as possible, I took the following steps: When contacting the interview partner before the interviews, I gave a brief outline of the suggested interview, i.e. that I planned to talk in some more detail about topic areas mentioned in the questionnaire. This should increase the active participation of the interview partners since they were able to prepare for the interview by taking another look at the questionnaire they had filled out (if they kept a copy, alternatively I provided them with another questionnaire copy beforehand if requested, or during the interview (e.g. see SUCHMAN/JORDAN (1990) for collaboration in survey interviews). I designed the interview guidelines to begin with a brief explanation about the study and myself, including confidentiality. Then I began the interview part with a ‘pleasant’ question but at the same time signalling interest (see GLÄSER/LAUDEL (2009: 148) for such an approach), by asking about the business activities of the subsidiary.

Moreover, I was prepared to explain the interview questions with specific examples, to avoid potential misunderstandings and establish – as much as possible – that the questions were understood as intended (see SUCHMAN/JORDAN 1990 for the importance to avoid misunderstandings). Also I approached the interviews from a

⁵⁰ Since the interviews rather play a complementary, implicit role in my project, this chapter is kept comparatively brief.

collaborative standpoint. I aimed at a sufficient exchange between interviewee and interviewer in the course of the semi-standardised interviews (see GLÄSER/LAUDEL (2009: 41), a fixed amount of questions in a certain order but the majority of them open), to communicate effectively but trying not to introduce a bias (see SUCHMAN/JORDAN 1990: 232). Furthermore, at the end of each interview, I included a question for the interviewee enquiring if in their opinion I had left something out that they would like to address or whether they had suggestions. I did this to actively involve them and give them the opportunity to add information as seen fit (see GLÄSER/LAUDEL (2009: 149)). And last but not least, it goes without saying that I prepared for each interview, arrived well on time and appropriately dressed for the occasion (see BEWLEY 2002: 346).

2.3.2 Setting up and conducting the interviews

On the survey questionnaire a box is included where the respondent could indicate whether he or she would be available for further questions. This served as a starting point for whom to contact for setting up an interview. This approach constitutes a pre-selection as the respondents I asked for an interview had already agreed to be contacted for more questions (see CYCYOTA/HARRISON (2002: 171) for such approaches). As a first means of contact, I used email.

Since I was in the UK in February and March 2011 for a research stay, I contacted all the US-subidiaries in the UK that had indicated that they would be available for further questions (five).⁵¹ I asked the respondents if they had time for an interview which would last about forty-five minutes to an hour.

I recorded the interviewees that I met in person when they agreed to let me tape the confidential conversation. I took notes in all instances. The interviews in the UK lasted from under an hour to about one and a half hours.

Towards the end of March and in April 2011, I contacted US-subidiaries in Germany (five) and Switzerland (five) for interviews. I approached respondents who had (a) agreed to further questions and (b) which I regarded, after preliminary analysis, as a rather typical or untypical case according to my theoretical predictions in terms of the subsidiary characteristics. I subsequently contacted further respondents according to a random draw of the remaining respondents that had offered to answer

⁵¹ At the time not many UK responses were gathered as yet, and it was ensured to conduct as many interviews as possible.

further questions. Both in Germany and Switzerland I conducted interviews in person and via phone, according to the wish of the respondents, following the same interview guidelines as utilised in the UK interviews. The language of the interviews was as per the preference of the interviewees, in English or German. Furthermore, in the course of the research project, it also became apparent to me that it would be interesting to include the employee view of the matter.

Overall, I conducted ten interviews with questionnaire respondents (four in the UK, three in Germany and Switzerland),⁵² three of which were via the phone, due to preference of the interviewee or logistical constraints.⁵³ Additionally, I interviewed one employee representative of a US-subsiary in Germany.

Although the interviews are not systematically analysed in the following chapters, they constitute a significant part of the project in so far as that they are used as further background information when needed and to gain a deeper understanding of certain questions regarding the different papers following in the subsequent chapters. This concludes the data and methodological approach and in the following the individual papers that constitute different aspects of my work can be found.

⁵² During the course of the interviews, as referring to questions relating to the previously filled out questionnaire, few times the interviewees provided an updated answer to one of the questions which was noted accordingly.

⁵³ Due to the small number of interviews per country, no average subsidiary characteristics are described in this section.

Chapter 3

Re-examining the host-country effect to include hybrid market economies: Is it sufficient to consider host- and home-country, and what role do the subsidiary size and incorporation type play?

(currently available in a slightly modified version as: Kluike, Marlies (2012): Re-examining the host-country effect to include hybrid market economies: Is it sufficient to consider host- and home-country, and what role do the subsidiary size and incorporation type play? At: Social Science Research Network.)

Abstract

Two so far unexplored issues regarding host-country effects are addressed that contribute to a better understanding of findings for hybrid host-market economies such as Switzerland. Host-country effects are differentiated by practices belonging rather to IR and education & training as per the varieties of capitalism approach (1). Then it is investigated to what extent foreign subsidiaries' overall uptake of host-country employment relations is determined by the subsidiary incorporation type and size for IR and education & training related practices (2). Analysing US-subsidiaries in Switzerland and in contrast Germany and the UK, mostly support for the propositions distinguishing between IR and education & training host-country effects are found.

Keywords: *host-country effect, IR, education & training, varieties of capitalism, US-subsidiaries, Germany, Switzerland, UK*

3.1 Introduction

The discussion about MNCs and their uptake of host-country employment relations practices is still on-going (e.g. see BJÖRKMAN/BUDHWAR 2007;

GOODERHAM/NORDHAUG/RINGDAL 2006; LAVELLE 2008; MULLER 1998; ROSENZWEIG/NOHRIA 1994; SCHMITT/SADOWSKI 2003).

The varieties of capitalism approach is often applied as a framework of analysis in this context (e.g. see FARNDAL/BREWSTER/POUTSMA 2008; PARRY/DICKMANN/MORLEY 2008) for considering institutional influences. Analysing HRM practices of North-American multinationals (from liberal market economies) PARRY/DICKMANN/MORLEY (2008) find that rather for host-countries distant to the analysed home-country, i.e. in this case coordinated market economies, localisation effects occur.

However, as e.g. SCHNEIDER/SCHULZE-BENTROP/PAUNESCU (2010) find, there are also a number of economies that have both liberal and coordinated features (here referred to as hybrid market economies) in different market economy spheres. The question arises therefore if and what host-country effects occur in such cases.

In terms of the varieties of capitalism approach (see HALL/SOSKICE 2001), employment relations and hybrid market economies, the two spheres IR and education & training should therefore be considered separately. Taking account of the two spheres, it should be possible to better categorise hybrid host-countries in this respect and consequently assess whether a host-country effect occurs (when such are generally suggested to occur, i.e. home- and host-countries are not too similar to begin with to expect significant differences) for practices dominantly related to IR and education & training, an aspect not previously taken into account in this way.

Following the argumentation that differences in host-country practices uptake occur for practices related to IR and education & training for US-subsidaries in certain hybrid market economies, a more differentiated approach is required for determining the *overall* uptake of subsidiaries' host-country employment relations,⁵⁴ apart from that such a distinction should generally be taken into account I argue as explained in the following. Applying a distinction according to employment relations spheres enables me to analyse a potentially different role of factors (e.g. size) to account for the subsidiaries' overall uptake of such employment relations practices, something not previously applied. So far, rather the uptake of *all* analysed (IR/HR) practices or their average has been analysed in this respect, for example by

⁵⁴ The extent of practices uptake is operationalised with an index (see 3.3).

SCHMITT/SADOWSKI (2003) and ROSENZWEIG/NOHRIA (1994), without distinguishing IR and education & training related practices.

In terms of typically used control variables (such as size) playing a role in MNC subsidiaries' host-country practices uptake, so far there tend to be some general expectations about their influence, (e.g. see FARNDALE/BREWSTER/POUTSMA 2008; FENTON-O'CREEVY/GOODERHAM/NORDHAUG 2008; GOODERHAM/NORDHAUG/RINGDAL 2006; SCHMITT/SADOWSKI 2003) if at all. I will focus on two central variables, how the subsidiaries were incorporated into being part of a US-company and the size of the subsidiary. These variables have both been applied in previous studies considering the uptake extent of host-country employment relations (e.g. see ROSENZWEIG/NOHRIA 1994; SCHMITT/SADOWSKI 2003) and based on interviews that I conducted I found implications for them being of importance as well.

In the following, I therefore analyse the research questions (1) in how far host-country effects in terms of practices linked to IR and education & training occur for MNC-subsidiaries originating from liberal market-economies located in differently coordinated economies regarding employment relations and (2) in how far the effect of subsidiary size and incorporation type on subsidiaries' overall host-country practices uptake in the different employment relations spheres (IR versus education & training) varies.

To contribute to solving the puzzle at hand, I analyse US-subsidiaries (as major liberal market economy investors) located in a hybrid market economy, Switzerland, and as a contrast, in Germany and the UK. Switzerland – very attractive for foreign investors but not analysed much as yet – represents a market economy with both liberal and coordinated elements, although it has originally been referred to as a coordinated market economy (see HALL/SOSKICE 2001). On the one hand, Switzerland is similar to Germany in terms of its prominent dual vocational education & training system (see ESTEVEZ-ABE/IVERSEN/SOSKICE 2001: 170), but on the other hand Switzerland has a flexible labour market (e.g. see OECD (eds.) 2010) and overall little IR coordination; as have the UK and USA – the typical fully liberal case. The UK and Germany represent cases at different ends of the coordination spectrum. Germany is – despite debates about the German model (e.g. see TÜSELMANN/MCDONALD/HEISE 2003 for labour relations) – a typical coordinated market economy. The UK is a typical example of a liberal market economy (see

HALL/SOSKICE 2001; SCHNEIDER/PAUNESCU 2012) and overall comparatively similar to the USA in terms of employment relations, labour market regulations (see OECD (eds.) 2010) and education & training (see ESTEVEZ-ABE/IVERSEN/SOSKICE 2001: 170).

I proceed in the following way: In the theory and hypothesis part (chapter 3.2.), I disentangle the analysed market economies in terms of employment relations spheres and deduct when host-country effects should occur (and when this does not apply due to supposedly overall much similarity between typical home- and host-country practices to begin with). Then I derive predictions about what role the subsidiary incorporation type and size play in terms of subsidiaries' host-country practices uptake in the different employment relations spheres. Subsequently I introduce the data and variable operationalisation where I also define the expected host-country practices and build an index for capturing subsidiaries' overall uptake of host-country employment relations (chapter 3.3). Afterwards, I analyse the means, t-test/chi-square test outcomes and regression analyses (chapter 3.4). Then I discuss my findings (chapter 3.5) and end with a conclusion (chapter 3.6).

3.2 Theoretical framework and hypotheses

PARRY/DICKMANN/MORELY (2008) have highlighted in their quantitative analysis that with more institutional distance between North-American MNC home- and host-countries it is more likely that employment relations practices from the host-country are adopted. In the case of analysing US-subsidiaries, host-country effects should thereby be more likely in coordinated environments, i.e. a difference observable between US-subsidiaries' practices in liberal versus coordinated environments. And in the latter I would expect to find host-country effects as per the approach and definition of this paper – in comparison to the liberal ones where I do not expect such host-country effects due to a sufficient similarity of the US-home and host-approach.

It has not been systematically analysed as yet how host-country effects occur in more untypical market economies that are overall somewhere in the middle of the spectrum between coordinated (by non-market mechanisms, e.g. between employers and employees in terms of collective bargaining and with generally stricter employment protection legislation) and liberal market economies (rather market-mechanisms determining business, and e.g. with flexible labour markets, see

HALL/SOSKICE 2001) but exhibit either liberal or coordinated features in different market economy spheres linked to employment relations.⁵⁵ While building on PARRY/DICKMANN/MORELY (2008), I argue that it is additionally necessary to distinguish between different spheres of market economies that play a role in determining employment relations practices: IR and education & training, because some market economies may have a rather typical coordinated or liberal makeup in regard to one of the spheres but not the other (e.g. see findings by SCHNEIDER/SCHULZE-BENTROP/PAUNESCU 2010).

Distinguishing between IR and education & training related practices is similar to the commonly referred distinction of IR and HR (e.g. see SCHMITT/SADOWSKI 2003). Employment relations practices should either be dominantly related to IR, or to education & training. Regarding education & training related practices, one can refer to MARSDEN's (1999) employment systems theory. Dominant skill systems such as the dual apprenticeship system in Germany should be centrally linked to employment relations practices, e.g. to various aspects of the employment relationship such as job design and pay structures.

Furthermore, in such cases where there is a mix of liberal and coordinated elements regarding host-country employment relations (and expectedly useful generally because potential differences in this regard have not been systematically focused on), a more differentiated approach is required for determining the *overall* host-country practices uptake of subsidiaries. So far, a distinction of whether employment relations practices rather belong to IR or education & training has not been applied in this context, therefore a puzzle is to be solved regarding the determinants of subsidiaries' overall host-country employment relations use when differentiated by IR and education & training. I focus on two central variables (see also ROSENZWEIG/NOHRIA 1994; SCHMITT/SADOWSKI 2003), how the subsidiaries were incorporated into being part of a US-company (via a start-up or merger/acquisition) and the size of the subsidiary, measured by its headcount. And based on interviews I conducted in the course of this project, I detected indications for the importance of these two factors.

I test my idea specifically in regard to US-owned foreign subsidiaries due to their continuing importance and because the USA are a typical example of a liberal

⁵⁵ FENTON-O'CREEVY/GOODERHAM/NORDHAUG (2008) apply a distinction, but in different way, a gradual index distinction of overall coordination between different market economies and its effect on centralised HRM, not distinguishing between employment relations practices linked to different spheres.

market economy. In the USA generally and in comparison to other countries, companies are rather free to determine their practices, e.g. in terms of employment relations (see HALL/SOSKICE 2001: 32). Regarding IR, there is little coordination between employers and employees in the form of collective bargaining and employment protection legislation is rather minimal (see HALL/SOSKICE 2001; OECD (eds.) 2010). Furthermore, in terms of education & training, there is rather a focus on a university and college type education providing general skills and there are little medium-level occupational skills such as in the form of apprenticeships (see ESTEVEZ-ABE/IVERSEN/SOSKICE 2001: 170).

The host-countries of the analysed US-subsiidiaries have been chosen because they represent gradually different cases in terms of the varieties of capitalism approach, one hybrid market economy and two pure cases as reference points at either end of the coordination spectrum. *Switzerland*, a hybrid market economy, displays both coordinated and liberal characteristics. In terms of IR, there is some but light coordination between employers and employees (see AFONSO/MACH 2011), and rather liberal employment protection legislation (see OECD (eds.) 2010) with a very flexible labour market, therefore rather similarities to liberal market economies such as the UK and USA exist, and a contrast to Germany (which if following Switzerland's original categorisation as a coordinated market economy would not be picked up on as then a typical coordinated IR approach would be expected). However, in terms of education & training, overall there is much similarity to Germany (see ESTEVEZ-ABE/IVERSEN/SOSKICE 2001: 170). As typical for a coordinated market economy, there is a strong focus on the dual vocational education system. *Further*, because it is a pure case at the coordinated end of the spectrum (see SCHNEIDER/PAUNESCU 2012), *Germany* is selected. Regarding employment relations, there is comparatively much coordination between employers and employees in terms of collective bargaining (see EIRO ONLINE (eds.) 2009a), and employment protection is rather strict. Predominantly specific occupational skills gained via the dual apprenticeship system are fostered (e.g. see ESTEVEZ-ABE/IVERSEN/SOSKICE 2001). *And finally*, the *UK* is also analysed as a host-country due to its comparative similarities to the USA generally and in terms of employment relations (see HALL/SOSKICE 2001; SCHNEIDER/PAUNESCU 2012). There are rather uncoordinated private sector employment relations, a flexibly regulated labour market (see OECD (eds.) 2010) and dominantly a general skill orientated education (see ESTEVEZ-

ABE/IVERSEN/SOSKICE 2001: 170). With this choice of host-countries, it should be possible to test in how far host-country effects occur regarding employment relations practices rather determined by IR or education & training.

Regarding dominantly IR related practices (sometimes both spheres may have an influence on a practice, hence the dominant influence should be determined), in the US-subsidaries in Germany a host-country effect should occur due to the difference to the USA in this sphere and the proposition that the bigger the distance between home- and host-country employment relations spheres, generally an uptake of host-country practices should occur (see PARRY/DICKMANN/MORELY 2008). However this should not apply in the US-subsidaries in Switzerland and the UK due to their comparative similarities to the USA (and suggested similar practices), hence a difference in practices as compared to US-subsidaries in Germany should be present (and host-country effects detectable via this comparison). Therefore, I test the following hypothesis:

H1): Dominantly IR related practices differ between US-subsidaries in Germany versus in Switzerland and the UK.

Regarding dominantly education & training related practices, in the US-subsidaries in Germany and Switzerland a host-country effect should generally occur due to the practice differences to the USA, in contrast to the US-subsidaries in the UK with similarities to the USA in terms of their dominant education & training system, therefore I test the following hypothesis:

H2): Dominantly education & training related practices differ between US-subsidaries in Germany and Switzerland versus in the UK.

Concerning the second research question, I focus on in how far the subsidiary size and incorporation type play a different role in subsidiaries' overall uptake of host-country practices in different employment relations spheres. In terms of IR the subsidiaries in Germany (here also functioning as an example for any (hybrid) market economy with coordination in this sphere) should be considered because a host-country effect is suggested due to differences to the US-home practices. And in terms of education & training related practices, subsidiaries in Germany and Switzerland should be the focus due to an expected host-country effect.

Company size measured as per its staff headcount should, for example according to SCHMITT/SADOWSKI (2003) and ROSENZWEIG/NOHRIA (1994), play a role

in determining the uptake of host-country employment relations. The idea is that larger establishments use more host-country practices, however ROSENZWEIG/NOHRIA (1994) acknowledge that the relation could also be in the opposite direction. I suggest that bigger subsidiaries should localise more in regard to IR related practices and not education & training related practices. The reason is that the larger the subsidiary, the more it may make sense to transfer practices related to education & training as central building blocks of non-IR employment relations practices, e.g. for efficiency and coherence reasons. However, in terms of IR which generally entails somewhat more outwardly visible employment relations practices, the bigger the subsidiary, the more it may be subject to legitimacy pressures (for the concept of legitimacy, see SCHMITT/SADOWSKI 2003) and therefore foreign subsidiaries may adjust to host-country IR practices. Also, bigger subsidiaries should be able to gain comparatively more advantage from being coordinated in such a way (here considered in regard to Germany). And indications in the direction of two different effects according to what employment relations are concerned (although not of direct focus) were observable in some of the interviews conducted. Therefore for subsidiary size, I suggest a different effect regarding IR and education & training related practices as just outlined. Hence I test the following hypothesis:

H3): a) The bigger the US-subsiary, the more host-country IR practices are used.

H3): b) The bigger the US-subsiary, the less host-country education & training practices are used.

In terms of the type of incorporation, both according to SCHMITT/SADOWSKI (2003) and ROSENZWEIG/NOHRIA (1994), the type of incorporation should have the effect that if companies existed before they became a US-company, more host-country practices should be adopted. In case of a US-company buying a previously established company more host-country practices may already be ingrained in the subsidiary and hence be harder to destabilize which is not the case if a new subsidiary company is built up from scratch. And as got apparent during the interviews, e.g. regarding establishments in Germany, it seems that when certain practices had existed before a company became a US-subsiary, chances were higher for them to be at least partly kept. Therefore in this case, there is no different relationship suggested regarding the subsidiary incorporation type and what sphere employment relations practices relate to.

Hence I test the following hypothesis:

H4): If a US-subsubsidiary existed already before it became part of a US-MNC, the subsidiaries' host-country employment relations practices uptake is higher.

3.3 Data, operationalisation and host-country practices definition

3.3.1 Data

The data used for this paper was collected in 2010-2012 and therefore constitutes unique up-to-date information. Further, it includes, besides Germany and the UK, the so far much less researched host-country Switzerland. The data is made up of two parts, firstly and mainly, a (postal) questionnaire-survey and supplementary interviews.

Contact information regarding the subsidiaries to be addressed was mostly obtained via the Amadeus database (see BUREAU VAN DIJK (eds.) 2009). 500 randomly drawn subsidiaries were contacted in each country (and additional measures were administered in the UK). The survey was mostly sent to a member of high-level subsidiary management who had the opportunity to pass on the questionnaire if he/she felt it was more appropriate for someone else in the organisation to answer it.

The survey was designed so that both user-friendliness and response rates should be increased as much as possible, for example in the following ways: Testing the questionnaire wording (see SHERBLOM/SULLIVAN/SHERBLOM 1993: 60) in a pre-test, applying a relatively short questionnaire (see EDWARDS et al. 2002: 1183), and personalising the sent out cover letters with individualised details and personal signatures (e.g. see DILLMAN et al. 2007: 643). However, no further incentives other than a summary of the research findings was offered due to the target population of high-level management where common techniques may not be useful (see CYCYOTA/HARRISON 2002: 151).

Overall, 99 replies were received, 33 from each country.⁵⁶ The net response rate for the US-subsubsidiaries in Germany and Switzerland is about 7 percent. The response rate for the UK cannot be determined due to a partly different data gathering technique. The response rate is on the lower side of the acceptable spectrum but

⁵⁶ The response sample includes subsidiaries from various sizes, due to the tested variables all subsidiaries with less than five staff are excluded in the following analyses. Also, due to some item non-response to individual questions, the amount of subsidiaries included for different analyses varies somewhat (see results section).

within the spectrum (see SHOHAM (1996) with a response rate of 5 percent), especially given that the survey was addressed to executives, who have little discretionary time (see HUSELID/BECKER 2011: 428).

The data includes companies from various sectors, as e.g. also the CRANET (eds.) (2009) data does (e.g. see FARNDALE/BREWSTER/POUTSMA 2008). Regarding the overall sample, e.g. 30 percent of the subsidiaries in Germany are from ‘manufacturing’, this is similar in the UK with an approximate 28 percent share of responses from ‘manufacturing’ businesses. In Switzerland about 39 percent of subsidiaries operate in ‘wholesale trade’, however ‘manufacturing’ is also prevalent with around 30 percent.

The additionally conducted interviews (referred to as motivation to focus on certain aspects in this paper, as already outlined) were mostly randomly chosen among the subsidiary respondents that had indicated on the questionnaire that they were available for further questions. Overall I conducted three interviews in Switzerland, four in Germany, and four in the UK, wherever possible in person and three by phone.

3.3.2 Variable operationalisation and definition of typical host-country practices

IR related practices

Regarding the IR variables analysed, I refer to the three building blocks of IR (and thus by a substantial presence of them coordination is implied, e.g. see also in HALL/SOSKICE 2001), whether there is a works council, whether companies are represented in an employer’s organisation and whether there is a collective agreement (see table 7, panel A). These variables are also typically administered measures (e.g. see SCHMITT/SADOWSKI 2003). Whereas the existence of the variables would imply a subsidiary adopting host-country practices in Germany, was this to occur in the other two countries it would be counter my predictions. Works councils with comparatively extensive rights (in establishments with more than five employees, see HANS-BÖCKLER-STIFTUNG (eds.) 2011a) are found in Germany; however certain (voluntary) forums can also be found in Switzerland and the UK. In Germany 44 percent of private sector staff work in establishments with a works council (see HANS-BÖCKLER-STIFTUNG (eds.) 2011b) whereas no comparable figures on the forums in Switzerland and the UK were obtainable. The other two measures regarding IR, membership of an employer’s association and whether there is a tariff agreement are not generally legally enforceable as well. However due to the varying degrees of IR coordination (overall more in Germany

and less in Switzerland and the UK), differences in the respective host-countries are expected as predicted in the first hypothesis. In terms of employer's association membership, in Germany 63 percent of employees work in companies associated with such organisations (in 2006), in the UK 40 percent (see EIRO ONLINE (eds.) 2009a/b). In Switzerland, about a third of organisations should be members, the umbrella employer's organisation reports representing 100,000 establishments (see SCHWEIZERISCHER ARBEITGEBERVERBAND (eds.) 2010) and there were about 313,000 establishments in Switzerland in 2008 (see BUNDESAMT FÜR STATISTIK (eds.) 2010). Generally, in Germany collective bargaining coverage is 61 percent (2007, see EIRO ONLINE (eds.) 2009a), however only around 45 percent in Switzerland (2000, see in OESCH 2010: 6) and 35 percent in the UK (see EIRO ONLINE (eds.) 2009b). Therefore, for all the measures a host-country effect, i.e. uptake of local practices, is suggested for US-subidiaries in Germany versus the ones in Switzerland and the UK.

Education & training related practices

For employment relations practices *predominantly* linked to education & training,⁵⁷ three core variables relating to pay systems, training and job design are used. In detail, the following is enquired about: Whether pay setting is linked to occupational qualifications or rather not (which can be applied regardless of a collective agreement), whether apprentices are trained and how much formalised teamwork is used (see table 7, panel B). Since the varieties of capitalism approach (see HALL/SOSKICE 2001) does not make extensive suggestions regarding employment relations practices connected to education & training, one can additionally refer to MARSDEN (1999) who identifies a link between societal employment systems and education & training. Regarding pay, MARSDEN (1999: 123) suggests pay classifications to be linked to certain employment systems, e.g. such with a dominance of (vocational) occupational skills. An example would be Germany where dual apprenticeship training is the dominant skill type (e.g., about 70 percent of school leavers not entering higher education participate in apprenticeship training, see STEEDMAN 2010: 23), and hence pay should overall be orientated rather on occupational than other criteria. The dual apprenticeship system is also prevalent in Switzerland, the apprenticeship system makes up about 60 percent of secondary

⁵⁷ This needs to be analysed for individual practices, because even for certain practices linked to training there may be a differential effect of IR/the flexibility of the labour market that has a major impact on the practice (as can be observed regarding training & skill practices in Switzerland in chapter 4).

level two education entries there (see BUNDESAMT FÜR STATISTIK (eds.) 2008: 5). The somewhat different apprenticeship training in the UK is not very prevalent there any more (e.g. there are only 11 apprentices per 1000 employees in England (making up a major part of the UK) as opposed to 40 in Germany and 43 in Switzerland in 2008/2009, see STEEDMAN 2010: 2) and general education rather prevails (see ESTEVEZ-ABE/IVERSEN/SOSKICE 2001), thus generally pay may be orientated on other criteria than occupational qualifications. The other obvious but core measure is whether the US-subsidiaries train apprentices themselves. If this is the case in the US-subsidiaries in Germany and Switzerland, a host-country effect occurs, not so in the UK. And finally, less formalised teamwork should exist in subsidiaries that take up local practices in Germany and Switzerland. This is because the predominant skill/employment system in the two countries should provide people with functionally flexible skills and in such there should be less exclusively defined work roles (see MARSDEN 1999: 130), therefore teamwork should rather be inherent in jobs, and hence *formalised* teamwork found less I argue.

Overall uptake of host-country employment relations in IR and education & training

In terms of the second research question, to assess the subsidiaries' host-country practices uptake extent in the spheres of IR versus education & training, and in how far the subsidiary size and incorporation type are related to them, I compare the actual subsidiaries' practices to what has been hypothesised to be the practice if a host-country effect occurs. I then assign a score for each practice ('one' versus 'zero' depending on whether a host-country effect occurs as predicted) and add these up to form an overall index value (e.g. see FENTON-O'CREEVY/GOODERHAM/NORDHAUG 2008; PARRY/DICKMANN/MORLEY 2008 for using indices), where all practices are equally weighted. Given the three IR variables used here, the index related to IR practices can have a value from 'zero' to 'three'. The higher the value, the more of a host-country effect occurs overall. The same logic applies to the analysed practices related to education & training, a score between 'zero' and 'three' can occur. A subsidiary with a score of 'three' would hence use a host-country practice in each measured employment relations practice, for example. For binary variables, for example whether there is a works council in the subsidiaries in Germany, the score assignment is straightforward. If there is a works-council, the score of 'one' is assigned and if not, a score of 'zero' is assigned. For the non-binary variable analysed, the share of staff working in formalised

teamwork, a different procedure is required. The average UK-value, due to the UK representing a typical liberal market economy and therefore usable as a point of comparison for determining whether the US-subsidiaries in Germany and Switzerland employ rather a typical liberal or coordinated practice, is taken as a reference. From the average share of staff working in formalised teamwork one standard deviation is deducted, below the threshold value (34 percent of formalised teamwork, less formalised teamwork should occur in coordinated market economies/if coordinated in terms of education & training) the host-country score of ‘one’ is assigned, and at/above 34 percent the score of ‘zero’ is assigned (in that case no host-country effect would occur).

3.4 Results

3.4.1 *Host-country effects*

In table 7 the different averages of the measured variables for the host-country effects in regard to IR (panel A) and education & training (panel B) can be found, as well as the average values for the subsidiary size and incorporation type (panel C). In the following, hypothesis one and two are analysed for each measure in terms of the mean (see table 7) and t-test/chi-square test results (see table 8).

In terms of the first hypothesis, concerning IR employment relations practices and a suggested host-country effect in US-subsidiaries in Germany as opposed to the US-subsidiaries’ practices in Switzerland and the UK, the following is observed: There are more US-subsidiaries in Germany than in Switzerland and the UK that have a works council (50 versus 18 percent) and there is a statistically significant relationship between having a works council and US-subsidiaries located in Germany (opposed to US-subsidiaries in Switzerland and the UK). This indicates a host-country effect for this measure – there are significantly more works councils in the subsidiaries in Germany. That even more subsidiaries than generally found in Germany have a works council (50 versus 10 percent of private establishments (in 2009), see HANS-BÖCKLER-STIFTUNG (eds.) 2010) fits to findings by SCHMITT/SADOWSKI (2003) regarding US-companies adopting such practices in Germany to a greater extent than typically locally found.

For the measure regarding membership of an employer’s association however, the hypothesis is not supported. There is no statistically significant relationship

between membership and US-subidiaries being in Germany (versus the ones in Switzerland and the UK) found. The amount of subsidiaries that are a member of an employer's association in the US-subidiaries in Germany versus the ones in Switzerland and the UK is similar, 33 versus 27 percent.

Table 7: Variables operationalisation and descriptive statistics

variables	questionnaire item	mean (std.)	
		GER	CH/UK
Panel A: Subsidiary IR practices			
works council	Is there a works council? <input type="checkbox"/> yes (1) <input type="checkbox"/> no (0)	0.50 (0.51)	0.18 (0.39)
employer's association	Is this subsidiary member of an employers' association? <input type="checkbox"/> yes (1) <input type="checkbox"/> no (0)	0.33 (0.48)	0.27 (0.45)
collective agreement	Does a collective agreement exist? <input type="checkbox"/> yes (1) <input type="checkbox"/> no (0)	0.43 (0.50)	0.10 (0.30)
		GER/CH	UK
Panel B: Subsidiary education & training practices			
pay setting	Is pay/are wages set rather according to occupational qualifications or other criteria? <input type="checkbox"/> occupational (1) <input type="checkbox"/> other (0)	0.79 (0.41)	0.50 (0.51)
apprenticeship training	Do you currently train apprentices? <input type="checkbox"/> yes (1) <input type="checkbox"/> no (0)	0.52 (0.50)	0.27 (0.45)
formalised teamwork	What percentage of current staff is commonly engaged in formalized teamwork? approx. _____ %	55.05 (37.51)	68.96 (35.11)
		GER	CH
Panel C: Variables related to host-country practices uptake			
subsidiary size	Please let us know the current overall staff headcount: approx. _____	534 (1,319)	376 (1,072)
type of subsidiary incorporation	The subsidiary was incorporated in form of a: <input type="checkbox"/> start-up (1) <input type="checkbox"/> merger/acquisition (0)	0.50 (0.51)	0.52 (0.51)

Note: Panel C only contains values for subsidiaries in Germany and Switzerland due to not focusing on the UK in the second part of the research question. CH = Switzerland, GER = Germany.

Source: Own data.

However, the membership share for the subsidiaries in Germany appears low when considering SCHNABEL (2005) who reports that most companies in Germany

are members of such organisations.⁵⁸ Also, as a point of reference even though not directly comparable, findings by SCHMITT/SADOWSKI (2003: 419) indicate no statistically significant difference between employer's association membership in local and Anglo-Saxon companies in Germany, however in their sample, around 60 percent of each group were members of an employer's association.

Concerning the last measure for the first hypothesis, having a collective agreement, the proposition is supported. There are more US-subidiaries in Germany than in Switzerland and the UK that have a collective agreement (43 versus 10 percent) and there is a statistically significant relationship between having a collective agreement and US-subidiaries being located in Germany (opposed to in Switzerland and the UK) as found in the applied chi-square test.

Table 8: Subsidiary employment relations practices distinguished by spheres

IR related practices	GER (1) vs. CH/UK (0) (chi- squ./t-test)	N
works council ++	9.41***	88
employer's association ++	0.35	86
collective agreement ++	12.97***	89
education & training related practices	GER/CH (0) vs. UK (1) (chi- squ./t-test)	N
pay setting ++	7.41***	85
apprenticeship training ++	4.48**	84
formalised teamwork +	1.52	73

Note: *** significant at 1%, ** significant at 5%, * significant at 10%. + = t-test, ++ = chi-square test.

Source: Own data.

It should be noted also that the proportion of subsidiaries in Germany with a collective agreement (43) is higher than the usual proportion of companies in Germany having a tariff agreement (33 percent in 2010, see WSI TARIFARCHIV (eds.) 2011).⁵⁹ In contrast, the analysed Anglo-Saxon companies in Germany as per the

⁵⁸ This is not to be confused with the previously reported employer's association coverage *in relation to employees* (see 3.3.2).

⁵⁹ This is not to be confused with the previously reported collective bargaining coverage *in relation to employees* (see 3.3.2).

study of SCHMITT/SADOWSKI (2003: 418) have an even higher incidence of collective agreements, about sixty-nine (but also local companies have more).

Overall, the first hypothesis is supported for two out of three measures: Generally a host-country effect occurs in the US-subsidaries in Germany as opposed to the ones in Switzerland and the UK (where practices are more similar to the US-home approach in terms of IR) in the analysed sample.

For the second hypothesis, regarding a possible host-country effect in the sphere of education & training, the following is observed: More US-subsidaries in Germany and Switzerland as opposed to the ones in the UK orientate pay/wages rather on occupational versus other criteria (79 versus 50 percent); and there is a statistically significant relationship between the US-subsidaries being in Germany and Switzerland (versus in the UK) and orientating pay/wages on occupational qualifications.

In terms of how many subsidiaries train apprentices, there is a difference between US-subsidaries in Germany and Switzerland versus the ones in the UK, 52 versus 27 percent, as well as a significant statistical relationship between apprenticeship training in US-subsidaries located in Germany and Switzerland versus in the UK; thereby this proposition is supported. The amount of subsidiaries training apprentices in all the sample subsidiaries appears rather high. For example, in Switzerland generally only about 18 percent of companies trained apprentices in 2005 (BUNDESAMT FÜR STATISTIK (eds.) 2008) and 31 percent of companies in Germany in 2007 (see FREI/JANIK 2008),⁶⁰ in contrast to the 52 percent in the sample.

In terms of formalised teamwork the proposition is not supported. On average, US-subsidaries in Germany and Switzerland use less formalised teamwork than in the UK (55 versus 69 percent), however, there is no significant difference in a statistical sense (two-tailed t-test result). In sum, two out of three education & training practices as tested for the second hypothesis indicate support for it.

Overall, the results for the first research question suggest that differentiating between employment relations spheres and related host-country practices should be taken into account, especially when analysing not so typical host-country market economies such as Switzerland. Distinguishing between practices related rather to

⁶⁰ Regarding these on first sight rather low percentages of companies in Germany and Switzerland generally training apprentices themselves, it should not be forgotten that these may be large companies training many apprentices, the dual vocational education system is still a major education route in Switzerland and Germany (see 3.3.2).

host-country IR or education & training provides a systematic framework for analysing not so typical market economies such as Switzerland when wanting to determine whether host-country effects occur (and when not due to a suggested similarity of US-home versus host-country practices). Furthermore, since I find some mixed evidence a need for further factors to be taken into account is highlighted also. This can be partly followed up in the following second research question analysis when taking into account the role of subsidiary size and incorporation type for the uptake of subsidiaries' employment relations practices in the different spheres.

3.4.2 Extent of host-country practices uptake and the role of subsidiary size and incorporation type

Moving on to the analysis of the second research question (hypotheses 3 and 4), the extent to which host-country practices are taken up in the US-subsidiaries in Germany and Switzerland (see table 9 for results, distinguished by the different employment relations spheres), OLS regressions are run with the index values of subsidiaries' host-country practices uptake as the dependent variables and subsidiary size and incorporation type as explanatory variables.⁶¹

Regarding hypothesis 3a and 4 (table 9, panel A), how the IR host-country practices uptake extent for the subsidiaries in Germany can be assessed, there is support found for the suggested role of subsidiary size. I find a statistically significant positive relation of subsidiary size with the extent of host-country practices uptake. Also, the role of the type of incorporation is supported. There is a significantly negative relation between subsidiaries incorporated into US-companies via a start-up and the extent of IR host-country practices uptake.

Regarding hypothesis 3b and 4 (table 9, panel B), in terms of how far host-country education & training related practices are taken up by the subsidiaries in Germany and Switzerland as determined by subsidiary size and incorporation type, the following is found: The suggested effect for subsidiary size is not supported as there is no statistically significant negative relationship with the dependent variable detected. The suggested role of the type of incorporation is also not supported. There is no significant relationship with the dependent variable found.

⁶¹ Cases with missing values are excluded, hence the smaller resulting number in the analyses, table 8.

This warrants analysing the education & training host-country practices uptake separately by country (table 9, panel C and D), US-subidiaries in Germany and in Switzerland. Indeed, for the US-subidiaries in Germany, the suggested relationships are found – a statistically significant, negative relationship of the subsidiary size and subsidiaries being start-ups with the dependent variable.

Table 9: Regression analyses: Extent of host-country practices uptake

Panel A	coefficient	robust standard errors
OLS regression – IR Germany		
R-Squ.: 0.57 N = 26 prob > F = 0.00		
subsidiary size	0.3**	0.1
incorporation	-1.3***	0.3
constant	1.7***	0.3
Panel B	coefficient	robust standard errors
OLS regression – education & training Germany and Switzerland		
R-Squ.: 0.01 N = 45 prob > F = 0.63		
subsidiary size	-0.1	0.1
incorporation	-0.2	0.2
constant	1.7***	0.2
Panel C	coefficient	robust standard errors
OLS regression – education & training Germany		
R-Squ.: 0.17 N = 23 prob > F = 0.03		
subsidiary size	-0.2***	0.1
incorporation	-0.7*	0.4
constant	2.0***	0.3
Panel D	coefficient	robust standard errors
OLS regression – education & training Switzerland		
R-Squ.: 0.43 N = 22 prob > F = 0.00		
subsidiary size	1.2***	0.2
incorporation	0.5**	0.2
constant	1.2***	0.1

Note: *** significant at 1%, ** significant at 5%, * significant at 10%. Collinearity tested and mean VIFs of below 1.5 found. Subsidiary size as measured per headcount is here introduced into the regressions as follows: Individual subsidiaries' headcount is divided by 1000. For the dependent index variables (in each case with four possible interval values between 0 and 3) there is no indication for a nonnormal distribution as per a Shapiro Wilk test, an OLS analysis is considered appropriate. Poisson regressions, as an alternative for count data, confirm the results also.

Source: Own data.

However, both variables are significantly (positively) related to the dependent variable for the US-subidiaries in Switzerland. These results are not as suggested but provide an indication for the non-significant findings when analysing the host-

country practices uptake extent for US-subidiaries in Germany and Switzerland together. Furthermore, the statistically significant (positive) result for the subsidiary size when analysing the US-subidiaries in Switzerland (in regard to the extent of host-country effects related to education & training) fits with the argumentation of ROSENZWEIG/NOHRIA (1994: 235) that bigger establishments localise their practices more. Concluding on my second research question, hypotheses three and four are supported when analysing the subsidiaries in Germany, however not in terms of the US-subidiaries in Switzerland.

3.5 Discussion

‘The pattern of HR practices pursued by North American owned MNCs varies widely depending on whether these North American owned MNCs are operating in liberal or coordinated market economies’ state PARRY/DICKMANN/MORLEY (2008: 2024). Based on the findings of this paper, I would like to add that a further distinction should be applied when analysing hybrid market economies in regard to different employment relations spheres, IR and education & training, and respective employment relations practices. I demonstrate that a fine-grained analysis is required both regarding when host-country effects occur for hybrid market economies such as Switzerland, and how the (commonly referred to) variables subsidiary size and type of incorporation (differently) determine the uptake extent of employment relations practices per sphere, IR and education & training.

Regarding the first research question, the results generally point to US-subidiaries in hybrid market economies such as Switzerland rather only exhibiting typical coordinated host-country practices when the institutional distance in the respective employment relations sphere is sufficiently big to the US-home-approach, such as in terms of education & training related practices, but not IR (as detected in the respective comparisons with US-subidiaries in Germany/the UK) – which would be a surprising finding if considering Switzerland only regarding its original classification as a coordinated market economy. Furthermore, US-subidiaries in hybrid market economies such as Switzerland seem to not generally exhibit ‘intermediary’ effects across all employment relations practices but depending on the sphere, host-country effects (if related to education & training, thus where coordinated, in case of Switzerland) or not (if related to IR where there is supposedly not a significant dif-

ference between US-home and host-country practices in case of Switzerland and no host-country approach as such should exist) can be detected when assessing it with and in contrast to the German and UK US-subsidary host-country practices.

Also, regarding the generally found host-country effects for US-subsidaries in Germany, and in the US-subsidaries in Switzerland regarding education & training, it should be noted that certain practices were adopted more than typically locally found. E.g., there are disproportionately many subsidaries found to train apprentices, and in Germany, also more than usual, tariff agreements were found, as well as works councils. Although findings as by SCHMITT/SADOWSKI (2003) indicate such effects as well for the analysed IR variables, the question arises why this is. Apart from the idea of legitimacy (see SCHMITT/SADOWSKI 2003) and subsidaries taking up visible employment relations practices, it may be that somewhat of a bias exists in such study samples in terms of some subsidaries responding that rather follow the 'host-country model'. Or for specific US-subsidaries there could be yet unexplored factors contributing to this observed trend and this ties in with PULL'S (2008) call for more research on the heterogeneity of US-MNCs and their assessment of country locations.

Moreover, the variable on teamwork is noteworthy to investigate further. There is a visible difference between the subsidaries in Germany and Switzerland in contrast the ones from the UK using formalised teamwork, and in the suggested direction with on average more formalised teamwork reported in the US-subsidaries in the UK. However, there is not a large or statistically significant difference. This may be interpreted as formalised teamwork becoming established in various environments despite proposed differences in staff's educational background and functional skill flexibility. This reminds of the idea of best practices (e.g. see PUDELKO/HARZING 2007) or it could have to do with more differentiated MNC behaviour (see BREWSTER/WOOD/BROOKES 2008) linked to yet other factors – apart from a potential measurement issue in terms of respondents differentiating between formalised (as opposed to other) teamwork.

Regarding the second research question, the role of subsidiary size and incorporation as either a start-up or merger/acquisition in regard to subsidaries' overall uptake of employment relations practices, the importance of distinguishing between different employment relations spheres was demonstrated. A different role of subsidiary size has been illustrated regarding the US-subsidaries in Germany in terms of

IR and education & training, and the same role for the type of incorporation (also see ROSENZWEIG/NOHRIA 1994; SCHMITT/SADOWSKI 2003, for similar expectations regarding the type of incorporation), as suggested. However, for the US-subidiaries in the hybrid market economy Switzerland, the statistically significant relationships for the subsidiary size and incorporation type with the dependent variable are of the opposite direction than found regarding the US-subidiaries in Germany. And, not surprisingly, no significant relation for either variable is found with the host-country practices uptake extent (regarding education & training practices) when considering both US-subidiaries from Germany and Switzerland at the same time. According to the propositions in this paper, the finding on subsidiary size when considering US-subidiaries' extent of host-country effects in Switzerland is counterintuitive, since with a bigger subsidiary size the more standardised, i.e. non-local, practices may be adopted in this sphere (also see GOODERHAM/NORDHAUG/RINGDAL 2006 for finding a significantly positive influence of size on calculative, i.e. rather liberal-type, practices that generally e.g. companies in Germany were found to use less). But also the findings on the incorporation type are surprising in this context, with start-ups exhibiting more host-country practices, and counter my predictions and findings by e.g. SCHMITT/SADOWSKI (2003) and ROSENZWEIG/NOHRIA (1994). This prompts the question what further factors determining subsidiaries' host-country practices uptake play a role in Switzerland, a host-country for which very little research exists in regard to MNC employment relations (e.g. see the study overview of ISEKE/SCHNEIDER 2012).

Overall, differentiating host-countries further than liberal versus coordinated market economies and taking account of different market economy spheres belonging to employment relations, IR and education & training, should be considered regarding the uptake of host-country practices, especially if analysing not so typical market economies such as Switzerland.

3.6 Conclusion

In this paper, it has been shown that differentiating between employment relations practices in terms of to what market economy employment relations sphere they belong to, IR or education & training, should be taken into account for determining host-country effects and whether they occur. Moreover, it has been demonstrated that

subsidiaries' extent of host-country practices uptake regarding IR and education & training related practices is not equally determined by factors such as subsidiary size. With my findings I contribute to the still partly under-researched institutional context (see PARRY/DICKMANN/MORLEY 2008) of MNCs and their employment relations practices. Also further analysis in terms of determining what factors play a role in the extent of host-country practices uptake of US-subsidiaries is needed, especially when market economies are not equally coordinated in different spheres.

As typical for a cross-sectional study with a limited amount of observations, results cannot be generalised nor causes be determined. The attempt to better distinguish between employment relations practices of hybrid market economies as per their dominant link to IR or education & training should cover most employment relations/HRM practices, although possibly not their entirety. Furthermore, this study gives a first indication for future analysis and points towards an enduring influence of host-country employment relations. To find out more, host-country effects may be analysed in the way proposed in this study with regard to further employment relations practices, and in regard to MNCs of different countries of origin in more or less coordinated host-country market economies. Also, more research in terms of what else determines host-country effects and their extent, for example differences according to in how far individual subsidiaries may have more or less reasons to apply host-country employment relations practices (e.g. see KLUIKE 2012; KLUIKE/PULL 2012) from the spheres of IR and education & training is called for.

Chapter 4

Similar, but still different: How US-MNCs in Germany and Switzerland use host-country training & skill practices

(currently available in a slightly modified version as: Kluike, Marlies; Kerstin Pull (2012): Similar but still different: How US-MNCs in Germany and Switzerland use host-country training & skill practices. At: Social Science Research Network.)

Abstract

In this exploratory study, we first examine in how far US-subidiaries in Germany and Switzerland display characteristics of a strategic fit with their host-country. We find mostly support for our predictions, e.g. US-subidiaries in Germany are characterised by less of a price orientation and ICT intensity than US-subidiaries in Switzerland. Subsequently we determine each subsidiary's host-country fit and test for resulting within country differences in using local training & skill practices. We find the extent to which a subsidiary engages in continuing vocational education & training and to which training on the job is important to vary with subsidiary host-country fit in Germany, while in Switzerland – as per our prediction – we find no such relations.

Keywords: *host-country fit, employment relations, multinationals*

4.1 Introduction

Strategically utilising comparative advantages that different country locations offer has become more and more important for MNCs, also in terms of employment relations. Among others, the varieties of capitalism approach (see HALL/SOSKICE 2001) highlights the comparative advantages different country locations and their institu-

tional settings might offer for specific industries and the incumbent firms. While the varieties of capitalism approach and its many implications have received a lot of attention in the literature (e.g. see HANCKÉ 2001; HARCOURT/WOOD 2007; PARRY/DICKMANN/MORLEY 2008; SCHNEIDER/SCHULZE-BENTROP/PAUNESCU 2010; TEUBER et al. 2011; VITOLS 2001b), applications concerning multinational enterprises and their strategic use of comparative location advantages are scarce (for a notable exception, see, however, GRIFFITH/MACARTNEY 2010).

In this article, we aim to fill this research gap and widen the scope by (1) analysing whether MNCs use the comparative advantages different institutional settings offer and by (2) highlighting the role a subsidiary's resulting host-country fit plays when it comes to the adoption of 'local' employment relations practices at the example of locally embedded training & skill practices. The idea is that if a US-subsi-diary located in either Germany or Switzerland is able to gain comparative advantages from the host-country location in terms of employment relations, as a consequence host-country employment relations practices should be utilised more than if that was not the case. By focusing on employment relations and comparing two rather similar, but – as we will argue – still different country locations, Germany and Switzerland, in step (1) we provide a rather strong test of the varieties of capitalism approach. In step (2) we contribute to the literature on host-country effects (see PUDELKO/HARZING 2007; ROSENZWEIG/NOHRIA 1994; SCHMITT/SADOWSKI 2003) by analysing whether the extent to which a multinational subsidiary utilises local employment relations practices is related to its host-country fit.

We start by comparing the two country locations under consideration (Germany and Switzerland) with respect to their employment relations systems. And we find Germany and Switzerland to form an interesting contrast regarding employment relations with both similarities (e.g. dual apprenticeship system) and differences (e.g. labour market regulation). As there is considerable US-investment in both Germany and Switzerland, we ask – referring to the varieties of capitalism approach (see HALL/SOSKICE 2001) and PULL (2008) – whether each of the two host-countries offers certain comparative advantages in terms of employment relations that different US-investors, depending on their different needs, can gain from each of these country locations.

From this we deduct our first hypothesis concerning the relation between a set of subsidiary characteristics and a subsidiary's resulting likelihood to be located in

either Germany or Switzerland. In spite of the apparent similarity between the two country locations, with the help of our unique dataset, we find US-subidiaries in Germany to be characterised by significantly more frequent core business changes, somewhat less of a price orientation and less ICT intensity than their counterparts in Switzerland. As the observed differences between US-subidiaries in Germany and Switzerland are mostly compatible with our theoretical analysis, we find support for the varieties of capitalism approach. This is further strengthened by the fact that we provide a rather strong test of the varieties of capitalism approach by focusing on two similar host-countries and by only regarding investors from one home-country.

In a next step we study whether the degree to which a subsidiary located in the ‘right’ country in terms of a good host-country fit affects the use of ‘local’ training & skill practices (e.g. see FARNDALE/PAAUWE 2007 for internal drivers leading to differentiation; and PUDELKO 2006 for different HRM systems and possible manoeuvre room). Regarding training & skill practices which can provide more or less of a competitive advantage depending on different company needs, we disentangle the country location similarities in terms of education and the country location differences regarding labour market flexibility. We find that in Germany, the extent to which a subsidiary engages in continuing vocational education & training and the extent to which training on the job is important both vary with its host-country fit, while in Switzerland – as predicted – we do not find a relation between host-country fit and the use of these training & skill practices. Other than expected, in neither Germany nor Switzerland, apprenticeship training is related to subsidiary host-country fit.

The article proceeds as follows: In chapter 4.2, we first present our theoretical analysis and derive our hypotheses. In chapter 4.3, we describe our original dataset of US-subidiaries in Germany and Switzerland. In chapter 4.4, we present and discuss our results. The article ends with conclusions in chapter 4.5.

4.2 Differentiating subsidiaries on the country level and within country locations

4.2.1 Choice of home- and host-country locations: US-subsidiaries in Germany and Switzerland

In analysing our research question on whether multinationals systematically utilise the comparative location advantages different employment relations settings offer by (1) choosing an appropriate country location and (2) by adopting ‘local’ employment relations practices, we focus on US-subsidiaries and on the two country locations Germany and Switzerland. We choose US-subsidiaries because US-multinationals are of central importance as investors worldwide. By concentrating on the two host-country locations Germany and Switzerland, in terms of the varieties of capitalism approach (see HALL/SOSKICE 2001) we choose two rather similar but still different country locations. We do so because – in comparison to the US – Germany and Switzerland represent an ideal test scenario concerning the different comparative advantages of different employment relations institutions: Both countries are quite similar with respect to their vocational education & training systems while they differ a lot with respect to the labour market flexibilities they offer. Further, in light of the many similarities between the two countries, we provide a rather strong test of the explanatory power of the varieties of capitalism approach.

When assessing the two chosen country locations from the perspective of the varieties of capitalism approach, Germany is a typical example for a coordinated market economy (see HALL/SOSKICE 2001) whereas Switzerland has more liberal tendencies (see HALL/GINGERICH 2009: 458; SCHNEIDER/SCHULZE-BENTROP/PAUNESCU 2010). In terms of the different market economy spheres in which the firm operates such as IR, education & training (combined what we refer to as employment relations), corporate governance and inter-company relations (see HALL/SOSKICE 2001), the two countries can typically be described as the following:

In *Germany*, IR are governed by comparatively strong employer-employee coordination and high employment protection, thus less flexible in this respect (see HALL /SOSKICE 2001; OECD (eds.) 2010, 2012). A further prominent characteristic of German employment relations is the dual vocational education & training system

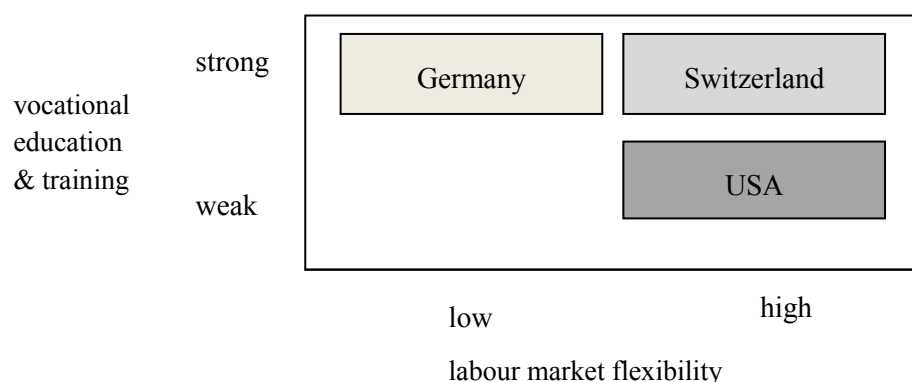
producing firm and industry specific occupational skills (see ESTEVEZ-ABE/IVERSEN/SOSKICE 2001: 170). Furthermore, corporate governance is typically stakeholder orientated, and there is a comparatively strong coordination between companies (see HALL/SOSKICE 2001).

Switzerland has a much more flexible labour market (see AFONSO/MACH 2011) than Germany, however in practice some employer-employee coordination prevails (see OESCH 2007). Concerning vocational education & training, there is also a dual apprenticeship system similar to Germany, providing rather industry specific occupational skills (see ESTEVEZ-ABE/IVERSEN/SOSKICE 2001: 170). As compared to Germany, there is, however, more of a shareholder orientation (see AFONSO/MACH 2011) and yet some coordination across organised employer and employee bodies – e.g. setting training standards together (see OESCH 2007: 353).

As a comparison, US employment relations are generally determined by flexible labour market regulations, thereby more similar to Switzerland than to Germany in this respect. Furthermore, there is more of a focus on university and general skill education in the USA, and the vocational education & training system is weak (see ESTEVEZ-ABE/IVERSEN/SOSKICE 2001), different to both, Germany and Switzerland.

Thereby, overall the three countries display strongest similarities and differences in terms of the vocational education & training system on the one hand and in terms of labour market flexibility on the other (see stylised overview in figure 1).

Figure 1: Vocational education & training and labour market flexibility



Source: Own compilation.

4.2.2 MNC location choices and the role of employment relations

Concerning our first research question on whether multinationals systematically utilise the comparative location advantages different employment relations settings offer by choosing an appropriate country location, this has hardly been analysed as yet. Rather, existing literature on related fields supports our view that there is a research gap that needs addressing. E.g., there does not seem to be a clear trend regarding a number of employment relations factors and whether they rather attract or deter FDI. Regarding co-determination, there are both negative and positive relationships with foreign direct investment found (e.g. see BOGNANNO/KEANE/YANG 2005; COOKE/NOBLE 1998; TRAXLER/WOITECH 2000). This also applies to other factors, e.g. union density or centralised collective bargaining (see PULL (2008: 315) for a comprehensive overview). A more positive trend is observable regarding education and skill variables, another central part of employment relations systems and of importance for our analysis. Education is found to have a significant positive effect in terms of attracting foreign direct investment, e.g., COOKE (2001: 708) – regarding the education years difference between home- and host-countries – finds a positively significant effect on FDI ratios (see COOKE 2001: 710), as well as COOKE (1997: 3). And the studies do not distinguish between investors, e.g. of the same country of origin, in a systematic and detailed fashion. However, we can refer to PULL (2008: 314-329) for a systematic differentiation of MNC subsidiaries, thereby providing us with first support that there are systematic differences between subsidiaries that are linked to employment relations complementarities.

Furthermore, the results of the literature on business system complementarities lend support to our idea of investors strategically using comparative location advantages. E.g., SCHNEIDER/SCHULZE-BENTROP/PAUNESCU (2010) find that when there is a high proportion of university graduates and a substantial stock market, there is considerable export performance in high-technology (see SCHNEIDER/SCHULZE-BENTROP/PAUNESCU 2010: 246). BASSANINI and ERNST (2002) find countries with coordinated IR with rigid employment protection laws to concentrate on industries which are characterised by high specificity and cumulativeness. Also HARCOURT and WOOD identify employment protection to aid firm specific skills (see HARCOURT/WOOD 2007: 151). GRIFFITH and MACARTNEY (2010), regarding *within* MNC data in 12 OECD countries, find empirical evidence that

‘multinational enterprises locate more innovative activity in countries with high EPL’ (employment protection legislation), ‘however they locate more technologically advanced innovation in countries with low EPL’ (GRIFFITH/MACARTNEY 2010: 1).

In what follows we build on the preceding literature and identify characteristics that ideally a subsidiary in Germany or Switzerland should have in order to gain competitive advantage from its chosen host-country with respect to its employment relations system.

US-subsidiaries in Germany are ideally predicted to, in contrast to Switzerland, have a tendency to infrequently experience core business changes in the main business of the subsidiary, be relatively little dependent on price and have relatively little ICT intensity. This is because the German market economy should rather foster a coordinated long-term orientation (see HALL/SOSKICE 2001) without frequent core changes and rather less price pressures due to less of a shareholder orientation (see VITOLS 2001b). Also less of a service-orientation (see HALL/SOSKICE 2001: 30 for service orientation complementarities in liberal market economies) which should coincide with a comparatively lower ICT focus (e.g. see WÖFL 2005: 38 for the link between service and ICT use⁶²) should prevail.

While there is reason to believe that US-subsidiaries in Germany and Switzerland will differ in terms of the frequency of core business changes, long-term orientation, price orientation and ICT intensity, in other aspects we expect no differences between subsidiaries at the two country locations. In particular, we do not suspect that there is a significant difference between US-subsidiaries located in Germany and Switzerland regarding how specific the assets utilised for the subsidiary main business are, or in how far technology intensive the subsidiary main business is. This is due to the market economy similarities of Germany and Switzerland in terms of fostering rather specific skills (see ESTEVEZ-ABE/IVERSEN/SOSKICE 2001: 170) which should go hand in hand with having rather less general assets in a business overall (see HALL/SOSKICE 2001: 17 for more specific assets in coordinated market economies). It should also coincide with employing rather medium technology (if at all) (see HALL/SOSKICE 2001, for technology specialisations in different market economies). Concluding, we formulate the following hypothesis:

⁶² ICT as being utilised for the subsidiary business is in focus here which should go along with a service comparative advantage – thereby measured in share of subsidiary budget spending; this is not to be confused with producing ICT hardware or similar products.

Strategic Fit: Subsidiary characteristics & location choice

H1): US-subsidiaries in Germany are, *ceteris paribus*, characterised by (a) a less frequent occurrence of core changes, (b) a lower price orientation, (c) a lower ICT intensity and (d) a more pronounced long-term orientation than their counterparts in Switzerland. Concerning (e) type of assets and (f) technology intensity, there are no differences between US-subsidiaries in Germany and Switzerland.

4.2.3 Host-country fit and the use of local training & skill practices

With respect to our second research question, we analyse whether the extent to which a subsidiary ‘fits’ in its location affects the utilisation of ‘local’ employment relations practices. Our analysis is motivated by the literature on host- vs. home-country effects (e.g. see ALMOND et al. 2005; ALMOND 2011; PUDELKO/HARZING 2007; ROSENZWEIG/NOHRIA 1994; SCHMITT/SADOWSKI 2003). What is neglected in this literature so far is that the extent to which a host-country effect is observable should in fact depend on whether the specific country location was chosen according to its comparative advantages with respect to the employment relations system: If a multinational strategically chooses a certain country location because of the specific comparative advantages its employment relations system offers, we expect it to in a next step then also *exploit* these comparative advantages by making use of the corresponding local employment relations practices (see also KLUIKE 2012).

Concerning the specific employment relations practices under consideration, to find out if our proposition regarding host-country fit and a respective use of local practices applies, we focus on training & skill practices as these are locally embedded. Human capital (despite increased movement of labour) still overall differs by country locations as it is determined by distinct education and skill environments in connection with different local employment regulations. Also, a skilled workforce is of central importance for economies (see SCHWAB (ed.) 2011: 5) and therefore companies, hence US-investors should especially be interested in utilising local skill specialisation advantages for which partly in the USA no equivalent exists, such as for the dual apprenticeship system, if these match the US-subsidiaries’ host-country fit.

To obtain a more detailed view of training & skill employment relations practices, we refer to MARSDEN (1999) in addition to the varieties of capitalism approach

(see HALL/SOSKICE 2001). Companies' employment systems in Germany (see MARSDEN 1999) can generally be classified as the function centred training approach. Due to Switzerland's general similarity to Germany in terms of education and skills, we regard it as belonging to the same category. Here, companies should orientate on skills linked to occupational qualifications when organising work. These dominant occupational qualifications are acquired via dual apprenticeships in both countries. Hereby learning takes place both at school and at work (e.g. see TEUBER et al. 2011). And hence, jobs organised along such qualification lines are expected to prevail to capitalize on staff's broad occupational skills. This is opposed to companies in the USA which employ a rather task centred production approach, where job organisation is orientated on technology complementarities and specifying tasks in detail (see MARSDEN 1999: 31-60). Here, staff with a typically rather general education gained outside the workplace (see BOSCH/CHAREST 2008) are expected to be trained for specific tasks once in a job. Hence, employment systems – in combination with labour market flexibilities where Switzerland is rather liberal, as are the USA and not so Germany – should have implications for companies' training & skill practices.⁶³

With respect to training & skill practices, we focus on three central measures: The extent to which the subsidiary invests in (a) apprenticeship training, (b) continuing vocational education & training and (c) the importance of on the job training. Considering the chosen measures, the contrast between the subsidiaries' home-country, the USA, and the two host-countries, Germany and Switzerland, is highlighted: In the US, there are generally little medium occupational skills gained via apprenticeships, a prevalence of on the job training in combination with relatively narrow job roles and little skill transferability (see MARSDEN 1999: 121, 130 and 141). The situation is different in Germany and Switzerland and the gradual differences between the host-countries in terms of education and labour market flexibility can be disentangled:

Concerning US-subidiaries in *Germany*, the more of a fit between a US-subidiary and the country location Germany, the more apprentices should be trained

⁶³ In this chapter companies' employment relations practices overall linked to vocational education & training are referred to as training & skill practices. However, differential influences of IR/labour market flexibility are considered within these practices, illustrating that one needs to analyse for individual practices what sphere, IR or education & training, they dominantly relate to – as argued in chapter 3.

because of the firm and industry specific occupational qualification orientation in Germany (see ESTEVEZ-ABE/IVERSEN/SOSKICE 2001: 170) and resulting complementarities such as incremental innovation. Furthermore, the more host-country fit the subsidiary has, the less should the subsidiary offer its employees continuing vocational education & training. Even though generally firms with a focus on developing their employees may both engage in apprenticeship training and continuing vocational education & training in Germany, for US-subsidiaries we predict otherwise due to their home-country tendency of rather training staff on the job as needed and not training apprentices. And lastly, the more of a host-country fit, the less important should skills acquired on the job be. This is because not only skills obtained purely on the job should make up the most important skills to operate a job in an environment orientated on specific occupational qualifications acquired mainly by apprenticeships (restricted use of on the job training in Germany, see MARDEN 1999: 141) and with little job mobility (see HENNEBERGER/SOUSA-POZA 2002; OECD (eds.) 2012). Concluding we formulate the following hypothesis:

H2: Host-country fit and training & skill practices in Germany

apprenticeship training:

a) The better the host-country fit of US-subsidiaries in Germany, the more apprentices are trained.

continuing vocational education & training:

b) The better the host-country fit of US-subsidiaries in Germany, the less continuing vocational education & training is offered.

training on the job:

c) The better the host-country fit of US-subsidiaries in Germany, the less important is training on the job.

For the US-subsidiaries in *Switzerland*, due to Switzerland's general similarity to Germany in terms of occupational job qualifications and employment system, the same is predicted regarding training apprentices. This does not apply to the amount of continuing vocational education & training offered by the subsidiaries and the importance of training on the job, both areas which predictably rather resemble home-country US-practices due to similarities in regulatory flexibilities and outcomes (e.g. high job mobility/low job tenure, see HENNEBERGER/SOUSA-POZA 2002;

OECD (eds.) 2012; BUREAU OF LABOR STATISTICS U.S. DEPARTMENT OF LABOR (eds.) 2012). In connection with the flexible labour market in Switzerland (e.g. see AFONSO/MACH 2011), regarding continuing vocational education & training offered, we predict no difference according to subsidiary host-country fit: In Switzerland staff will move between companies relatively frequently so that subsidiaries will need to offer training for newcomers accordingly as some skill complementarities will be lost when moving, especially if outside one's industry. Also regarding the importance of skills acquired on the job, we do not predict a significant difference according to subsidiary host-country fit. This is due to the same reason as outlined before. There is generally a high job mobility of staff between companies in Switzerland. This does not allow to necessarily keep all specific occupational skill advantages acquired in a job which should in turn heighten the importance of skills acquired on the job. Concluding, the following hypothesis is formulated:

H3: Host-country fit and training & skill practices in Switzerland

apprenticeship training:

a) The better the host-country fit of US-subsidaries in Switzerland, the more apprentices are trained.

continuing vocational education & training:

b) In Switzerland, subsidiaries' host-country fit does not affect the amount of continuing vocational education & training offered.

training on the job:

c) In Switzerland, subsidiaries' host-country fit does not affect the importance of on the job training.

4.3 Data and operationalisation

4.3.1 Data

In lack of an existing appropriate data set, we investigate our research questions with the help of original subsidiary data we acquired in 2010/2011. For our survey, we contacted a random selection of US-subsidaries (subsidiaries where US-companies hold more than 50 percent, see OECD (eds.) 2003). Subsidiary contact information was obtained from the Amadeus database (see BUREAU VAN DIJK (eds.) 2009). Five

hundred subsidiaries from different sectors were randomly selected to be contacted in Germany and Switzerland (the base population) with a postal survey which was addressed to the subsidiary management but could be passed on as fit was seen. Both strategy and specific employment relations questions were asked, employing both free text factual answers and Likert-Scale questions. Although the accompanying cover letter briefly explained the purpose of the conducted study, it did not elaborate on specific expectations in order not to unduly influence the respondent. Hence because of the indirect design the non-response bias should be somewhat counteracted in this respect.

Various measures were taken in order to increase response rates of the survey: Checking the survey questionnaire in a pre-test (see SHERBLOM/SULLIVAN/SHERBLOM 1993: 60 for the importance of wording), using a short questionnaire (see EDWARDS et al. 2002: 1183, shorter questionnaires should increase responses) and having individualised details on the cover letter (sent in German to Germany, and in English to Switzerland in order not to discriminate against one of its native languages) such as personal signatures (which should increase response rates as well, e.g. see DILLMAN et al. 2007: 643). We abstained from offering any other incentives besides an executive research finding summary because of the target population (see CYCYOTA /HARRISON 2002: 151 who report offering incentives as ineffective regarding top-management).

Overall, we gathered 66 replies, 33 in each of the two countries (however due to some item non-response the number of subsidiaries included in the analyses varies).⁶⁴ As the study by CALIGIURI/COLAKOGLU (2007) shows, modest sample sizes cannot generally be avoided in surveys sampling unique data, especially when strategic MNC behaviour is concerned. The net response rate for the US-subsidaries in Germany and Switzerland was 7 percent (considering undeliverable questionnaires and companies having gone out of business). This puts the response rate within the spectrum of comparable studies. As a comparison, in his survey regarding foreign subsidiaries in Germany, VITOLS (2001a: 1) obtained a response rate of 10 percent. SHOHAM (1996: 59), with a 5 percent response rate, reports it as low but in the range of previously administered studies.

⁶⁴ Subsidiaries with one staff are excluded.

4.3.2 Variables

Table 10: Variables and descriptives

construct	questionnaire item	mean (std.)	
		Germany	Switzerland
Panel A: Subsidiary characteristics determining host-country fit			
core business changes (H1a)	How often does the subsidiary business encounter core business changes? choice of: every seven years and less often <input type="checkbox"/> yes (1 = less frequent) <input type="checkbox"/> no (0 = more frequent)	0.1 (0.3)	0.3 (0.5)
price orientation (H1b)	The success of our main business driving products/services is price determined. (5.P. Likert-Scale)	3.2 (0.9)	3.2 (1.1)
ICT intensity (H1c)	What share of the subsidiary budget is spent on information and communication technology? approx. _____ %	6.1 (7.7)	8.3 (9.0)
long-term orientation (H1d)	What share of the premises and equipment is subsidiary owned? approx. _____ %	48.4 (40.6)	53.1 (44.2)
type of assets (H1e)	Assets and components used could easily be switched to another use (e.g. new products/services). (5.P. Likert-Scale)	2.8 (1.2)	2.4 (1.1)
technology intensity (H1f)	Our main business driving products/services belong to high-tech. (5.P. Likert-Scale)	3.4 (1.3)	3.4 (1.4)
Panel B: Training & skill practices			
apprenticeship training (H2a, H3a)	What percentage of staff is currently made up of apprentices? approx. _____ %	2.7 (3.8)	1.8 (3.2)
continuing vocational education & training (H2b, H3b)	How many days of training did staff receive on average in 2009? approx. _____ days	6.4 (7.1)	3.4 (2.6)
training on the job importance (H2c, H3c)	The most important work skills of our staff have been acquired on-the-job. (5.P. Likert-Scale)	3.4 (0.8)	3.5 (0.8)
Panel C: Controls			
central HR company strategy	An HR strategy applicable in the entire company is followed. (5.P. Likert-Scale)	3.4 (1.3)	3.7 (1.1)
existence of a works council	Is there a works council? (in CH: 'Personalkommission') <input type="checkbox"/> yes (1) <input type="checkbox"/> no (0)	0.5 (0.5)	0.2 (0.4)
staff headcount	Please let us know the current overall staff headcount: approx. _____	485 (1,263)	376 (1,072)
type of subsidiary incorporation	The subsidiary was incorporated in form of a: <input type="checkbox"/> start-up (1) <input type="checkbox"/> merger/acquisition (0)	0.5 (0.5)	0.5 (0.5)
year of subsidiary incorporation	The year of incorporation is: year: _____	1999 (9.4)	1985 (22.2)

Note: The number of answers varies between 24 and 33 (per country) due to item non-response.

Source: Own data.

Table 10 summarises how the relevant variables were measured in the survey and displays their means and standard deviations, separate for the two country locations.

Panel A contains the variables that were used to test hypothesis 1 and to assess a subsidiary's host-country fit. As can be observed from the descriptives, US-subsubsidiaries in Germany and Switzerland, on average, are comparable with respect to some characteristics (price orientation, technology intensity), while they display differences in others (core business changes, ICT intensity, long-term orientation, type of assets). In a statistical sense significantly different from one another, however, are only the figures on the frequency of core business changes: While in Switzerland about 30 percent of the participating US-subsubsidiaries experience core business changes only every 7 years or less frequently, the corresponding figure for Germany is about 10 percent. In other words, core business changes are – other than expected – relatively more frequent in the German as compared to the Swiss US-subsubsidiaries. It remains to be seen, however, whether this effect is also visible in the multivariate analysis.

The variables in Panel B describe in how far a subsidiary utilises the training & skill practices under question. They were used to test hypothesis 2 and 3. Interestingly, on average the US-subsubsidiaries in Germany have a higher apprenticeship staff share compared to the ones in Switzerland (while reported average figures for the whole economy are rather similar in the two countries, i.e. somewhere around 5.6 percent, see BUNDESAMT FÜR STATISTIK (eds.) 2008: 29 and JACOBEBBINGHAUS/MOHRENWEISER/ZWICK 2008: 13). However, a conducted t-test indicates that the share of apprenticeship staff does not significantly differ between the US-subsubsidiaries in Germany and Switzerland (hypothesis 2/3a). The same applies for the importance of training on the job (hypothesis 2/3c), there is no statistical difference between subsidiaries in Germany and Switzerland. However, subsidiaries in the two countries vary with respect to continuing vocational education & training: There was significantly more training provided in the subsidiaries in Germany in 2009 compared to the ones in Switzerland (hypothesis 2/3b).

Panel C contains a set of controls used for robustness checks with respect to hypothesis 1, 2 and 3. As common practice when analysing employment relations practices, it is advisable to control for some additional factors. One standard control and also central to consider here is the size of the subsidiary (see

GOODERHAM/NORDHAUG/RINGDAL 2006: 1502 for this standard control measure) measured by its headcount, since the size of a subsidiary might well affect both, subsidiary characteristics (hypothesis 1) and training & skill arrangements (hypothesis 2 and 3).⁶⁵ Also another aspect to control for with respect to hypothesis 2 and 3 is when and how the subsidiary became a US-subsiidiary, either by a start-up or by a merger/acquisition of a previously existing local company. This is because training & skill practices in an already established company may be more difficult to change, especially the longer the organisation has existed. Furthermore, with respect to hypothesis 2 and 3 we control for whether there is a central HR company strategy followed, thus controlling for a possible home-country-related effect (e.g. see HARZING/SORGE 2003). And lastly, especially for the subsidiaries in Germany, also a works council might have an effect on the adoption of local training & skill practices, therefore we control for it also regarding hypothesis 2 and 3.

4.4 Results

4.4.1. Differences between US-subsiidiaries in Germany and Switzerland & host-country fit

Table 11 displays the marginal effects of a logit analysis with the dependent variable 'location' with '1' representing 'Germany' and '0' representing 'Switzerland'. Explanatory variables are the subsidiary characteristics highlighted in hypothesis 1 and headcount as a control. The results indicate that US-subsiidiaries in the two locations are significantly different from each other with respect to a set of variables: Specifically, US-subsiidiaries in Germany experience core business changes more frequently (hypothesis 1a, less frequent core business changes coded as 1, and more frequent ones as 0, hence the negative relation) and are less ICT intensive (hypothesis 1c). As predicted, they also are less characterised by a price orientation (hypothesis 1b), with the respective result being just borderline to not significant at the 10 percent level ($p = 0.105$). As predicted, US-subsiidiaries in Germany and Switzerland do not significantly differ with respect to the type of assets used (hypothesis 1e) and their technology intensity (hypothesis 1f). But with respect to the degree of long-term

⁶⁵ Due to already controlling for subsidiary headcount in the subsidiary fit measure as it is included in the logit analysis from which the predicted probability values are taken (see results section), it is not controlled for again in the training & skill practice variable regressions.

orientation, we do not find US-subsidaries in Germany to be more long-term oriented than subsidiaries in Switzerland (hypothesis 1d).

Table 11: Logit regression of location – marginal effects

marginal effects after logit in country (D =1/CH=0)	dy/dx	standard errors	95 % confidence interval	
			from	to
core business changes (H1a)	-.4456327***	.15468	-.748792	-.142474
price orientation (H1b)	-.1616697(*)	.09971	-.357105	.033766
ICT intensity (H1c)	-.0334976**	.01522	-.063329	-.003666
long-term orientation (H1d)	-.0017022	.00208	-.005783	.002379
type of assets (H1e)	.0930341	.07594	-.055814	.241883
technology intensity (H1f)	.0058083	.06242	-.116542	.128159
headcount	.0001352	.00012	-.000094	.000364

observations: 51
 Logit information:
 pseudo R²: 0.2215
 log likelihood: -27.452599
 prob > chi2 = 0.0288

Note: *** significant at 1%, ** significant at 5%, * significant at 10%. Marginal effects at means except for core business changes where the discrete change from 0 to 1 is analysed.

Source: Own data.

Overall, despite the rather small sample, we detect a number of significant differences between the US-subsidaries located in Germany and Switzerland, which are mostly compatible with location decisions being linked to comparative advantages in employment relations. This lends support to our previously outlined predictions of and deductions from the varieties of capitalism approach summarised in hypothesis 1. As predicted, for subsidiaries in Switzerland, more ICT intensity (hypothesis 1c) and somewhat more of a price orientation (hypothesis 1b) are found. Further and also as predicted, German and Swiss US-subsidaries do not differ in the types of assets used (hypothesis 1e) and also not in technology intensity (hypothesis 1f). Only with respect to the frequency of core changes (hypothesis 1a) and long-term orientation (hypothesis 1d), our predictions do not hold: Overall the US-subsidaries in Switzerland experience significantly less frequent core changes and are not significantly less long-term orientated as per our measure of subsidiary premises and equipment ownership.

4.4.2 US-subsidiaries' training & skill practices in view of their host-country location fit

To test hypothesis 2 and hypothesis 3, we first need to determine the host-country fit for each subsidiary. This we conduct via the predicted probability of each subsidiary to be located in the county location it finds itself in (Germany or Switzerland), according to the logit analysis we employed. Each subsidiary is thereby assigned a subsidiary host-country fit score between 0 and 1, with a higher value indicating more of a fit between subsidiary and country location. For subsidiaries in Germany we find the mean host-country fit to be 0.66, for subsidiaries in Switzerland it is slightly (but not statistically significantly) lower (0.62).

Next, we run pair wise correlations assessing the relationships between a subsidiary's host-country fit and its training & skill practices (table 12). Several of our hypotheses are supported by the data: In accordance with hypothesis 2b, we find that the host-country fit of a subsidiary in Germany is negatively correlated with the amount of continuing vocational education & training it offers, while there is no significant correlation between the two variables in subsidiaries located in Switzerland – supporting hypothesis 3b. Furthermore and as predicted, in Germany, we find a significantly negative correlation between host-country fit and the importance of on the job training (hypothesis 2c) while – as predicted – there is no such link in Switzerland (hypothesis 3c).

Table 12: Correlations between training & skill practices and host-country fit

training & skill practice	in Germany	in Switzerland
apprenticeship training (H2a, H3a)	0.08	0.16
continuing vocational education & training (H2b, H3b)	-0.47**	-0.06
training on the job importance (H2c, H3c)	-0.38*	0.02

Note: *** significant at 1%, ** significant at 5%, * significant at 10%. The number of answers varies between 22 and 26 (per country) due to item non-response.

Source: Own data.

However, concerning apprenticeship (hypothesis 2a/3a) training, in both country locations, other than predicted, we find no relation with subsidiaries' host-

country fit. Apparently, the extent to which US-subsidaries actively participate in the training of apprentices is – unlike postulated in hypothesis 2a and 3a – unrelated to their host-country fit. This is somehow counter-intuitive, because training apprentices should provide a key competitive advantage to US-subsidaries with a good host-country fit in both of the two countries. As a robustness check, we run OLS regression analyses for each training & skill variable, controlling (one by one due to the sample size) for the control variables displayed in table 10, Panel C. By and large, the results remain robust to these alterations.⁶⁶

In sum, we find US-subsidary employment relations practices variation within Germany (e.g. ROYLE 2004 also points out enduring IR differences within nations) to be related to subsidiary host-country fit: Two out of three hypotheses are supported. Only in regard to apprenticeship training there are no significant differences found according to host-country fit. Regarding the US-subsidaries in Switzerland we find no significant relations between host-country fit and training & skill practices. While this non-relation was in fact postulated for the field of continuing vocational education & training and also for the importance of on the job training, we expected host-country fit and the share of apprentices to be positively correlated.

4.5 Conclusions

In this article, we *first* studied in how far we can distinguish US-subsidaries located in Germany and Switzerland according to a set of characteristics that can be linked back to host-location employment relations complementarities. In spite of the apparent similarity between the two country locations, we found US-subsidaries in Germany to be characterised by significantly more frequent core business changes, less ICT intensity and somewhat less of a price orientation than their counterparts in Switzerland. An implication of this finding is that there are indeed different employ-

⁶⁶ Only regarding the following measures does the result turn insignificant: When we include the control having a central HR company strategy in the OLS regression regarding continuing vocational education & training for the subsidiaries in Germany, the host-country fit result turns borderline insignificant ($p = 0.101$) while the control variable is insignificant. And, regarding the same outcome measure: When controlling for all sample subsidiaries having a works council, the results stay significant. When considering subsidiaries only that have the required size to establish a works council in Germany, the relation between host-country fit and continuing vocational education & training turns just borderline insignificant ($p = 0.102$). Since it is more likely that bigger subsidiaries have a works council, it should be noted that a size effect is captured here additionally as well.

ment relations comparative advantages in different country locations utilised by multinationals, which fits to study findings such as by GRIFFITH and MACARTNEY (2010). However, subsidiaries in Germany and Switzerland are also more similar – in terms of their long-term orientation – than expected, and the opposite as predicted in terms of how often core changes happen (more frequent core changes in the subsidiaries in Germany). While this outlines that the picture is also somewhat more complex than one may deduct from the varieties of capitalism (see HALL/SOSKICE 2001) predictions, in light of the rather hard test administered (Germany and Switzerland will in general be judged to be rather similar – especially from the perspective of a foreign investor), the support for the varieties of capitalism approach is still quite considerable.

Our *second* line of investigation concerned the question whether and how US-subsubsidiaries within Germany and Switzerland differ in their training & skill practices according to their individual host-country fit. In the case of Germany we found – as predicted – that a subsidiary’s host-country fit affects the extent to which local training & skill practices are used, except for training apprentices. In the case of Switzerland and – except for hypothesis 3a, training apprentices, compatible with our theoretical analysis – we do not find a host-country fit effect. From here, we can go back to the literature on home- and/or host-country effects with additional insights. Overall our findings indicate that when analysing host-country effects (e.g. see EDWARDS/KURUVILLA 2005 for an overview of selected studies; FERNER/QUINTANILLA/VARUL 2001; ROSENZWEIG/NOHRIA 1994; SCHMITT/SADOWSKI 2003), the host-country fit of the subsidiary needs to be taken into account: If, as indicated by our findings, a subsidiary has a good host-country fit and host-country employment relations practices are different from home, host-country effects should generally be found. In absence of a substantial difference between home- and host-country practices, however, host-country fit will not affect their use.

Taken at face value, our results imply that indeed there are country level comparative advantage differences between Germany and Switzerland with respect to employment relations and that according to subsidiaries’ host-country fit one can distinguish between subsidiaries’ employment relations practices. Our article directs attention to both cross and within country differentiation in terms of employment

relations and our findings indicate that these differentiations are substantial for an in-depth analysis of foreign subsidiaries' host-country practices adoption.

Future studies should refer to different home- and host-countries and focus on different employment relations practices – ideally with a larger sample size. While our study may not be representative in a statistical sense, it should nevertheless provide an important starting point for future research in the area.

Chapter 5

Within country variation of US-subsidiaries' host-country fit and staff adjustment practices

(currently available in a slightly modified version as: Kluike, Marlies (2012): What follows employment relations comparative advantage: Within country variation of US-subsidiaries' host-country fit and staff adjustment practices. At: Social Science Research Network.)

Abstract

Purpose: *In this paper it is tested in how far US-subsidiaries' employment relations comparative advantage – subsidiaries' host-country fit – coincides with a different use of host-country employment relations – staff adjustment practices.*

Design/methodology/approach: *Characteristics of subsidiaries that should lead to the subsidiary profiting from using host-country employment relations are identified. An index is created to display subsidiaries' host-country fit. Then the relationship between host-country fit and staff adjustment practices is analysed while recurring on a unique dataset on US-subsidiaries in Germany, Switzerland and the UK.*

Findings: *As predicted, regarding the central measure there is a significant relationship between host-country fit in US-subsidiaries in Germany and the frequency of staff adjustments found and none for US-subsidiaries in the UK, each in comparison to the US-subsidiaries in Switzerland.*

Research limitations/implications: *Differentiating US-subsidiaries according to employment relations comparative advantage capabilities needs to be taken into account for the analysed staff adjustment practices when there is a difference between home- and host-country employment relations practices to begin with. The main limitation is the modest sample size.*

Originality/value: *Differentiating subsidiaries' employment relations practices such as staff adjustments by their host-country fit contributes to explaining contradictory*

findings regarding US-companies' uptake of host-country employment relations practices.

Keywords: *employment relations comparative advantage, host-country fit, staff adjustment practices, US-subsidiaries, Germany, Switzerland, UK*

5.1 Introduction

In how far Anglo-Saxon MNCs take up host-country employment relations has been discussed widely. A tendency of US-companies referring to home-country approaches (e.g. in terms of IR, see COLLINGS/GUNNIGLE/MORLEY 2008) and especially if located in coordinated market environments and regarding HR practices has been identified (see ISEKE/SCHNEIDER (2012) for an overview of empirical studies), but there is also conflicting evidence. For example, case study evidence on US MNCs in Germany (see ROYLE 2002) points towards Anglo-Saxon MNCs introducing their home approach in terms of IR practices. But e.g. SCHMITT (2003) finds British and American MNCs in Germany not transferring home-country IR in his empirical study.

The question arises therefore what factors are at work to determine which companies with an Anglo-Saxon origin rather try to establish their home-country approach to employment relations in the host-countries they operate in, especially if in a host-country quite different to their own home-country.

Referring to the idea that subsidiaries behave strategically according to their needs (e.g. see BOXALL/PURCELL (2000) for the concept of best fit), a variation in employment relations practices of US-companies can be deducted. *On the one hand*, subsidiaries are drawn to locations for reasons that may not be that much complementary to host-country employment relations, e.g. for market access (see CHAKRABARTI 2001), and not use host-country employment relations if they are not obliged to. *On the other hand*, different market economies offer specific comparative advantages (see HALL/SOSKICE 2001), including employment relations, and certain foreign companies should profit from those and therefore use host-country employment relations accordingly. E.g., PULL (2008) detects systematic advantages of different national employment relations for certain US-investors. GRIFFITH/MACARTNEY (2010: 1) find empirical evidence that 'multinational enter-

prises locate more innovative activity in countries with high EPL, however they locate more technologically advanced innovation in countries with low EPL'. So overall one should not only find one type of foreign subsidiary in a given market economy, but rather a variety *within* different host-countries and that should in turn have to do with a different use of host-country employment relations.

Despite a lot of research on MNCs and employment relations, and especially so in terms of US-companies, one has generally not considered *foreign subsidiaries* differing in terms of employment relations comparative advantage *within* host-countries and a subsequent potentially different use of host-country employment relations. The empirical literature concerning the employment relations practices of MNCs focuses on e.g. home- (e.g. see HARZING/SORGE 2003) and/or host-country effects (e.g. see BJÖRKMAN/BUDHWAR 2007; PUDELKO/HARZING 2007) or on comparing local companies and multinational subsidiaries in regard to their practices (e.g. see DOERINGER/EVANS-KLOCK/TERKLA 1998; GOODERHAM/NORDHAUG/RINGDAL 2006; SCHMITT/SADOWSKI 2003).

Generally subsidiaries are only differentiated in terms of e.g. firm size when analysing employment relations practices. As an example of a study employing comparatively ample differentiations one can refer to GOODERHAM/NORDHAUG/RINGDAL (2006) who use 'industry, size, the strategy or market orientation of the firm, and the date when the firm was established in its particular setting' (2006: 1502). These factors are found to be mostly significantly related to the measured HR practices. This points towards the importance of analysing a set of potential determinants of employment relations practices.

In this paper, I endeavour to aid closing the research gap by analysing the question in how far US-subsidiaries' differences in host-country employment relations comparative advantage – which I refer to as subsidiaries' host-country fit – *within* their given host-countries relates to subsidiaries' use of host-country employment relations. I assess individual US-subsidiaries' host-country fit by comparing subsidiaries' characteristics to what characteristics they should ideally have to profit most from host-country employment relations. Thereby I take into account how national institutions and foreign subsidiaries and their strategies interact.

US-subsidiaries represent the prominent group of Anglo-Saxon multinational investors, hence I focus on them. I only analyse subsidiaries from the same country so I can avoid a multiple home-country effect. I choose the host-country locations

Germany, Switzerland and the UK due to their gradual differences in market economy spheres while recurring on the varieties of capitalism approach (see HALL/SOSKICE 2001). Germany is a classic example of a coordinated market economy. As a contrast, I test the relationship between host-country fit and staff adjustment practices for US-subsidaries in the UK, a typical liberal market economy. Furthermore, I focus on Switzerland since it constitutes a rather hybrid market economy case with both coordinated and liberal elements (see HALL/GINGERICH 2009; SCHNEIDER/SCHULZE-BENTROP/PAUNESCU 2010).

One type of employment relations practices, staff adjustment practices, are the focus as *firstly* they are of high strategic importance for companies (e.g. see TSAI/YEN 2008: 367), they determine who makes up companies' human capital. Also, staff reductions may have negative consequences if not carefully managed (see DATTA et al. 2010). *Secondly*, staff adjustment practices should allow for a rather strong test of in how far different US-companies adjust their practices according to their host-country if they can profit from host-country employment relations. This is because US-companies should generally be free to determine their own approach to staff adjustment practices in their home-country due to its flexible labour market (e.g. see OECD (eds.) 2010) and hence some US-companies may be especially resistant to taking up host-country approaches in this regard.

The paper proceeds in the following way: In the theoretical analysis (chapter 5.2) I identify what characteristics subsidiaries in the different countries should ideally have to profit from host-country employment relations. Subsequently I deduct my hypotheses regarding host-country fit and staff adjustment practices. Then I describe my method, including the host-country fit operationalisation (chapter 5.3). I employ an original dataset and then display and report the correlation and regression results (chapter 5.4), ending with a conclusion (chapter 5.5).

5.2 Theoretical analysis and hypotheses: Different US-subsidaries in Germany, Switzerland and the UK and staff adjustment practices

5.2.1 Varieties of capitalism and employment relations comparative advantage in Germany, Switzerland and the UK

Concentrating on US-subsidaries in the host-country locations Germany, Switzerland and the UK for my analysis, I refer to the varieties of capitalism approach (see HALL/SOSKICE 2001). It has generally received a lot of attention in the literature (e.g. see ALLEN/ALDRED 2011; HANCKÉ 2001; REGINI 2003; THELEN 2009), however – except for KLUIKE/PULL (2012) – not regarding empirical investigations of within country comparative advantage differences of foreign subsidiaries.

Since the chosen host-countries have both distinct similarities and differences, I can systematically distinguish between different country location characteristics as predicted by the varieties of capitalism approach and the comparative advantage (see HALL/SOSKICE 2001: 37) the locations should offer. Market economies are distinguishable by their degree of (non-)market coordination (see HALL/SOSKICE 2001). The degree of coordination can be assessed regarding different market economy spheres, corporate governance, inter-company relations, IR and education & training (the latter two making up employment relations).

Germany is a prime example for a coordinated market economy, and the UK is similarly liberal as the USA are (see HALL/SOSKICE 2001). Switzerland is located somewhere in the middle of the coordination spectrum (e.g. see HALL/GINGERICH 2009; SCHNEIDER/SCHULZE-BENTROP/PAUNESCU 2010), although it was originally classified as a coordinated market economy.

Considering the distinctiveness of different market economies which should entail specific comparative advantages (e.g. see BASSANINI/ERNST 2002; GRIFFITH/MACARTNEY 2010; HARCOURT/WOOD 2007), foreign companies may invest in specific market economies for specific endeavours (see HALL/SOSKICE 2001: 57). Thereby subsidiaries located in different countries should have certain characteristics if they are to utilise host-country comparative advantages such as employment relations. But this may not be (or less) the case if a country location was chosen due to other reasons (e.g. see CHAKRABARTI (2001) for dominant foreign direct investment factors).

According to the needs and corresponding characteristics a subsidiary has, each subsidiary will have more or less of a host-country fit with its host-location regarding employment relations. Hence ideal subsidiary characteristics need to be identified for each location to assess the subsidiaries against to determine their host-country fit in terms of employment relations.

I refer to *three key factors* that can be linked to central business comparative advantage determinants as per the varieties of capitalism approach (see HALL/SOSKICE 2001). They are complementary to host-country employment relations and should in combination determine host-country fit,⁶⁷ therefore ideal subsidiary characteristics can be derived from them: *Change intensity, type of assets (specific versus switchable) and technology intensity* (see an overview in figure 2).

Regarding business *change intensity*, US-subsubsidiaries in Germany are ideally predicted to be little prone to frequent core changes in the subsidiaries' main business. This is because the German market economy should rather foster a long-term business orientation and a stakeholder focus (see VITOLS 2001b: 337-360). This is complementary to the comparatively long-term orientated, coordinated IR sphere in Germany.⁶⁸ Further, I predict rather similar ideal characteristics of the US-subsubsidiaries in Switzerland and the UK in this instance – relatively frequent core business changes. This is because the Swiss market economy is similar to the UK in terms of a relatively high shareholder (value) orientation (see AFONSO/MACH 2011; VITOLS 2001b: 337-360) and rather flexible regulations that make change more easily possible, also in terms of IR (e.g. see AFONSO/MACH 2011).

Regarding how specific the main *assets* utilised for the subsidiary are, I do not suspect that there is a significant difference between US-subsubsidiaries based in Germany and Switzerland. I predict this due to the market economy similarities of Germany and Switzerland in terms of fostering rather specific, functionally broad occupational skills⁶⁹ (e.g. see ESTEVEZ-ABE/IVERSEN/SOSKICE 2001; MARSDEN 1999: 130ff.). This should coincide with having rather less switchable and more (co)-specific assets (see HALL/SOSKICE 2001: 49) in a business overall in order to profit

⁶⁷ See chapter 5.3 for the operationalisation of host-country fit via an index due to the importance of considering the three key factors determining host-country fit together.

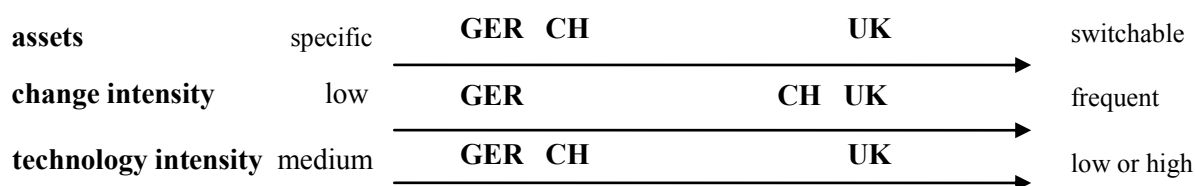
⁶⁸ Although a decline of the German model in terms of for example IR (e.g. see CASEY/FIEDLER/ERAKOVIC 2012; GRAHL/TEAGUE 2004) has been discussed, typical characteristics so far overall remain and German IR can be regarded as coordinated.

⁶⁹ As in Switzerland people move more frequently between jobs somewhat less of firm specific knowledge may accumulate over time, however comparatively specialised (industry) knowledge should prevail due to the dominance of the dual apprenticeship system.

from specialisation effects. For the UK, I propose the opposite subsidiary characteristics. This should ideally be more of a reliance on switchable assets (see HALL/SOSKICE 2001: 49) that can be applied to different ventures. This fits to the education & training orientation typically found in the UK (e.g. see ESTEVEZ-ABE/IVERSEN/SOSKICE 2001), a general skill education supplemented by specific skills as needed and rather acquired in post-education employment.

Regarding *technology intensity*, businesses in Germany and Switzerland should ideally focus on advanced, medium technology, e.g. due to skill complementarities as described already. In the UK, going hand in hand with its flexible labour market, education & training system, and radical change possibilities (see VITOLS 2001b: 351), high-technology should be fostered (and in contrast rather low-technology in basic ventures where one can also benefit from the UK's environment, e.g. in terms of basic general skills).

Figure 2: Stylised host-country fit elements and ideal predictions overview



Source: Own compilation.

In the following, it is considered in how far host-country fit, consisting of the above described key factors in combination with each other, determines a typical host-country approach to staff adjustment practices by taking a closer look at the analysed host-countries' typically expected approach to staff adjustments in comparison to what should typically apply in the USA.

5.2.2 Subsidiary host-country fit and staff adjustment practices

Apart from that US-subsidiaries in Germany, Switzerland and the UK should have somewhat different ideal characteristics to profit most from their host-country employment relations, it also needs to be considered in how far the analysed host-country employment relations practices are similar to home-country practices to begin with. If home- and host-country practices are more or less the same generally, no significant variation according to host-country fit should be detectable, as it would

not be distinguishable whether some subsidiaries may ‘localise’ their practices or refer to home-country practices.

What typical staff adjustment practices should look like in the analysed host-countries as opposed to the USA can be derived from analysing their IR spheres. In *Germany* there is rather high employment protection, staff adjustments are comparatively restricted and typically considerable coordination between employers and employees exists (see EIRO ONLINE (eds.) 2009a; VITOLS 2001b: 345), as opposed to the USA where generally little layoff regulations and IR coordination exist (see EIRO ONLINE (eds.) 2005, OECD (eds.) 2010). In the *UK* (especially the private sector), very similar to the USA, there is little IR coordination and there are flexible layoff regulations (see EIRO ONLINE (eds.) 2009b; OECD (eds.) 2010). And in *Switzerland*, there is some rather ‘light’ IR coordination between employers and employees (see AFONSO/MACH 2011), and very flexible layoff regulations (see OECD (eds.) 2010). Hence, there is similarity to the USA, even though potentially somewhat but not significantly less than between the UK and USA.

Therefore, for US-subsidiaries in Switzerland, no significant relationship between host-country fit is suggested regarding staff adjustment practices. These are dominantly related to the flexible labour market in the hybrid market economy Switzerland which is sufficiently similar to the USA not to expect significant differences according to host-country fit. And staff adjustments are not predominantly related to the education & training system of Swiss employment relations where US- and Swiss practices should typically vary more.⁷⁰

Furthermore, since the Swiss market economy has overall both liberal and coordinated features it constitutes an ideal point of comparison in terms of the expected host-country fit effects regarding staff adjustments in US-subsidiaries in Germany and the UK. In comparison to the US-subsidiaries in Switzerland, US-subsidiaries with a comparatively good host-country fit in Germany should make significantly less use of staff adjustment practices (‘the better the less’). This should have implications such as comparatively high average staff tenure in the subsidiary as well. In comparison to the US-subsidiaries in Switzerland, for US-subsidiaries in the UK there is generally no significant relationship between staff adjustment practices in terms of subsidiary host-country fit expected. This is because of the relative

⁷⁰ This illustrates that especially for not so typical market economies as Switzerland; a careful analysis is warranted in terms of predictions regarding host-country fit effects.

similarity between the US-home and the UK and Swiss approach in terms of staff adjustment possibilities and practices.

Following from this, I will test these hypotheses:

H1): The better the host-country fit of US-subsidiaries in Germany the less staff adjustment practices are applied, in reference to US-subsidiaries in Switzerland.

H2): The extent of host-country fit of US-subsidiaries in the UK is not significantly related to subsidiaries' staff adjustment practices, in reference to US-subsidiaries in Switzerland.

5.3 Data and variable operationalisation

5.3.1 Data

I recur on a unique dataset that was collected in 2010-2012 via a survey. It provides both detailed information about subsidiary characteristics and employment relations practices and this cannot be found in current large-scale surveys.

Overall, 99 replies were obtained, 33 in each location. The net response rate obtained for the US-subsidiaries in Germany and Switzerland is 7 percent. The response rate for the UK cannot be determined due to a different data gathering technique. Overall the response rate is on the lower end of the acceptable spectrum, however still within the spectrum. As an example, SHOHAM (1996: 59) – with a 5 percent response rate for his US-based study – reports this as being low but in the range of previously conducted studies.

For the area of staff adjustment practices as tested here subsidiary size should have a specific impact. In an economically difficult situation, smaller subsidiaries expectedly have less choice to potentially utilise alternative measures instead of letting staff go. In Germany this is accounted for by an exception clause in terms of layoff regulations. Currently, employment termination regulation only applies in establishments with ten or more employees (see ZACHERT 2004: 134). I apply this threshold for my analysis for subsidiaries in all three host-countries despite no such thresholds there. The basic argumentation regarding less choice of alternative practices in very small establishments should equally apply. Focusing on subsidiaries

with ten or more staff results in analysing 27 US-subidiaries located in Germany, 31 in Switzerland and 26 in the UK.⁷¹

Regarding the sectors the subsidiaries belong to,⁷² the following trends can be identified: About 30 percent of subsidiaries in the sample from Switzerland and the UK each belong to ‘manufacturing’, and about 37 percent in Germany. ‘Wholesale trade’ is about as dominant a response sector in case of the subsidiaries from Switzerland as ‘manufacturing’ is in Germany. ‘Professional, scientific and technical services’ is a sector of solid presence in all the three country response groups, most prevalent regarding the US-subidiaries located in the UK (about 12 versus 21 percent).

5.3.2 Variable operationalisation

Staff adjustment practices (dependant variables)

I employ two measures, a central one testing how often staff are adjusted, and a supplementary one that has to do with effects of staff adjustments over time, average job tenure of permanent staff.

Firstly, the central measure of in how far subsidiaries often let staff go due to business need I operationalise with a Likert-Scale design (1 = strongly disagree, 5 = strongly agree) (see table 13). As one can see, this question is stated in such a way that it can include different staff, e.g. temporary and permanent. Thereby even regarding the answers from subsidiaries’ based in Germany, which is relatively strictly regulated and especially in regard to permanent staff (see OECD (eds.) 2010), there should be leeway – hence the answers to the practices enquired about could vary in Germany as in the other countries.

The *second*, supplementary, measure was enquired about by asking for the average permanent staff job tenure (see table 13). This should provide information about in how far employment is rather stable in a given subsidiary. Thus, job tenure should provide an indication of the company’s strategy regarding keeping employees long-term.

⁷¹ Due to non-response to some items the amount of cases included in the analyses varies, see results section.

⁷² It was not concentrated on one sector as finer differentiations are applied here to distinguish subsidiaries which should work across sectors.

Table 13: Variable operationalisation

construct	questionnaire item
dependent variables	
staff adjustments	Staff numbers are often adjusted according to business need. (5.P. Likert-Scale)
job tenure ⁷³	What is the current average job tenure of permanent staff in years?
host-country fit components (together independent variable)	
core business changes	How often does the subsidiary business encounter core business changes? choice of: approx. every 1-3 years/ 4-6 years/ 7+ years
assets	Assets and components used could easily be switched to another use (e.g. new products/services). (5.P. Likert-Scale)
high-technology	Our main business driving products/services belong to high-tech. (5.P. Likert-Scale)
control variables	
headcount	Please let us know the current overall staff headcount. approx. _____
alternative measures	When needed, working time, or similar, has rather been adjusted than staff let go. (5.P. Likert-Scale)
year of incorporation	The year of incorporation is: year: _____
voluntary fluctuation	What was the voluntary fluctuation rate of permanent staff in 2009?
works council	Is there a works council? <input type="checkbox"/> yes (1) <input type="checkbox"/> no (0)
collective agreement	Does a collective agreement exist? <input type="checkbox"/> yes (1) <input type="checkbox"/> no (0)

Note: The (ordinal) dependent variable ‘staff adjustments’ varies from 1 – 5, i.e. has relatively ample categories and does not have a nonnormal distribution as per a Shapiro Wilk test, hence it should be sufficient to use it in the subsequent OLS analyses (see LEWIS-BECK/BRYMAN/LIAO (2004) for using ordinal dependent variables with OLS under certain conditions). The independent variable ‘alternative measures’ is ordinal, however has rather ample categories also, 5 possible values, and hence is in the following treated as ‘quasi-metric’.

Source: Questionnaire information.

As an orientation, in Germany employees generally tend to stay relatively long in their jobs (see RHEIN 2010: 4, average job tenure was 10.8 years in 2008). In

⁷³ It is a somewhat approximate measure. Typically tenure under different ownership should be recognised in such figures, and the seniority of parent company or other staff transferred in should have an impact as well; overall higher permanent tenure should in any case be an indication for a long-term focus in the subsidiary (by holding permanent staff long, no matter if originally hired under a previous owner or when US-owned, and if transferring staff in with a high seniority).

Switzerland staff movements are more frequent (average tenure of 8.8 years in 2010, see OECD (eds.) 2012; high job mobility, see HENNEBERGER/SOUSA-POZA 2002). And in the UK, there are generally rather frequent job movements (see RHEIN 2010: 4, average job tenure was 8.2 years in 2008). In the US generally there is high fluctuation of employees and overall shorter job tenure (e.g. a median of 4.6 (January 2012), see BUREAU OF LABOR STATISTICS U.S. DEPARTMENT OF LABOR (eds.) 2012).

Host-country fit (explanatory variable)

To analyse the proposed hypotheses, the host-country fit needs to be operationalised. For displaying the overall subsidiary fit with the host-country, I construct an index whose components can be found in table 14. Analogous to the theoretical argumentation that the fit is made up of generally equally important elements forming one indicator, the scores for the three key characteristics are added up and the sum constitutes the host-country fit. Each individual item in the index is rated on a score between 'zero' and 'two' (except the core change operationalisation for the subsidiaries in Switzerland, see below); hence there are three possible values.

The index can equal a minimum of 'zero' ('one' for Switzerland), thereby signifying worst fit, and on the other hand a score of 'six', the best possible fit. In table 14 the index operationalisation per item per country is displayed. In the following I explain it for each item per country:

In Germany, a US-subsubsidiary should ideally not undergo frequent core business changes, hence the answer category of core business changes happening every 7+ years would be ideal and is attributed a score of 'two', and respectively less for the other response options, 'zero' for the least ideal one (core changes every 1-3 years). For the Likert-Scale question regarding assets, respectively the two scale items on each side of the middle category three are awarded one common value. E.g., 'two' is awarded for having selected the option one or two on the Likert-Scale (as theoretically predicted, little switchable assets), 'one' for having filled out the middle category and 'zero' for the Likert-Scale answer four or five. For the measure on high technology, the maximum score of 'two' is assigned to the middle category (three) of the Likert-Scale answer as medium technology should be most prevalent in Germany, the nearest two answer categories (Likert answer two and four) are assigned a score of 'one', and the other two (five and one) a score of 'zero'.

Table 14: Host-country fit index operationalisation

subsidiary characteristic	subsidiaries in item	GER	CH	UK
		score	score	score
core business changes	<input type="checkbox"/> approx. every 1-3 y.	0	1	2
	<input type="checkbox"/> approx. every 4-6 y.	1	2	1
	<input type="checkbox"/> approx. every 7+ y.	2	1	0
assets	<input type="checkbox"/> 1 strongly disagree	2	2	0
	<input type="checkbox"/>	2	2	0
	<input type="checkbox"/>	1	1	1
	<input type="checkbox"/>	0	0	2
	<input type="checkbox"/> 5 strongly agree	0	0	2
high-technology	<input type="checkbox"/> 1 strongly disagree	0	0	2
	<input type="checkbox"/>	1	1	1
	<input type="checkbox"/>	2	2	0
	<input type="checkbox"/>	1	1	1
	<input type="checkbox"/> 5 strongly agree	0	0	2

Source: Based on questionnaire information and theoretical predictions.

In Switzerland, a US-subsiidiary should ideally undergo more frequent core business changes than in Germany, therefore the answer category of core business changes happening every 4-6 years would be ideal. This is attributed ‘two’, the other two options are both attributed ‘one’. A ‘zero’ is not attributed because the other two options should not be that much differently distant to the ideally predicted outcome as Switzerland may accommodate more of a range of businesses, due to its mix of liberal and coordinated elements. For the Likert-Scale question on assets and technology, due to highly similar expectations as for Germany, the same logic is applied as outlined for the US-subsiidiaries in Germany (see above).

In the UK, a score of ‘two’ is awarded if the subsidiary change intensity is 1-3 years,⁷⁴ due to ideally frequent core business changes happening there, and respectively less points are awarded if less changes happen. For the other two measures regarding assets and technology, the coding is opposite as for the ideal predictions for Germany, due to the opposite expectations regarding them, switchable assets and not a focus on medium technology.

⁷⁴ Here, the operationalisation takes account of a yet somewhat more change intensive environment in the fully liberal market economy UK as opposed to Switzerland – however both categories differ from the operationalised ideal change intensity for the US-subsiidiaries in Germany, as predicted earlier.

5.3.3 Control variables operationalisation

Beyond differentiating subsidiaries by their fit, central variables (see table 13 for operationalisation) will be introduced into the regressions to control for their potential role in the analysed relationship and check robustness. One factor to consider, especially for the central staff adjustment measures, is the subsidiary size measured by *headcount*. This applies even beyond the threshold selected for the analysis here (subsidiaries with ten or more employees) since staff adjustment practices may still vary due to different flexibility capabilities according to size. With the variable whether when needed rather *alternative measures* such as working time adjustments (which may especially be applied to permanent staff) were employed before letting staff go, potentially linked to (company-wide) strategies to avoid at least certain (e.g. core) staff adjustments which generally some US-companies may have, it can be controlled for possible effects of this on the overall outcome of staff adjustments due to business need. Furthermore, one should consider the *year of incorporation* of the subsidiary, i.e. when the subsidiary became part of the US-company, as an essential control regarding average job tenure.⁷⁵ And, as a further control the share of *voluntary staff fluctuation* may be controlled for regarding job tenure as it may have a negative impact. Also, the measure how *often staff number adjustments* are applied can be used as a control on average job tenure because it should partly contribute to it. And lastly, both whether there is a *works council* and a *collective agreement* can be controlled for regarding the measure on staff job tenure as it is concerned with *permanent* staff where such bodies have an influence, thus their presence (more or less in any of the locations) may have a relationship with longer job-tenure.

5.4 Findings

5.4.1 Descriptive statistics (dependent, explanatory and control variables)

Regarding the two dependent variable measures, staff number adjustments and job tenure (see table 15), there are similar averages found for the different locations.

⁷⁵ It cannot control for all subsidiary age effects concerning average permanent tenure as here previously recognized tenure may come into play (see explanation regarding average permanent tenure).

There are no significant statistical differences between the dependent variables in the different countries.

In terms of the independent variable, the average host-country fit value, it becomes evident that the average subsidiary in Switzerland has a higher host-country fit value than the average subsidiary in the UK and Germany. And between the average US-subsidiary in Germany and Switzerland there is a statistically significant difference in fit scores as determined by a t-test. This may have to do with that in the fit operationalisation for the subsidiaries in Switzerland, there is somewhat more of a chance to achieve a higher score as Switzerland should generally offer a broader variety of companies at least certain comparative advantages (for core changes, there is no ‘zero’ score attributed but either ‘one’ or ‘two’, see index operationalisation).

Table 15: Descriptive statistics

construct	mean (std. dev.)		
	in Germany	in Switzerland	in the UK ⁷⁶
staff number adjustments	3.5 (1.2)	3.5 (1.3)	3.5 (1.3)
job tenure	7.6 (4.9)	7.5 (3.8)	6.1 (3.7)
subsidiaries’ host-country fit	3.0 (1.4)	3.7 (1.2)	3.5 (1.5)
headcount	573 (1,360)	388 (1,088)	145 (233)
alternative measures	3.5 (1.3)	3.2 (1.3)	2.9 (1.3)
year of incorporation	1997 (9.8)	1985 (22.6)	1997 (11.8)
voluntary fluctuation	4.7 (6.9)	9.4 (17.3)	7.3 (6.4)
works council	0.5 (0.5)	0.2 (0.4)	0.2 (0.4)
collective agreement	0.5 (0.5)	0.1 (0.3)	0.1 (0.3)

Source: Own data.

With respect to the control variables: The average subsidiary in Germany has the highest headcount. On average, subsidiaries in Switzerland have existed the longest. Average voluntary fluctuation is highest in Switzerland and lowest in Germany. And, not surprisingly, subsidiaries in Germany have a substantially higher share of works councils and collective agreements. Statistically significant differences can be found between subsidiaries’ year of incorporation in the subsidiaries in Germany and Switzerland, and Switzerland and the UK as determined by a t-test. Also, there are significant relationships between subsidiaries located in Germany and having a

⁷⁶ While analysing the data, an extreme outlier was found in the UK regarding headcount (in thousands) and tenure (several decades), it was therefore excluded from the analysis.

works council and collective agreement found, both in comparison to subsidiaries located in Switzerland and the UK.

5.4.2 Staff adjustment practices and host-country fit: Correlations and regressions

First, correlation analyses are conducted for each staff adjustment measure with the host-country fit per country location (see table 16). It becomes evident that there is no statistically significant relationship between host-country fit and the staff adjustment practice measures except for one (average job tenure in the UK, not as predicted). However, the correlations only function as a first indication and do not include a comparison as proposed in the hypotheses.

Table 16: Correlations: Staff adjustment practices and host-country fit

host-country fit	in Germany	in Switzerland	in the UK
staff adjustments	-0.30	0.15	-0.20
average job tenure	-0.08	0.13	-0.39*

Note: *** significant at 1%, ** significant at 5%, * significant at 10%.

Source: Own data.

Turning to the multivariate analyses, in table 17 OLS regression analyses are displayed. Panel A displays the regression with the dependent variable in how far often staff numbers are adjusted, and panel B displays the regression with the dependent variable average permanent job tenure. The independent variables, apart from the already mentioned control variables, are as follows: To include interaction terms of host-country fit and US-subsidiaries in the different countries, dummy variables for subsidiaries located in Germany and the UK are introduced in the model, as well as the host-country fit measure alone, in addition to the interaction terms consisting of the host-country fit⁷⁷ and country dummies. The subsidiary location ‘Switzerland’ constitutes the reference category.

⁷⁷ I centre this and other non-binary variables by deducting the mean from each score (see ROBINSON/SCHUMACKER (2009) for the importance of centring).

Table 17: Regressions: Staff adjustment practices and host-country fit

panel A: staff adjustments	model 1	model 2
OLS regression (with robust standard errors)	R-Squ.: 0.05 N = 74 prob>F = 0.45	R-Squ.: 0.08 N = 72 prob>F = 0.42
	Coefficient	coefficient
host-country fit	0.2	0.1
dummy variable Germany	0.0	0.1
dummy variable UK	0.1	0.1
interaction: host-country fit/Germany	-0.4*	-0.4*
interaction: host-country fit/UK	-0.3	-0.3
headcount		0.0
alternative measures		-0.2
constant	3.4***	3.4***
panel B: job tenure	model 1	model 2
OLS regression (with robust standard errors)	R-Squ.: 0.13 N = 66 prob>F = 0.04	R-Squ.: 0.12 N = 63 prob>F = 0.13
	Coefficient	coefficient
host-country fit	0.7	0.6
dummy variable Germany	1.4	1.6
dummy variable UK	-0.8	-0.5
interaction: host-country fit/Germany	-1.2	-1.1
interaction: host-country fit/UK	-1.4	-1.3
year of incorporation	-0.1*	-0.1
voluntary fluctuation		-0.0
constant	6.8***	6.5***

Note: Significance levels as in table 15. Collinearity tested and found sufficiently low.^{78 79}

Source: Own data.

⁷⁸ The additional control variables for panel B, headcount, staff number adjustments, works council and collective agreement, have also each been introduced in model 1 as a further check, the main results from model 1 remain (except for partly the year of incorporation) and each additional control variable is significantly (positively) related with the dependent variable. That there is a significant relationship between frequent staff adjustments and permanent job tenure may be explained in so far that a distinction can be made between strategic and other employees when often letting staff go (see DATTA et al. 2010). And not surprisingly, the presence of a works council and collective agreement has a highly significant relationship with higher job tenure.

⁷⁹ That in the host-country fit operationalisation there is a somewhat higher chance for US-subsidiaries from Switzerland to achieve a higher fit-value should not unduly influence results. As a robustness check, I also tested model 2 (panel A and B) with the fit scores for subsidiaries in Switzerland re-scaled and the main results are confirmed. Furthermore, I tested the relationship between host-country fit and staff adjustments with the key controls separately for each country (in view of the overall models in panel A not being significant, although the variable of interest has a significant effect); the results are confirmed and strengthened – a significant effect for host-country-fit is found for the US-subsidiaries in Germany regarding staff adjustments (and the model generally) and not in Switzerland and the UK (see table A-1, A-2 and A-3 in the appendix).

The frequency of staff adjustments and subsidiaries' host-country fit

Regarding how often staff numbers are adjusted according to business need in relation to the subsidiary host-country fit, the following is found: The theoretical prediction is supported for the US-subsidiaries in Germany since the interaction term of the host-country fit measure and the dummy variable for subsidiaries located in Germany is significantly (negatively) related (in reference to subsidiaries in Switzerland) to frequent staff adjustments (this applies to both model 1 and 2 with control variables, see table 17, panel A). This means that the US-subsidiaries with a good host-country fit (high index value) apply staff adjustments significantly less in Germany.

There is no significant relationship between host-country fit and the dependent variable for the subsidiaries in the UK, again in reference to the subsidiaries in Switzerland, for which also no significant relationship was proposed. Furthermore, none of the introduced control variables have a significant relationship with the dependent variable. Therefore, for the central measure of the frequency of staff adjustments, the proposed hypotheses can be supported. Staff adjustments vary significantly according to host-country fit in the US-subsidiaries in Germany (hypothesis 1), while there is no significant relationship between the interaction term of host-country fit and the country location UK and the dependent variable (hypothesis 2), each in reference to US-subsidiaries in the location Switzerland.

Average job tenure and subsidiaries' host-country fit

In terms of an expected significant relationship between average permanent job tenure (in years of permanent subsidiary staff) and the host-country fit of the US-subsidiaries in Germany as compared to Switzerland, there is none, not as predicted (in model 1 and model 2, panel B, table 17). As a first explanation one may suggest that this could have to do with that people's job mobility in Germany is generally comparatively low (e.g. see DUSTMANN/PEREIRA 2008). However, for the sample subsidiaries in Germany the average job tenure is low (7.6), therefore other factors must play a role not captured in this analysis. Furthermore, there is no significant relationship between the UK host-country fit interaction term and average job tenure present (also when introducing different control variables) in reference to the US-subsidiaries in Switzerland, as predicted. The average job tenure of the subsidiaries

in the UK is also rather low (6.1 years). Therefore, for the supplementary measure of average permanent staff job tenure, the second hypothesis is supported, but not the first hypothesis.

5.5 Conclusions

In this paper, I have illustrated the importance of taking host-country fit into account while examining staff adjustment practices, and find a host-country effect according to subsidiaries' host-country fit when there is a difference between home- and host-country practices to begin with for the central measure employed. In regard to the supplementary measure, the results regarding the US-subsidiaries in Germany are not as originally predicted, which may be connected to that the average tenure for these US-subsidiaries is overall very low if compared to average figures for Germany. And that the average job tenure of US-subsidiaries in the UK is also rather low may indicate the presence of effects potentially linked to the recent economic crisis in both countries.

The findings indicate that subsidiaries' host-country fit can, when there is a substantial difference between analysed home- and host-country practices, help explain in how far subsidiaries adopt host-country employment relations practices. This needs to be determined regarding individual practices as can be learned from the example of the host-country Switzerland that combines different coordinated and liberal elements. By demonstrating the need to systematically differentiate between subsidiaries I contribute to the literature on MNCs and employment relations practices (e.g. see ROSENZWEIG/NOHRIA 1994; SCHMITT/SADOWSKI 2003). Differentiation by host-country fit should help explain inconclusive findings about the employment relations use of Anglo-Saxon MNCs in different market economies.

Since I focus on staff adjustment practices where US-companies should generally have a rather liberal approach, and considering the sample size, the findings are considerable and clearly indicate a need for further follow up. In terms of implications for MNCs, the results of this paper indicate that there may be leeway for some subsidiaries yet to be explored in order to utilise local employment relations comparative advantages, by *using* host-country employment relations practices such as local approaches to staff adjustments. In order to investigate this further, subsidi-

ary differentiations should be followed up in regard to more host-country practices, as well as in regard to further countries.

Chapter 6

Human resource management configurations of radically innovative US-subidiaries in Germany, Switzerland, and the UK

(modified version of a paper being developed with Silvia Teuber, Uschi Backes-Gellner, Kerstin Pull, Martin R. Schneider)

Abstract

This paper analyses the question of how radically innovative companies organise in different institutional environments. According to the varieties of capitalism approach, such companies find the optimal institutional environment in liberal market economies that offer the necessary conditions: Flexibility in numerical labour adjustments and qualification-related employee skills – university educated staff. Using fuzzy-set qualitative comparative analysis (fsQCA), we investigate configurations of company-level HRM practices of US-subidiaries in Germany, Switzerland, and the UK, three countries that systematically differ in terms of labour adjustment costs and qualification level of the work force. We identify different equifinal company-level configurations of HRM practices of radically innovative companies. The results support the importance of flexible labour adjustments, as suggested by the varieties of capitalism approach. However, in contrast to institutional literature, which implies a strong influence of the institutional environment, configurations are rather not country-specific. This result suggests that the institutional environment does not fully determine the company-level HRM practices conducive to radical innovation.

Keywords: *fsQCA, innovation, HRM practices, institutions*

6.1. Introduction

Innovations are an important driver of growth and wealth for both companies and developed societies (see AGHION/HOWITT 1998; AHLSTROM 2010; OECD (eds.) 2011). One important way of fostering innovation is offering flexibility – radically innovative companies in particular are characterised by frequent and fundamental changes when adopting ideas and behaviours new to the organisation (see DAMANPOUR/GOPALAKRISHNAN 1998; HALL/SOSKICE 2001; SANTOS 2000).

Since for radical innovation⁸⁰ flexibility is an important factor and generating new ideas relates to human capital, we endeavour to shed further light on the HRM practices which radically innovative companies employ. As we outline in the following, there are different approaches regarding HRM practices and radical innovation.

Institutional approaches can be referred to when endeavouring to explain innovation mechanisms, and these may help account for the contradictory empirical results in organisational literature concerned with innovation (e.g. see JIMÉNEZ-JIMÉNEZ/SANZ-VALLE 2005) which generally does not take into account that country-level institutions can limit a company's actions (see CORIAT/WEINSTEIN 2002). The institutional approaches stress the importance of country-level institutions, as they should largely determine the innovation trajectories of companies by influencing their flexibility to undergo changes (see HALL/SOSKICE 2001; LUNDVALL 1992; NELSON 1993). Of particular importance in this context is HALL/SOSKICE's (2001) varieties of capitalism approach, as it posits a clear link between certain institutional environments and innovations, and as it focuses on the firm and its key decisions, including its HRM. The varieties of capitalism approach is thus compatible with a contingency approach to strategic HRM (see DELERY/DOTY 1996). Hereby in the extreme, certain HRM practices should excel only in their appropriate institutional and industry context. But the varieties of capitalism approach is also compatible with the idea of complementary HRM practices or bundles that jointly support radical change/innovation.

Although the varieties of capitalism approach sheds light on national patterns of specialisation, literature in this field generally treats the company as a more or less passive adaptor to country-level institutions and underestimates the company's or-

⁸⁰ In this paper, innovation is understood in a non-sector specific way, in terms of business change intensity.

organisational choice (see CORIAT/WEINSTEIN 2002). However, companies have strategic leeway because their activities cut across national boundaries in a globalised economy and as institutional environments within one country may be heterogeneous (see LANGE 2009). Therefore, we consider alternative approaches as well.

A *first* alternative to the contingency approach to strategic HRM is a universalistic approach (see DELERY/DOTY 1996). Recently, several studies suggested that a number of management practices including HRM practices are universally linked to good company performance (see BLOOM/VAN REENEN 2010). This would rather imply that HRM practices conducive to radically innovative performance should not differ across countries.

A *second* alternative to the contingency approach to strategic HRM is a configurational approach. Consistent with the idea of complementary practices (and in this sense similar to the varieties of capitalism argument), this approach assumes that a bundle of practices, rather than a single practice, would be linked to radically innovative performance. But in addition, it is argued that not a single successful bundle exists but, rather, various bundles of HRM practices may each support innovative performance (i.e. equifinality, various paths associated with the same outcome). Consistent (though not direct) evidence on this hypothesis can be found in ARUNDEL et al. (2007) and LORENZ/VALEYRE (2005). They illustrate that innovative work is organised in various ways throughout the European Union and that the observed differences cut across national borders.

In view of the differing theoretical approaches regarding innovation and HRM practices, in this paper we seek to shed light on the question what HRM practices are conducive to radical innovation. By so doing, we disentangle the relative plausibility of the universalistic approach, the configurational approach, and the contingency approach implied by the varieties of capitalism. Our study is linked to the varieties of capitalism approach, our main concept of analysis that we contrast the other theoretical concepts against, in the following way: Firstly, the study measures radical innovation by using radical change as the dependent variable (a typical varieties of capitalism measure). Secondly, to capture the leeway that companies have through their international outreach, the study focuses on US-subsidaries in Europe, countries the varieties of capitalism approach focuses on. Our selection of host-countries incorporates both a typical liberal (UK), coordinated (Germany) and hybrid market economy (Switzerland), thus we test our propositions across the whole spec-

trum of market economies. The additional advantage of considering subsidiaries is that MNCs should choose a country location from which their core business can profit, hence from data about subsidiary companies it should be especially relevant to learn from in terms of how they organise for radical innovation, be it in an institutional approach that generally supports radical innovation such as the UK, or rather not, such as Germany – as predicted by the varieties of capitalism approach.

We recur on a unique data set of 85 US-subsidiaries in three countries, Germany, Switzerland, and the UK, with information on company HRM practices and the importance and frequency of core changes (as a measurement of radical innovation). We use the set-theoretic fsQCA (see RAGIN 1987, 2000, 2008; RIHOX/RAGIN 2009). This method allows us to treat each observation as a configuration (combination of HRM practices), to identify configurations that lead to radical innovative outcomes, and to analyse necessary and sufficient conditions within the configurations. With fsQCA, we also follow previous literature that established the suitability of a set-theoretic approach for organisational research (see FISS 2011; GRECKHAMER et al. 2008; KOGUT/MACDUFFIE/RAGIN 2004).

Our results indicate that radically innovative companies exhibit different configurations of HRM practices and that a number of these are also successful in more than one country. In this sense, the contingency approach is not supported: HRM practices conducive to radical innovation are not fully determined by the institutional environment. Conversely, the results are rather in line with the configurational and somewhat the universalistic approach. Equifinal bundles of practices conducive to radical innovation exist, and these work in different institutional contexts. As suggested by the varieties of capitalism approach for liberal market economies, the measure high numerical flexibility is included in every successful bundle of HRM practices.

The paper is organized as follows: Chapter 6.2 describes the theoretical background and derives the hypotheses. Chapter 6.3 introduces the data set and explains the method of fsQCA. Chapter 6.4 describes the variables and their calibration and presents the results. Chapter 6.5 concludes and outlines both implications and limitations.

6.2 Theory and hypotheses

According to institutional approaches, and the varieties of capitalism in particular, two ingredients are necessary to provide radically innovative companies with a certain level of flexibility for quickly adapting to new situations and business needs: Numerical and qualification-related flexibility (see AMABLE 2003; HALL/SOSKICE 2001; LUNDVALL 1992; NELSON 1993; NOOTEBOOM 2000).

Firstly, radically innovative companies should be able to quickly *adapt their number of employees* to new business demands. Such numerical flexibility largely depends on labour adjustment costs, which are determined by the level of employment protection a country offers (and arguably indirectly via local norms and expectations). While a ‘hire-and-fire’ strategy is possible in liberal market economies such as the UK characterised by low employment protection levels (see OECD (eds.) 2010), coordinated market economies such as Germany – with high employment protection levels – generally impede such a strategy (see HALL/SOSKICE 2001).

Secondly, companies require employees with a qualification level that allows them to flexibly react to new developments and to quickly acquire all necessary knowledge. The varieties of capitalism approach argues that employees with occupational and firm-specific skills (e.g. acquired via dual apprenticeships) facilitate incremental product innovation, as employees have an in-depth knowledge of the company, its products, and its clients. By contrast, employees with general academic skills (e.g. acquired via university education) are able to quickly adapt to new market demands, a skill crucial for *radically* innovative companies that undergo constant and fundamental changes (see CASPER 2007; ESTEVEZ-ABE/IVERSEN/SOSKICE 2001).⁸¹ Thus the US and the UK in particular, with their strong academic (tertiary university/college) educational systems, offer an optimal institutional environment (see OECD (eds.) 2011) for radical innovation, especially compared to countries with strong apprenticeship systems, such as Germany or Switzerland.

Furthermore, even though the varieties of capitalism approach does not extensively focus on company-based training, as the provision of training is not

⁸¹ As we conduct a cross-sector study also including companies without scientific employees, we follow the varieties of capitalism approach (which argues that the overall labour force of a company is the relevant figure) rather than the national systems of innovation literature which focuses mainly on the knowledge base of a company’s scientists.

perfectly measurable at the country level, the institutional environment may influence the amount of company-based training. This in turn may be an alternative or additional aspect of HRM practices linked to radical innovation in different institutional contexts and is hence considered as well. Company provided training is constituted by individual company strategies in terms of giving employees a certain amount of training and thus qualifying them according to company needs. Overall, radically innovative companies in particular may offer a considerable amount of training as they have to quickly adapt to new situations. This fits with HALL/SOSKICE (2001: 30) who suggest that generally in liberal market economies, there may be substantial in-house training. However, especially certain radically innovative companies may rather adapt to new developments by hiring highly-skilled employees whose knowledge fits company needs without much further training. Studies considering innovation also take into account the aspect of training – with mixed results (e.g. see DING/AKHTAR 2001; JOHNSON/BALDWIN/DIVERTY 1996; MAK/AKHTAR 2003; MILES/SNOW 1984).

Finally, also related to qualification and considered for the same reason as the amount of training provided, is the flexibility with which companies assign their employees to different tasks.⁸² Even though the varieties of capitalism approach does not specifically focus on this aspect, we can consider the factor in view of its predictions and other systems approaches. High functional flexibility of employees means being able to perform different tasks both within the same function and between different functions (e.g. see MARSDEN 1999). This should thereby offer companies the possibility of assigning work flexibly within staff's broad occupational skill sets, without losing time seeking new employees (potentially well-suited for incremental innovation). However, this is limited to certain areas of expertise. For totally new ventures (radically innovative), staff with an entirely different profile should rather be required, and hence be hired externally. So when core changes occur often, functional flexibility may not be that advantageous for companies to focus on, e.g. due to cost reasons, although functional flexibility may generally foster innovation. This also fits with MARSDEN (1999, 2000) who argues that due to the qualification background of German employees, jobs are more function-centred. This means that jobs are defined more broadly along certain processes. Conversely, jobs in the UK –

⁸² Studies involving the concept of innovation refer to this aspect (e.g. see MICHIE/SHEEHAN 2003; SCHULER/JACKSON 1987) also.

where according to HALL/SOSKICE (2001) radical innovation should be fostered – are more task-centred and have narrower and more explicit job definitions.

In sum, country-level institutional approaches such as the varieties of capitalism indicate that flexibility in terms of numerical and qualification-related adjustment is crucial for radically innovative companies. As per the varieties of capitalism approach and its core predictions, liberal market economies such as the UK support companies' radically innovative competencies with a strong tertiary education system and low employment protection. Coordinated market economies such as Germany impede companies' radically innovative strategies as they have comparatively few university educated employees and high employment protection (see CASPER/WHITLEY 2004; HALL/SOSKICE 2001; SCHNEIDER/PAUNESCU 2012; SCHNEIDER/SCHULZE-BENTROP/PAUNESCU 2010; WHITLEY 2000, 2002). Therefore, somewhat different and country-specific combinations of HRM practices than in liberal market economies should occur both in the coordinated market economy Germany and Switzerland, which is partly coordinated due to a weak tertiary, university education system and partly liberal due to its low employment protection.

Following the varieties of capitalism's contingency idea that companies adapt to the country-level institutional environment by following the innovation strategy that best fits the country, we hypothesise:

H1): In liberal market economies (UK), radically innovative companies exhibit the country-specific combination of frequent staff adjustments & a high share of university-educated staff, in coordinated market economies (GER) & hybrid market economies (CH) radically innovative companies show other country-specific combinations.

However, following the universalistic approach (see DELERY/DOTY 1996), radically innovative companies should use the same HRM practices independent of the country. The assumption is that a company has a range of choices and a considerable degree of autonomy within a country-specific institutional environment; the company may use the institutionally given country-specific advantages but may also follow different strategies which are not institutionally supported by the country. First results indicating this possibility appear in HERRMANN/PEINE (2011), which shows that radically innovative pharmaceutical companies in Germany also have a high percentage of academic employees, even though the German institutional envi-

ronment does not support that strategy. Thus, recurring on the universalistic approach and taking inspiration from the varieties of capitalism approach central predictions we therefore hypothesise:

H2): Radically innovative companies exhibit frequent staff adjustments & a high share of university-educated staff independent of the country.

Yet alternative to the contingency approach and the universalistic approach is the configurational approach which applied to the question at hand would rather suggest that different bundles of practices are equifinally linked to innovative performance (see DELERY/DOTY 1996 for the concept). Therefore, depending on the configuration in which an HRM practice is embedded in, the HRM practice is conducive to radical innovation or not. Following this approach, we hypothesise:

H3): Radically innovative companies exhibit different configurations of HRM practices independent of the country.

6.3 Data and method

6.3.1 Data

We use data consisting of 85 US-subsidaries located in Germany, Switzerland and the UK. The data was collected in 2010 and 2011⁸³ using a survey mostly sent to 500 randomly drawn high-level subsidiary managers from companies of different sectors per country about which we obtained relevant background information from the Amadeus database (see BUREAU VAN DIJK (eds.) 2009). Overall, 85 replies were obtained, 33 each in Germany and Switzerland, and 19 in the UK. After deleting the observations with missing values, 59 companies remain.

The host-country selection and questionnaire design have been chosen for the following reasons. *Firstly*, the country selection includes the typical (European) cases of the varieties of capitalism for a coordinated market economy (Germany) and a liberal market economy (the UK). In addition, we included Switzerland because it combines both features of a coordinated (strong apprenticeship system) and liberal market economy (low level of employment protection), thus allowing us to further identify the support and obstacles that single institutional features provide. *Secondly*,

⁸³ Due to different development stages of the papers, this paper does not include all UK data as described in chapter 2.

the data contains various company-level HRM variables for measuring the flexibility described in the theory section and variables measuring radical innovation by identifying the importance and frequency of core changes. *Thirdly*, the outcome variable ‘changes’ allows us to analyse the question of radical innovation not only in those sectors that do research and development and produce patents (e.g. pharmaceuticals) but also in the service sector. Further, the idea of change fully corresponds to the theoretical foundation of the varieties of capitalism, and the change variables at our disposal, due to our own survey, are unique and provide in-depth company-level information. *Fourthly*, by focusing on US-subidiaries, we keep the possibly influential factor of a parent company’s nationality (‘home-country effect’) constant.

Although the data is fully appropriate for our research focus, it also has some limitations. The survey’s response rate of 7 percent⁸⁴ is below the usual 10-12 percent response rate for surveys sent to CEOs (at least in the U.S.) (see FISS 2011; GELETKANYCZ 1997). Although the non-response bias cannot be fully avoided, the representativeness of the sample does not limit the validity of the results in the same way that it usually would for the following three reasons (see also FISS 2011): *Firstly*, we are not interested in representative figures for entire sectors or countries but instead in the answers to general questions; which HRM practices are related to radically innovative companies and whether these configurations are country-specific or not. Therefore, the over- or under-representation of certain sectors or company sizes due to response biases would not change the validity of the findings. *Secondly*, non-random samples are common in studies that analyse basic research questions (see DOTY/GLICK/HUBER 1993; FISS 2011), therefore suggesting that fully representative samples are not the most essential factor for those kinds of questions. *Finally*, in contrast to regression analyses, the fuzzy set method does not rely on the assumption that data is representatively drawn from a given distribution (see FISS 2011).

⁸⁴ The exact response rate cannot be determined for the UK due to a different reminder technique, 7 percent refers to responses in Germany and Switzerland.

6.3.2 Method

In contrast to previous literature that relies mainly on cluster or regression analyses, we use the set-theoretic fsQCA to analyse different configurations of HRM practices (see RAGIN 1987, 2000, 2008; RIHOUX/RAGIN 2009) that are related to radically innovative companies. In contrast to conventional statistical approaches, the set-theoretic fsQCA method does not disaggregate cases into single aspects but treats every observation as a configuration, i.e. a combination of particular HRM practices. The method allows us to distinguish between necessary and sufficient conditions. In addition, we can conduct an analysis for the opposite outcome variable (e.g., few or no core changes), also known as causal asymmetry. The underlying intuition is that the causes leading to the presence of an outcome are not the same as those leading to the absence of an outcome (see DOTY/GLICK/HUBER 1993; MEYER/TSUI/HININGS 1993; RAGIN 2008). With fsQCA, we can further analyse whether any particular condition (HRM practice) may have different or even opposite effects, depending on the presence or absence of other conditions (see GRECKHAMER et al. 2008). Such an analysis may possibly explain the differing previous empirical findings on, for example, the numerical adjustment of employees. Finally, we can identify whether various paths are associated with the same outcome ('equifinality'), which is of special interest in the organisation literature and has received increasing attention in the management literature (see FISS 2011).

The application of fsQCA involves four steps. *Firstly*, the dependent and independent measures are calibrated into sets by defining full membership, full nonmembership, and a crossover point of maximum ambiguity regarding membership. *Secondly*, a data matrix (see truth tables A-7 and A-8 in the appendix) is created with 2 to the power of k rows, with k as the number of independent variables in the analysis. Each row is associated with a possible combination of independent variables, and the cases are sorted into these rows, although not every row can always be filled with an empirical observation (i.e., a problem of limited diversity) (see RAGIN 2000). *Thirdly*, the minimum number of cases required for a solution and the minimum consistency level⁸⁵ of a solution is chosen, thus reducing the number of rows.

⁸⁵ Consistency of a configuration can be calculated by dividing the number of cases with a particular configuration but which do not exhibit the outcome by the whole number of cases that exhibit the particular configuration.

The minimum value of consistency is usually 75 percent (see RAGIN 2006, 2008). Due to the small data set, the minimum acceptable solution frequency is in our case set at 1. *Fourthly*, the remaining truth table rows are simplified by algorithms based on Boolean algebra. The current study uses the truth table algorithm described by RAGIN (2005, 2008). The counterfactual analysis can overcome the problem of limited diversity. By using all simplifying assumptions regardless of whether the counterfactual is difficult or easy,⁸⁶ we can create the parsimonious solution. Moreover, by using only simplifying assumptions based on easy counterfactuals, we can create the intermediate solution.

6.4 Results

6.4.1 Variables and calibrations

Outcome

To measure the degree of radical innovation, we create a measure that reflects the importance and frequency of core changes. We asked the subsidiary companies to specify the degree to which they undergo core changes using a 5-point Likert-Scale ('The subsidiary business undergoes core changes from time to time', with 1 equivalent to 'strongly disagree' and 5 equivalent to 'strongly agree').⁸⁷ In addition to the question on the degree of core changes, we also asked companies to estimate how often the subsidiary business encounters core business changes. Three categories were possible: category 1, 1-3 years, category 2, 4-6 years, and category 3, more than 7 years. We used this information to create a new variable (CHANGES) which stresses the importance of radical ('core') changes weighted by their frequency and which is coded the following way (see also table 18):

- Full membership (fuzzy set value of 1) is reached when core changes are high (4 or 5) and the frequency of changes is high (category 1).

⁸⁶ 'Easy' counterfactuals are those that are used to eliminate an 'absent variable' from the solution, e.g. the complex solution shows $A*B*c$, then it is easy to eliminate c . 'Difficult' counterfactuals are those that are used to eliminate an 'existent variable' from the solution, e.g. the complex solution shows $A*B*c$, then it is difficult to eliminate B as existing knowledge would suggest that B should be linked to the outcome.

⁸⁷ Table A-4 in the appendix shows the distribution of the CHANGES variable in the three countries. We find almost every combination in each country, indicating that optimal sorting according to the varieties of capitalism approach does not occur in our sample.

- A fuzzy set value of 0.8 is given when core changes are high (4 or 5) and a frequency category of 2 applies.
- A fuzzy set value of 0.6 is given for high degrees of core changes (4 or 5) and a frequency category of 3 applies.
- A fuzzy set value of 0.4 is given when core changes are lower (1-3) but the frequency is high (category 1).
- A fuzzy set value of 0.2 is given when core changes are lower (1-3) and a frequency category of 2 applies.
- Full non-membership with fuzzy set value 0 is given when core changes are lower (1-3) and a frequency category of 3 applies.

In addition, to analyse what causes lead to the opposite outcome, we created a measure that is the negation of CHANGES.

Causal conditions

As described in the theoretical section, we use five flexibility variables. The first is the degree of numerical adjustment of employees (ADJUSTMENT) using a 5-point Likert-Scale ('Staff numbers are often adjusted according to business needs',⁸⁸ with 1 indicating 'strongly disagree' and 5 indicating 'strongly agree'). The second variable is the qualification level of employees (UNIVERSITY) using a percentage measure from 0-100 percent ('What is the current approximate share of staff with a university degree as their highest qualification'). The third variable is the qualification strategy of the company (TRAINING) using an open scale ('How many days of training did staff receive on average in 2009'). The fourth variable is the variety of tasks employees can perform *within* their function (MULTIPLE TASKS) using a 5-point Likert-Scale ('Most staff are assigned a broad variety of tasks', with 1 meaning 'strongly disagree' and 5 meaning 'strongly agree'). The fifth and final variable is the variety of tasks employees can perform *outside* a single job (CROSS-JOB ASSIGNMENT) using a 5-point Likert-Scale ('Responsibilities for some tasks can be shared by more than one same-level job type', with 1 meaning 'strongly disagree' and 5 meaning 'strongly agree').

⁸⁸ This can include permanent and temporary staff, hence in that sense it should also be possible to be applied in e.g. Germany, although arguably with comparatively more difficulty.

Table 18: Calibrations

CHANGES	real value		fuzzy-set value
	core changes	frequency	
	4 or 5	1-3 years	1
	4 or 5	4-6	0.8
	4 or 5	more than 7	0.6
	1,2 or 3	1-3 years	0.4
	1,2 or 3	4-6	0.2
	1,2 or 3	more than 7	0
ADJUSTMENT	real value		fuzzy-set value
		5	1
		4	0.75
		3	0.5001
		2	0.25
	1	0	
UNIVERSITY	real value		fuzzy-set value
		100	1
		36	0.5001
		14	0
TRAINING	real value		fuzzy-set value
		8	1
		4.5	0.5001
		1.5	0
MULTIPLE TASKS	real value		fuzzy-set value
		5	1
		4	0.66
		3	0.33
		2	0
CROSS-JOB ASSIGNMENT	real value		fuzzy-set value
		5	1
		4	0.75
		3	0.5001
		2	0.25
		1	0

Note: For further information on the variables and value distributions of the variables CHANGES, UNIVERSITY and TRAINING, see appendix (tables A-4 – A-6).

Source: Own data.

The 5-point Likert-Scales CROSS-JOB ASSIGNMENT and ADJUSTMENT were calibrated by coding membership as ‘fully in’ for a response of 5, and ‘fully

out' for a response of 1. The crossover point was the middle of the scale (3).⁸⁹ As MULTIPLE TASKS includes only answers from 2 to 5, we calibrated the crossover point as 3.5, and the membership as fully out for a response of 2. For the continuous variables, UNIVERSITY and TRAINING, we chose the 75th percentile or higher as fully in, and the 25th percentile or lower as fully out. The crossover point was the median value (see table 18).

6.4.2 Analysis

The truth tables (tables A-7 and A-8 in the appendix) show the different configurations of causal conditions in our sample. By setting the consistency cutoff at the threshold of 0.80, the number of rows is reduced and the remaining truth table rows are simplified by algorithms based on Boolean algebra. We use the notation introduced by RAGIN/FISS (2008). Black Circles (●) indicate the presence of a condition, and circles with X's (⊗) indicate its absence. Blank spaces indicate a 'don't care' in which the causal condition may be either present or absent. Large circles indicate core conditions, i.e., those that also feature in the parsimonious solution. Small circles indicate peripheral conditions that feature in the complex and intermediate solution but not in the parsimonious solution.

The fsQCA shows the following: ADJUSTMENT is an INUS condition, the condition is insufficient by itself but necessary, meaning that it is present in all unnecessary but sufficient configurations associated with CHANGES. Additionally, the analysis of sufficient conditions (table 19) shows various findings to be mentioned.

Firstly, no single condition is sufficiently related to CHANGES. Instead, three causal paths emerge from the analysis, each consisting of a number of HRM practices. This finding rather supports the configurational approach (*hypothesis 3*) – various combinations of practices may each be sufficiently related to radical change (equifinality).

Secondly, causal paths 1 and 2 are exemplified by cases from different countries. Specifically, the ideal type cases underlying causal path 1 consist of two subsidiaries from the UK, four from Germany and three from Switzerland. Similarly, the ideal type cases underlying causal path 2 consist of three subsidiaries from Ger-

⁸⁹ As analysing cases with scores of exactly 0.5 is difficult, RAGIN (2008) recommends avoiding the use of a precise 0.5 membership score for causal conditions. We added a constant of 0.001 to the causal conditions with the value of 0.5 (see also FISS 2011).

many and one from Switzerland. Only causal path 3 is a national path, capturing just one ideal type case from the UK (exhibiting rather liberal HRM practices). Thus, national institutions do not appear to matter much for the configurations sufficiently related to radical change, which therefore contradicts our *first hypothesis*.

Table 19: Configurations for high values of CHANGES (many core changes and high frequency)

	1	2	3
ADJUSTMENT	●	●	●
TRAINING		⊗	●
UNIVERSITY	●	●	
MULTIPLE TASKS	●		●
CROSS-JOB ASSIGNMENT		⊗	⊗
consistency	0.85	0.82	0.77
raw coverage	0.37	0.26	0.19
unique coverage	0.13	0.07	0.05
overall solution consistency	0.81		
overall solution coverage	0.49		
	2 UK		1 UK
	4 GER	3 GER	
	3 CH	1 CH	
cutoff: 0.805			

Note: Assumptions applied: ADJUSTMENT and UNIVERSITY.

Source: Own data.

Thirdly, the configurations of HRM practices included in paths 2 and 3 overall do not reflect the underlying institutional environment and even contrast the institutional environment in certain aspects. In particular, causal paths 1 and 2 involve frequent adjustment of personnel, rather an absence of much company-provided training, and a strong reliance on university training. The first and latter of those are HRM practices dominantly supported by the institutional framework of liberal market economies. That the ideal cases underlying causal path 2 are all from Germany, the typical example for a coordinated market economy, and Switzerland, which exhibits features of both coordinated and liberal economies, is surprising.

Table 20: Configurations for CHANGES negated

	1	2	3
ADJUSTMENT	⊗		●
TRAINING		●	●
UNIVERSITY	⊗	⊗	
MULTIPLE TASKS	●	⊗	⊗
CROSS-JOB ASSIGNMENT	⊗	⊗	●
consistency	0.82	0.82	0.86
raw coverage	0.22	0.21	0.03
unique coverage	0.09	0.22	0.08
overall solution consistency	0.82		
overall solution coverage	0.39		
	2 GER	1 UK 2 GER 1 CH	1 UK 1 CH
cutoff: 0.817			

Note: Assumptions applied: ADJUSTMENT and UNIVERSITY.

Source: Own data.

The results therefore (apart from contradicting the first hypothesis) overall support the *second, universalistic, hypothesis* in so far that radically innovative companies show a high numerical and qualification-related flexibility in terms of university-educated staff (here in one case a ‘don’t care’ applies). In this sense there is compatibility with the idea of complementary bundles proposed in the varieties of capitalism approach as well, however independent of the country’s institutional environment, thus also supporting the configurational approach.

Fourthly, it should be noted that a variety of HRM practices are compatible with radical innovation. Only one practice, a strong numerical adjustment of personnel, is part of all the three causal paths we discovered. In the four other causal conditions, however, both the absence and the presence (or ‘dont care’) were observed to be sufficiently related to a positive outcome. Thus, an educational system based on either academic (tertiary/university) or non-academic training may lead to a positive outcome. Also the presence and absence of company-provided training is

possible when taking all three configurations into account. And the absence of cross-job assignments is generally associated with radical innovation across paths and countries, as well as generally the presence of multiple tasks – although regarding each element one path includes a ‘don’t care’ in this respect. Thus, these findings support the *third, configurational, hypothesis*.

The differences between the configurations already suggest that the effect of a causal condition depends on its combination with others, shifting attention towards an asymmetric understanding of causality. We therefore conduct fuzzy set analyses for the negated values of CHANGES, exhibiting the following solutions (table 20).

Our analysis shows that the same conditions that in the previous analysis led to the outcome CHANGES (such as a high degree of numerical flexibility) may also be sufficiently related to the negated outcome. Due to the symmetry of relationships in regression models, this analysis would not be possible with standard regression analyses (see FISS 2011). A number of findings stand out. For example, causal path 1 is followed by ideal type cases from Germany. Causal paths 1 and 2 involve the absence of university graduates. Overall, however, the findings from the negated outcome do not contradict the findings from our previous analysis. Given the low solution coverage, the absence of radical changes – and thus radically innovative performance – is obviously much less well explained by the HRM practices analysed here than the positive outcome.

6.5 Conclusion

This paper analyses the question how radically innovative US-subsubsidiaries organise in Germany, Switzerland, and the UK. Using fsQCA, we identify company-level configurations of the HRM practices of radically innovative companies. We find different equifinal configurations with a high degree of core changes. Not all configurations are country-specific, thus suggesting that the institutional environment does not fully determine the HRM practices at company level and thus supporting the universalistic approach, yet no single variable is sufficient but configurations of practices apply. We find different combinations of HRM practices which are associated with radical innovation, thus supporting the configurational approach. However, also per the varieties of capitalism approach one can predict specific combinations of HRM practices to provide comparative advantage, although the ones found here are

not entirely as one may predict according to this lens. In every configuration we find a high numerical adjustment of employees as one component which is conform to the varieties of capitalism approach. But we also find a configuration which may not include a high percentage of university graduates.

In sum, the results indicate that there are systematic paths that lead to firms being more or less radically innovative and they are rather not determined by the institutional environment at the country level. This implies the importance of company leeway in determining practices within different institutional settings. The matter should be followed up in future studies with extended measures of innovation and a bigger sample size.

This study has several limitations. We only measure the degree of radical innovation in terms of changes, the major and more and more important innovation determinant we identified. This approach allows us to analyse companies in different sectors, including those that are usually not characterised by high patent outputs or R&D investments. Furthermore, this analysis focuses on certain measures only, partly due to our limited sample size and partly, because we had to keep the questionnaire short. It would also be fruitful to include a performance measure in this context which could be followed up in future studies. Finally, the limited sample size does not allow illustrating all possible configurations associated with radically innovative and non-radically innovative subsidiaries. However, the analysed configurations suffice the aim of the study, to improve our knowledge on the relationship between HRM practices and innovations in general and in terms of a combined perspective of company-level organisational and country-level institutional variables.

Chapter 7

The location of the creative class and US-subsidaries in the coordinated market economy Germany

(joint work with Moira Conway)

Abstract

This paper analyses in how far US-MNCs locate subsidiaries in need of creative staff in State locations in the coordinated market economy Germany that fulfil the criteria of FLORIDA's creative class concept to a high extent. Such locations should provide an especially attractive location for certain staff, 'creatives', which should be of special interest to US-subsidaries in need of such. Analysing US-subsidaries that were established since the year 2000 and with more than 50 staff with a regression analysis, we find support for our propositions that rather non-'manufacturing' and organisationally higher rank subsidiaries with a need for urban infrastructure and connectedness are located in creative class States in Germany.

Keywords: *creative class, varieties of capitalism, Germany, US-subsidaries, location*

7.1 Introduction

In this paper, we apply the creative class concept (e.g. see FLORIDA 2002) to the analysis of different US-subsidaries located in the coordinated market economy Germany (see HALL/SOSKICE 2001). We analyse the question in how far US-subsidaries in need of creative skills are located in more creative German State locations.

The creative class concept as brought forward by FLORIDA (e.g. 2002) has been discussed in a number of papers concerning its applicability in European countries. Here, mixed results for applying FLORIDA's concept to European countries are

found. However, the creative class concept has not yet been used in connection with the question of US-MNCs placing subsidiaries in need of creatives in locations that according to FLORIDA's concept transferred to Germany constitute a rather creative location. Thereby, we pick up on a so far underexplored aspect in terms of MNC location decisions. Differences in terms of individual foreign subsidiary needs and characteristics regarding its location within a chosen country have not been thoroughly examined. Rather, one has examined regional characteristics and their general attractiveness as determined by certain factors (e.g. see COUGHLIN/SEGEV 1999; GUIMARÃES/FIGUEIREDO/WOODWARD 2000). However, one can refer to e.g. WINDSPERGER (2006: 22), who when analysing MNC headquarter locations in Vienna, argues that 'a multinational firm will invest in a certain location if the location-specific resources lead to competitive advantages compared to investments in another location'.

Our question is especially important to analyse regarding US-companies in Germany. *Firstly*, US-companies invest considerable FDI in Germany (e.g. see INSTITUT FÜR WELTWIRTSCHAFT (eds.) 2012) and may especially be inclined to locate subsidiaries in need of environments such as described by the creative class concept in locations that bear somewhat of a resemblance to such locations in the USA. *Secondly*, this question is a central one to be considered because although human capital is an attractive factor for US-companies generally regarding the location Germany (see ENGLISCH 2011: 12), arguably especially regarding specific, occupational skills (see ESTEVEZ-ABE/IVERSEN/SOSKICE 2001; HALL/SOSKICE 2001), one should not find creatives, as defined in the concept by FLORIDA (2002) – in its core many highly university educated staff such as engineers and people holding certain creative jobs such as in management – everywhere in Germany due to their dispersion and comparatively generally low prevalence (see BERLIN-INSTITUT FÜR BEVÖLKERUNG UND ENTWICKLUNG (eds.) 2007). Therefore, US-subsidaries in need of creatives should be able to hold such staff more successfully in creative locations, especially given the general low job mobility of workers in Germany (e.g. see OECD (eds.) 2010).

Hence, US-subsidaries with certain characteristics should purposefully locate in some regions in Germany rather than others, i.e. the ones attractive to the creative

class/potential creative staff, here referred to as creatives,⁹⁰ if they are in need of such.

While recurring on database and further information gathered via internet searches about US-subsidiaries, we identify three key characteristics by which we distinguish whether subsidiaries should rather be in need of creative class staff, their main business sector, organisational rank and need for links with the external environment.

We only analyse US-subsidiaries that have been founded or incorporated into US-ownership since the year 2000, to as much as possible exclude the potential effect that such subsidiaries could have on constituting the development of creative locations in the first place. Our findings indicate support for our hypotheses, more non-‘manufacturing’, hierarchically high-level US-subsidiaries and with a higher need to be connected with the outside environment are located in creative German State locations, our level of analysis for assessing creative locations.

In the following, we proceed like this: Firstly, in the theory section (chapter 7.2) we outline the location Germany in terms of its skill system and regional differences, then we consider how the creative class concept can be applied to the location Germany, and finally, we derive our hypotheses in regard to different US-subsidiaries’ location choices. In chapter 7.3 we outline the data operationalisation and results, and end with our conclusion in chapter 7.4.

7.2 Theory and hypotheses

7.2.1 The location Germany and its skill system

Since as per FLORIDA (2002) people holding certain creative jobs constitute the creative class (first of all regardless of education), however, regarding which many should be linked to having a University degree, it is of importance to outline the German skill system before further going into detail regarding the concept of the creative class and its location within Germany. Firstly, it should be noted in this context that Germany with its roughly 82 million inhabitants in the centre of Western

⁹⁰ Examples for creatives (in German job categories) can be found as operationalised by the BERLIN-INSTITUT FÜR BEVÖKERUNG UND ENTWICKLUNG (eds.) (2007: 30) – this includes both people with a university degree (e.g. highly creatives such as engineers and architects), and in certain creative jobs (and not necessarily university educated) such as technical jobs and others.

Europe spreads out over a size of about 357,000 square kilometres (see STATISTISCHE ÄMTER DES BUNDES UND DER LÄNDER (eds.) 2012) and consists of 16 States which are federally governed – thereby Germany is much smaller than for example the USA, however it is one of the bigger Western European countries.

For characterising the location Germany and its skill system, we refer to the varieties of capitalism approach (see HALL/SOSKICE 2001) because it distinguishes market economies according to their degree of market coordination whereby education and skills are one of the key spheres of consideration. Germany, as a typical example of a coordinated market economy (and in contrast to the USA), exhibits a skill system producing predominantly firm and industry specific skills acquired via the dual apprenticeship system (see ESTEVEZ-ABE/IVERSEN/SOSKICE 2001; HALL/SOSKICE 2001). About 70 percent of German school leavers not enrolling in higher education enter apprenticeships (see STEEDMAN 2010: 23). These apprenticeships span from ‘manufacturing’ occupations to various administrative and service related ones (e.g. see BUNDESMINISTERIUM FÜR BILDUNG UND FORSCHUNG (eds.) 2003 for most prevalent examples). In terms of what sectors typical skills in Germany should foster when following the varieties of capitalism idea (see HALL/SOSKICE 2001), an example would be medium technology manufacturing businesses.

Furthermore, as university type education is comparatively less prevalent in Germany (opposed to the dual apprenticeship system), the dispersion of this education needs to be mentioned. Since Germany is a federal State country and education is mainly dependent on German State legislation (see HIPPAH-SCHNEIDER/KRAUSE/WOLL 2007), differences can be found on the State level. For example, the overall university research intensity varies across States in Germany (see STIFTERVERBAND FÜR DIE DEUTSCHE WISSENSCHAFT e.V. (eds.) 2010). Also, in the State of Baden-Württemberg (and some others) there are especially many ‘duale Hochschulen’ (see STIFTERVERBAND FÜR DIE DEUTSCHE WISSENSCHAFT E.V. (eds.) 2011), a specific form of State University education where a general classroom education is combined with practical work experience periods (see HIPPAH-SCHNEIDER/KRAUSE/WOLL 2007: 33, 34). Given the above mentioned exemplary regional differences and paired with the fact that the population in Germany is generally less mobile in terms of jobs (see OECD (eds.) 2012), this provides a further indication for the importance of analysing our research question.

7.2.2 *The creative class concept and its application to the location Germany*

The creative class concept (e.g. see FLORIDA 2002) has been chosen as a framework of analysis as it helps us to examine why US-subsidaries may locate in certain places within Germany. The concept offers a unique approach concerning the analysis of (highly skilled) creative staff and locations, and factors that are not commonly taken into account in this context, thereby going beyond standard indicators such as economic prosperity, (see BERLIN-INSTITUT FÜR BEVÖLKERUNG UND ENTWICKLUNG (eds.) 2007). Firstly, we will briefly explain the concept and subsequently, we review some recent literature regarding the creative class in Europe, and explain why the concept is suitable as a lens of analysis in our paper.

According to FLORIDA, there is a creative class who are attracted to certain locational amenities, he identifies these as *technology, talent and tolerance*. There are different indicators to assess these three key factors. For technology, high-technology and innovation measures are considered; for talent the share of highly educated inhabitants in a defined area and the share of staff working in (highly) creative jobs; and for tolerance e.g. the share of foreign-borns in the population, homosexuals and bohemians (e.g. musicians, writers etc.) or other openness measures are typically examined (e.g. see BERLIN-INSTITUT FÜR BEVÖLKERUNG UND ENTWICKLUNG (eds.) 2007; FLORIDA/TINAGLI 2004). In summary FLORIDA (2002) argues that the creative class seeks cultural diversity, academic achievement, and the presence of high-technology companies. Creatives seek specific amenities and are attracted to regions with these amenities. An example is the Texan city of Austin in the USA (see FLORIDA 2003). FLORIDA has thereby identified locations inhabited by creatives that in turn should be highly attractive for certain companies.

Commonly it is distinguished between a core of creatives who produce new ideas and creative professionals working in knowledge-based jobs – bohemians who work in arts and culture are sometimes analysed separately. Jobs should follow these groups to cities that are appealing to the creative class according to FLORIDA (2002). And especially in times of changing demographics and increasing skill shortages subsidiaries need to consider such location amenities and attractiveness when deciding where to locate we argue. As FLORIDA puts it, ‘places have replaced companies as the key organizing units in our economy’ (FLORIDA 30: 2002).

Researchers have begun to examine FLORIDA's concept in various locations, outside the USA, including Europe. It has been argued that more empirical research is necessary to examine theories of creativity (see MARTIN-BRELOT et al. 2010; POHL 2008). Previous empirical research has also identified some communalities and differences between the creative class as examined by FLORIDA in North America and in Europe. For example, CLIFTON (2008) generally finds support for the creative class theory in the UK. FRITSCH/STÜTZER (2007: 15) find for Germany that 'good employment opportunities have only a relatively weak impact. Regions with a high share of creatives tend to have an above average level of new business formation, a high level of innovation and a relatively high share of employees in high-tech industries.' MARTIN-BRELOT et al. (2010) argue that Europeans are tied to place and the mobility is more localised. This fits to the finding that generally job mobility in Germany is low (see OECD (eds.) 2012). And in turn, creative class locations should be important for retaining certain creative people rather found in some locations within Germany. Furthermore, BOSCHMA/FRITSCH (2009) find that there are differences in the role of creative class in various countries in Europe. They argue that, among other topics, more research is needed to examine the relationships between national characteristics. Our project seeks to build on this past empirical work, and examine the relationship between creativity and US-subsidaries in Germany while taking account of the specificity of Germany. Our approach, ties between US-subsidaries of varying organisational characteristics and creative class locations, has not yet been examined.

7.2.3 Different US-subsidaries' location choices

Putting the pieces together, the following emerges: As per the varieties of capitalism approach (see HALL/SOSKICE 2001) Germany's dominant skill advantages are considerably determined by specific occupational skills, e.g. in 'manufacturing' and operating in medium rather than high-technology. These are not specialisations that should typically match the creative class because in creative class environments high-technology should be fostered (if technology-focused) and generally not much operational work. This is compatible with the varieties of capitalism idea (see HALL/SOSKICE 2001) in so far that different types of market economies offer specific comparative advantages which are each successful, and Germany as a coordinated market economy should offer different ones than for example the USA – thus

FLORIDA's concept which was developed in the North-American context may take certain parameters into account that do not for example consider typical German structures, e.g. skill structures (the benchmark of having a bachelor's degree is used in the talent index, next to the share of people holding creative jobs (e.g. see FLORIDA/TINAGLI (2004) but Germany's most prevalent education constitutes structured (three year) apprenticeships). However, for our analysis of different US-subsubsidiaries in need of skills and staff not dominantly found in Germany, FLORIDA's concept is helpful because it specifies environments and parameters where such staff may be found. Furthermore, there are also a number of creative skill advantages present in Germany as defined by FLORIDA, provided by certain vocational education (e.g. non-production apprenticeships in management) and University education that should match creative occupations well, such as in (certain) 'services' which is a major business sector in Germany as in other countries (e.g. see STATISTA (eds.) 2012 a, b, c). Further, there are regional differences in terms of skills within Germany. FLORIDA's (2002) concept of the creative class offers us a framework to establish in more detail what type of subsidiaries may be attracted rather to some and not other locations within Germany. Especially since in Germany there are comparatively few creatives as per FLORIDA's (e.g. 2002) concept⁹¹ (see BERLIN-INSTITUT FÜR BEVÖLKERUNG UND ENTWICKLUNG (eds.) 2007), and the creative class in Germany is unequally distributed (see FRITSCH/STÜTZER 2007), it is even more important for US-subsubsidiaries in need of creative staff to locate in a place in Germany where creatives reside.⁹² By considering what type of subsidiary-company would profit most from a creative class of people to draw most of its employees from, and assuming that MNCs will as much as possible want to strategically place subsidiaries in locations where maximum advantage can be gained, we can identify

⁹¹ Very recently FLORIDA (e.g. 2012) has brought forward a revised version of his original approach. Here, e.g. the share of talent incorporates a wider definition of with what (tertiary) educational qualification one is counted as being creative. Also for the share of people working in creative jobs, e.g. Germany scores about double than previously reported by FLORIDA and others (e.g. see BERLIN-INSTITUT FÜR BEVÖLKERUNG UND ENTWICKLUNG (eds.) 2007 (for 2005), FLORIDA/TINAGLI 2004 (for 2000) versus FLORIDA 2012 (for 2004-2007) – whether also here assessments have changed is not readily observable. The original and well discussed key approach and operationalisation by FLORIDA (e.g. 2002) (and the closely associated operationalisation by the BERLIN-INSTITUT FÜR BEVÖLKERUNG UND ENTWICKLUNG (eds.) 2007 and findings) remain the reference point for our paper.

⁹² Attractive locations for the creative class should be determined by talent, technology and tolerance (as described earlier), hence we refer to overall location assessments regarding their creative potential to determine which location subsidiaries in need of creatives should be attracted to.

characteristics by which to distinguish companies that should rather profit more or less from certain locations and hence be located accordingly within Germany.

We identify three key characteristics in this first analysis of its kind. *Firstly*, a broad distinction of whether the subsidiary is rather focused on ‘manufacturing’⁹³ or not, thereby operating – broadly speaking – in services, is applied. Subsidiaries in need of creative people as defined in FLORIDA’s concept should rather not operate in ‘manufacturing’ and thereby be located in creative locations we argue. Subsidiaries whose main business is in a non-production related area should need to rely more on creative staff (see also what jobs are commonly defined as creative talent, production work is not among them, e.g. see BERLIN-INSTITUT FÜR BEVÖLKERUNG UND ENTWICKLUNG (eds.) 2007).

Secondly, subsidiaries with a rather operational focus, be it in ‘manufacturing’ or ‘services’, should also in their core not be that much dependent on creative class staff as per FLORIDA’s concept. Here, rather less creative staff should suffice. However, on the other hand, the higher the subsidiary’s rank, the more the subsidiary should require staff that should be found more among creative people as defined here. For example, a US-subsubsidiary with a number of subsidiaries itself may constitute a regional headquarter or business function head office and in turn rather employ staff of the creative kind.

And thirdly, subsidiaries with more of a need to engage with the outside environment, for example with external stakeholders such as clients (who in turn should often belong to the creative class themselves), should require more creatively skilled staff in such subsidiaries. This is opposed to purely internal operations or such that do not require direct and relatively frequent interactions with potentially more strategic stakeholders, and therefore may well be carried out in locations not that frequented with creatives.

Based on these deductions, the following hypotheses will be tested:

⁹³ Even though there may be differences in specialisation and need for creatives within this broad industry distinction, it should suffice as a proxy in this study based on macro-indicators. A subsidiary with manufacturing operations should mainly have operational staff on site – not overall creative as such as per FLORIDA’s (2002) concept – not engineers or researchers. Within services there can of course also be differences in terms of how creative staff is required to be, however, as per the jobs counted as creative, there are generally more that can be summarised under services (e.g. see BERLIN-INSTITUT FÜR BEVÖLKERUNG UND ENTWICKLUNG (eds.) 2007), hence we apply this broad distinction between manufacturing and services.

H1): More non-manufacturing US-subsidaries are located in creative locations in Germany.

H2): The higher the organisational rank of US-subsidaries, the more creative is their location in Germany.

H3): The higher the need to connect with the outside environment for US-subsidaries, the more creative is their location in Germany.

7.3 Data and results

7.3.1 Operationalisation

Data sources

For our analysis, we use information about US-companies located in Germany gathered from the Amadeus database⁹⁴ (see BUREAU VON DIJK (eds.) 2009) and information gathered via internet searches (such as for example the size of the town/city individual subsidiaries are located in). Firstly, we concentrate on subsidiaries where more than 50 percent are held by US-companies in direct ownership. Furthermore, in order to ensure we only consider active subsidiaries that were founded recently, we excluded all companies there were founded before the year 2000 and which were indicated to be inactive. And we only consider companies with more than 50 staff, in order to ensure a certain consistency and comparability in terms how established the subsidiaries are.⁹⁵ This leaves us with overall 157 US-subsidaries for our analysis.

Dependent variable (subsidiaries' locations within Germany in terms of creativity)

The dependent variable, in how far the US-subsidaries are located in a more or less creative location in Germany, is operationalised with the help of an established measure. To maintain a standard definition of creativity in Germany, our project utilises the creative index operationalisation by the BERLIN-INSTITUT FÜR BEVÖLKERUNG

⁹⁴ The list with the queried US-subsidaries in Germany (the first step that was involved for identifying the subsidiaries to be contacted for the main survey as described in chapter 2) was used as a basis for filtering according to our criteria, this partly involved 'manual' filtering with the end result of detecting 157 applicable cases.

⁹⁵ By focusing on companies with this staff threshold, we should also ensure that we only consider subsidiaries actively operating and in commercial operations, therefore the headcount threshold serves as a quality-control measure without analysing each single subsidiary.

UND ENTWICKLUNG (eds.) (2007). In their report, German State locations are assessed against the creative class concept, however with some necessary country-specific adaptations in terms of operationalisation (e.g. assessing tolerance rather in terms of certain political opinions, see BERLIN-INSTITUT FÜR BEVÖLKERUNG UND ENTWICKLUNG (eds.) 2007).

An overview of which creativity rank the different German States hold in this framework is displayed in table 21.⁹⁶

Table 21: Ranking of German State locations as per their creativity (2005)

rank	German State
1	Berlin
2	Hamburg
3	Baden-Württemberg
4	Bayern
5	Hessen
6	Bremen
7	Nordrhein-Westfalen
8	Niedersachsen
9	Rheinland-Pfalz
10	Schleswig-Holstein
11	Saarland
12	Sachsen
13	Brandenburg
14	Thüringen
15	Sachsen-Anhalt
16	Mecklenburg-Vorpommern

Source: Based on the BERLIN-INSTITUT FÜR BEVÖLKERUNG UND ENTWICKLUNG (eds.) 2007: 20.

It becomes evident that not only generally economically highly successful States are in the top ranks, such as Berlin (see e.g. BERLIN-INSTITUT FÜR BEVÖLKERUNG UND ENTWICKLUNG (eds.) 2007 for the specificities of Berlin). This fits to KRÄTKE's (2010) point that the dealer (creative) class is not crucial for sustainable economic patterns in Germany – which is not surprising in the sense that in Germany, also 'non-creative' businesses as per FLORIDA's (2002) definition should be relatively strong. However, locations such as Berlin may be highly attractive for

⁹⁶ This ranking is the outcome of assessing how the different States fare in terms of the aspects technology, talent and tolerance, which together should determine a creative location and in turn such should be highly attractive for creatives (the ones already there and for others).

certain US-subidiaries as a location, e.g. operating in media, consulting or commercial art activities.

That State locations are the unit of analysis here⁹⁷ for assessing subsidiaries' location creativity we regard as an adjustment that takes account of the specificity of the location Germany. Geographic space and distance in Germany is, compared to the USA, much smaller; individual towns and cities are located much closer together and there is a tendency of regional centres consisting of more than one city, often within the same State (e.g. Köln-Bonn-Düsseldorf) (see BUNDESAMT FÜR BAUWESEN UND RAUMORDNUNG (eds.) 2009). And since generally people are tied to place and their mobility is more localised in Germany, as well as in other places in Europe (see MARTIN-BRELOT et al. 2010 for analysing different European cities and creatives) – which HANSEN/NIEDOMYSL, regarding Sweden, (2009: 191) put in a nutshell as 'the creative class people move for jobs rather than place' – people may well reside in one location within a State and commute to another town within it for work, thus we have chosen the State level for our analysis.

Independent variables

For hypothesis 1, regarding subsidiaries' main business operations ('manufacturing' or not), we take the industry code information from the database. By taking into account the first two digits of the NAICS industry codes (see U.S. CENSUS BUREAU (eds.) 2011a), we can identify subsidiaries operating in 'manufacturing' by their codes beginning with either 31, 32 or 33. All other industry codes signify a non-'manufacturing' related core business, i.e. broadly speaking from within the service sector. For the second independent variable, according to hypothesis 2, the organisational rank of the subsidiary, we can also use information directly from the database, namely how many subsidiaries the subsidiary itself has. This should give us a proxy for the organisational rank of the subsidiaries we focus on. Furthermore, for the propositions regarding subsidiaries differing in terms of the need to connect to the outside environment, i.e. need access to certain structures (e.g. meeting opportunities) that bigger cities or towns should provide, we can use two measures to operationalise hypothesis 3. Firstly, as a direct measure, according to the address information that we have for each subsidiary in our sample, we gathered information about whether the subsidiary is located in a city, which is according to the German

⁹⁷ FLORIDA (2003) himself also talks about regions, not only cities.

definition a settlement entity with or more than 100,000 inhabitants (see GABLER WIRTSCHAFTSLEXIKON (eds.) 2012). And we establish whether subsidiaries are located rather in cities or towns with a commercial airport or not (determined via internet searches), to capture an additional aspect of structural connectedness and geographical access that US-subsidiaries with a higher need for creative staff should be able to overall benefit from more when located in a city with such. This should not only be beneficial for travelling purposes, but also generally provide an indication for cities having an overall bigger interchange of people and meeting places for such which should be beneficial for creative purposes.

Control variable

We control for the fact that some German States are so called ‘Stadtstaaten’ (see DUDEN (eds.) 2012), in short and regarding the relevance here this means that the whole State consists of one city, and these happen to be bigger than 100,000 inhabitants (Berlin, Hamburg and Bremen). This is operationalised with a dummy variable.

7.3.2 Descriptive statistics

Table 22 provides an overview over the operationalised variables and their characteristics in the sample.

Table 22: Descriptive statistics

	mean	standard dev.	min.	max.
subsidiaries’ creative class location	5.9	3.2	1	16
manufacturing subsidiary rank	0.3	0.5	0	1
city	1.0	1.7	0	11
with airport	0.5	0.5	0	1
city State	0.4	0.5	0	1
	0.1	0.3	0	1

Source: Based on Amadeus and other compiled information.

The subsidiaries’ creative class location value range corresponds to the amount of German States, the higher equals the least creative (possible values between 1 = most creative and 16 = least creative). The mean score is about 6, so rather creative, but as the standard deviation of where the US-subsidiaries are located indicates, there are some differences. About a third of the subsidiaries in the sample

belong to the sector ‘manufacturing’ (1 = yes, 0 = no). And the average sample subsidiary has 1 subsidiary itself, with values ranging from 0 to 11. Also about half of the subsidiaries are located in cities (1 = located in a city, 0 = not). As the dummy variable of whether there is an airport (1 = yes, 0 = no) indicates, in about 40 percent of the cases there is an airport. Also, there are 10 percent ‘Stadtstaaten’ locations in the sample of US-subsidiaries (1 = subsidiaries reside in a ‘Stadtstaat’, 0 = not).

7.3.3 Correlations

As a first indication of the variables under analysis, we conduct a correlation analysis (see table 23). We find a first indication that there is a link between the subsidiaries’ (creative class) location and whether the subsidiary operates in ‘manufacturing’ (0.2), whether there is an airport in the subsidiary town/city location (-0.2) or whether the subsidiary is located in a city (-0.3), all statistically significant except for the subsidiary rank variable (-0.1). The proposed directions of the relationships are as suspected, e.g. the less creative the subsidiary location, the more subsidiaries operate in ‘manufacturing’, and the less are subsidiaries in cities and in locations with an airport. Beyond these first indications, the regression analysis can provide further insight when the different variables are considered at the same time, including the control.

Table 23: Correlation analyses: Subsidiaries’ location creativity and attributes

	subsidiaries’ creative class location
manufacturing	0.2***
subsidiary rank	-0.1
city	-0.3***
with airport	-0.2***
city State	-0.4***

Note: *** significant at 1%, ** significant at 5%, * significant at 10%.

Source: Based on Amadeus and other compiled information.

7.3.4 Regression analysis

The applied OLS regression with subsidiaries' creative class location rank as the dependent variable and an R-Squared of 0.24 – illustrating that around 24 percent of the subsidiaries' location variation is accounted for by our model – indicates the following (see table 24): There is a statistically significant positive relationship between 'manufacturing' US-subidiaries and being located in less creative States in Germany, hence non-'manufacturing' subsidiaries are rather located in creative States in Germany where there should be more creatively skilled people available to work for the subsidiaries. Thereby our *first hypothesis* is supported. Regarding our *second hypothesis*, we also find support. There is a statistically significant negative relationship between subsidiaries with a higher organisational rank, i.e. having more subsidiaries themselves, and being located in a rather non-creative State location in Germany. Hence, the higher the subsidiary rank, the more they are located in a rather creative location where more creatively skilled people should be available as staff, as predicted.

Table 24: OLS regression analysis: Subsidiaries in differently creative States

	coefficient	robust standard error
N = 157 R-Squared: 0.24 prob > F = 0.00		
manufacturing subsidiary rank	1.02*	0.55
city with airport	-0.21**	0.10
city State	-1.33**	0.58
constant	0.56	0.57
	-4.20***	0.41
	6.56***	0.46

Note: *** significant at 1%, ** significant at 5%, * significant at 10%.^{98 99 100}

Source: Based on Amadeus and other compiled information.

And lastly, regarding *hypothesis three*, our result is twofold: In regard to the measure of US-subidiaries with a higher need to be connected with the outside envi-

⁹⁸ We apply a multicollinearity check, and all values are sufficiently low (2.62 and below).

⁹⁹ For robustness, we run the model without the city State location subsidiaries, results are confirmed.

¹⁰⁰ As the dependent 'rank' variable has a range of 16 possible values and to a number of ranks not more than 25 subsidiaries' locations can be attributed (see BACKHAUS et al. (2003: 470) for recommending to have no less than 25 observations per dependent variable value for e.g. a logit model – which could generally be, as ordered logit, or (but with the same issue) ordered probit, an alternative with ordinal dependent variables), an OLS regression is considered appropriate.

ronment and hence be in a more urbanised location, the direct measure of being located in a city is supported. There is a significantly negative relationship between subsidiaries in cities and the dependent variable, i.e. rather subsidiaries in creative States reside in cities. However, there is no statistically significant relationship between subsidiaries being located in a more creative location with the variable ‘airport’ in the regression, not as suggested. Thereby we have mixed evidence for our third hypothesis. And controlling for whether the subsidiaries are located in German State locations that are ‘Stadtstaaten’, there is a statistically significant (negative) relationship with the dependent variable found in our model, i.e. significantly more US-subsidiaries located in a city State location are located in creative State locations. Based on the finding that Berlin and Hamburg have top ranks in the applied creative class State location measure and are represented in our sample (but not majorly), this is not surprising.

Overall this leaves us with mostly support for our hypotheses regarding the creative class concept applied to whether US-subsidiaries in Germany with different needs (for creative staff) and thus characteristics are located in more or less creative German State locations because this should cater best for their staffing needs. That the variable of having an airport in the location does not have a statistically significant relationship with the dependent variable may be due to city clusters and cities’ proximity in Germany. It may be sufficiently quick to get to an airport in a town/city nearby if required (maybe not needed as much as certain subsidiary city location structures) and potentially also to benefit from the heightened creative potential that such airport locations should offer, e.g. via an exchange of more different people and meeting places.

7.4 Conclusion

In sum, we have analysed the locational choices of US-subsidiaries with differing needs for creative staff in the coordinated market economy Germany (see HALL/SOSKICE 2001) while recurring on the creative class concept (see FLORIDA 2002) operationalised on the German State level and thus accommodating to staff’s comparatively low mobility in Germany. Analysing US-subsidiaries with more than 50 staff established in Germany in the year 2000 or later, we find support for all but one of our propositions regarding US-subsidiaries in different need of creative staff

to be located in a more or less creative location within Germany. Our novel approach provides us with a first indication that US-MNCs planning to locate a subsidiary in Germany may orientate themselves on their business peers in terms of where more or less creative subsidiaries and germane companies are already located. This is because they should be able to more easily recruit creative staff that should stay in the area for longer. For States wanting to attract more US-subidiaries, concepts such as the creative class may also be interesting for policy makers, however factors that interact with this matter need to be considered, the creative class concept is no ‘magic formula’ (BONTJE/MUSTERD 2009: 851). This appears especially so in the European context, where it has been illustrated that certain specificities need to be taken into account, e.g. coordinated market economies such as Germany tend to generally offer types of comparative advantage that do not all fall under FLORIDA’s definition of creativity.

Our first explorative, cross-sectional, study of its kind is naturally not without limitations. For example, it is beyond the scope of our analysis to distinguish further between the different sub-types of creative class as identified by FLORIDA and between subsidiaries’ motives and needs in detail. This could be explored in future studies.

Chapter 8

Conclusions

Since MNCs continue to make use of advantages of different country locations, even more so in difficult economic times, and for example in terms of employment relations, it is of continuing importance to analyse MNCs and employment relations. Concerning MNCs and their employment relations practices in different host-countries, there are yet a number of research gaps to be filled further which I try to contribute to with my work by considering what role comparative employment relations advantage plays for US-subsidaries' locations and host-country employment relations practices.

In this context, I have posed two overall research questions: (1) In how far are foreign subsidiaries located in a country where they can profit from host-country employment relations, and (2) in how far do foreign subsidiaries use host-country employment relations practices according to how much they can profit from host-country employment relations?

I focus on US-subsidaries in Switzerland, Germany and the UK in terms of their differences and employment relations practices. US-companies have been considered because of their continuing importance as global investors. The chosen host-countries form an interesting contrast in regard to their different host-country employment relations environments because they represent differently coordinated market economies. Switzerland rather represents a hybrid market economy somewhere in the middle of the coordination spectrum, while Germany and the UK represent more pure cases at different ends of the coordination spectrum each, and thereby specific combinations of national employment relations attributes. These countries may be more or less attractive to MNCs for specific subsidiary projects as has been outlined in previous chapters according to the varieties of capitalism approach (see HALL/SOSKICE 2001).

In chapter 2, I outline the main data collection process for this work (except chapter 7) and described the data which is used in the preceding chapters to this one. Original data was collected from 2010-2012 since no available survey data offers the

required data for the analyses of my overall research questions. The data was collected via a questionnaire survey sent to mostly randomly chosen US-subidiaries in Switzerland, Germany and the UK. Overall, 33 responses were obtained per country location. The net response rate, where a response rate could be determined, is about 7 percent for the subsidiaries in Switzerland and Germany. Also, a number of supplementary interviews were conducted. A first plausibility check, to find out in how far the sectors present in the random draw of subsidiaries contacted for the main survey in the different countries give an indication for possible employment relations comparative advantage in the different host-countries under analysis was administered. Despite some indication for employment relations comparative advantage, the dominant sectors are mostly the same in each analysed country location. This supported the need for further analysis, to find out in how far individual subsidiaries differ in terms of how much comparative advantage they can gain from their host-country in terms of employment relations, which subsequently should determine subsidiaries' use of host-country employment relations practices.

In chapter 3, I demonstrate that the current empirical literature on MNCs and their employment relations practices in different countries so far lacks differentiation. As my analysis provides a first indication for, it does matter to distinguish host-country effects in terms of different employment relations practices belonging rather to the sphere of IR or training & education, especially when analysing hybrid market economies such as Switzerland. I find that in Switzerland – where IR practices are rather liberal – and in the UK, significantly fewer US-subidiaries have works councils and collective agreements than in Germany. On the other hand, in terms of e.g. training apprentices, US-subidiaries in Switzerland and Germany exhibit this practice significantly more than the ones in the UK. Furthermore, I find the extent of subsidiaries' host-country practices adoption in regard to the sphere of IR and education & training to be characterised by a partly different relationship with the variables subsidiary size and incorporation type (which also appeared as factors based on the conducted interviews). This differentiation has so far also not been taken into account in the literature. The findings regarding the second part of this paper clearly indicate that there is a need for a more fine-grained (empirical) analysis of foreign subsidiaries and their employment relations practices uptake, thus further factors should be considered that may play a role in explaining why some subsidiaries use certain employment relations practices and others do not. At the same time, since on

the country level a different use of certain employment relations practices is overall found for US-subidiaries, i.e. they adopt host-country practices when there is a difference between home- and host-country practices to begin with, one may infer that different subsidiaries are rather located in certain locations and not others which could be connected to, amongst other things, employment relations comparative advantage. Thus in this sense, regarding the first overall research question, I detect an indication that subsidiaries are rather located in country locations where they can profit from host-country employment relations. The varieties of capitalism framework (see HALL/SOSKICE 2001) provides a suitable basis for analysis especially where host-country employment relations of hybrid market economies, e.g. Switzerland, need to be distinguished in more detail, via taking account of differentiations such as IR and education & training.

In chapter 4, Pull and I apply a finer distinction of how subsidiaries located in two countries differ when compared on the country level and when compared amongst themselves within their country location. For this analysis, the focus on only Switzerland and Germany was chosen, an especially hard test in terms of the referred to varieties of capitalism approach under which originally the two countries are categorised as the same type of market economy (coordinated) by HALL/SOSKICE (2001) where non-market mechanisms should prevail for coordination. However, the Swiss market economy is in certain aspects rather liberal, such as IR – there is overall rather little coordination and a flexible labour market (hence it can also be referred to as a hybrid market economy, see preceding chapters). *Firstly*, regarding systematic differences between subsidiaries in Germany and Switzerland in terms of characteristics that can be linked back to employment relations, in the applied logit and marginal effects analysis we find differences between subsidiaries located in Switzerland and Germany, such as subsidiaries in Switzerland being significantly more ICT (and somewhat price) determined. However, we also encounter findings counter our predictions, such as subsidiaries in Switzerland being subject to major business changes *less* often. *Secondly*, regarding in how far subsidiaries with a different host-country fit use host-country employment relations accordingly, we employ the predicted probability of each subsidiary to be located in its given country as a host-country fit measure in terms of employment relations. Our findings in regard to a different use of locally embedded training & skill practices are mostly supportive of our idea. Regarding the US-subidiaries in Germany, in how far training is provided by the

company and in how far skills gained on the job are viewed as central significantly varies by host-country fit; however, there is no statistically significant variation according to host-country fit in terms of apprenticeship training. The findings for the subsidiaries in Switzerland indicate no significant relationships according to host-country fit, mostly as predicted. In sum, regarding the first and second overall research questions, this paper provides an indication that different subsidiaries can profit to varying degrees from host-country employment relations which can be observed both on the country level and within different host-countries according to subsidiaries' individual differences (host-country fit) when home- and host-country practices should be significantly different to begin with. Regarding the varieties of capitalism approach (see HALL/SOSKICE 2001), it indicates the need to differentiate between market economy spheres even regarding similar but different market economies such as Germany and Switzerland and to take into account individual subsidiaries' host-country fit in employment relations use, which can be operationalised while recurring on the varieties of capitalism ideas as well.

In chapter 5, I analyse the idea of subsidiaries of a varying host-country fit using employment relations practices accordingly in further detail (thus I analysed the second overall research question) while considering staff adjustment practices of US-subsubsidiaries in Switzerland, Germany and the UK. I focus on three main subsidiary characteristics (assets utilised, change and technology intensity) derived from the varieties of capitalism framework according to which I infer the individual subsidiaries' respective host-country fit with their host-country location in terms of employment relations. I operationalise the host-country fit with an index as per my theoretical predictions, (as opposed to chapter 4 where predicted probabilities were used, i.e. an empirically derived fit measure) and subsequently analyse staff adjustment practice variation of the subsidiaries within their countries via an OLS regression analysis. Staff adjustments are an extreme test in terms of expectedly US-companies generally having considerable freedom in their approach to staff adjustments in the home-country. Naturally, regarding host-locations, they are influenced by national laws and institutions, however yet staff adjustments could be an area where US-subsubsidiaries may overall be less inclined, if possible, to adjust to host-country practices. I find support for my main measure in terms of host-country fit variation playing a significant part in staff adjustment practices (but not the second measure) regarding the US-subsubsidiaries in Germany, and as predicted not generally

for the subsidiaries in the UK (in reference to Switzerland). Thereby, regarding the second overall research question, the findings indicate that host-country employment relations practices such as the analysed measure on staff adjustments vary according to host-country fit and thus employment relations comparative advantage in countries where the analysed host-country practices are substantially different from US-home practices – such as in the rather typical coordinated market economy Germany, as opposed to Switzerland and the UK. However subsidiaries have some strategic leeway, e.g. permanent tenure was not found to differ by host-country fit in Germany. This finding, and the analysis with Pull in regard to training & skill practices, indicates that it should be fruitful to follow up the concept of host-country fit in more detail in the future, and especially in regard to hybrid market economies as here the type of analysed employment relations practice should determine whether effects are found or not. Regarding the varieties of capitalism approach (see HALL/SOSKICE 2001), the usefulness of the concept in terms of differentiating subsidiaries' employment relations practices according to spheres (IR and education & training), to detect similarities and differences between subsidiaries' home- and host-country employment relations to analyse where host-country fit should be considered, and in terms of operationalising the concept of host-country fit, i.e. the need to differentiate individual subsidiaries, is further indicated in chapter 5.

In chapter 6, we, Teuber, Backes-Gellner, Pull, Schneider and I, focus in more detail on employment relations practices of radically change-intensive (i.e. radically innovative as per our understanding) subsidiaries, as an example of companies where the institutional environment should, for example according to the varieties of capitalism approach (see HALL/SOSKICE 2001), provide rather specific country-level comparative advantages. With the help of fsQCA analysis, we identify different configurations of HRM practices of radically innovative subsidiaries. The results indicate that for example flexible labour adjustment possibilities, as suggested by the varieties of capitalism approach, are of importance. But we also find that configurations are rather not country-specific and/or fully according to the predictions we draw from the varieties of capitalism approach for radically innovative companies. This indicates that subsidiaries' host-country institutional environment does not entirely determine their employment relations practice combinations. Thus, regarding the second overall research question that this paper is related to in so far that one can observe whether subsidiaries with 'host-country-fit' in terms of innovation-intensity

(that can be linked to employment relations complementarities, as outlined) apply rather typical host-country employment relations practices or not, the following is indicated: There is one country specific path of a highly innovative subsidiary in the UK that exhibits rather the employment relations practices combination as expected per the varieties of capitalism approach. Regarding the other paths connected with high innovation which cut across countries, there are also rather the typical practices as predictably conducive for radical innovation (and generally predicted for liberal market economies) found (high labour adjustments and university educated staff). This indicates that subsidiaries with a relatively suboptimal host country fit as per the varieties of capitalism approach and innovation, i.e. highly innovative in Germany (and Switzerland), seem to at least partly not use host-country employment relations practices much but rather use their leeway. Therefore, in a very specific sense, an indication for my second overall research question is detected regarding using host-employment relations according to how much one can profit from them. However, in this paper there is a subsidiary differentiation applied focusing on high change intensity, in chapter 4 and 5 more support is detected for subsidiaries' host-country fit – operationalised as a combination of different key factors – having a significant relationship with certain employment relations practices. Also, one cannot directly compare the results as in chapter 4 and 5 single employment relations practices are considered and in this paper configurations.

With chapter 7 (joint work with Conway), I broaden the analysis of the topic area with an additional paper included as a 'bonus', providing a yet different angle on the topic however not directly related to my overall two research questions, focusing especially on US-subsidiaries in Germany. While recurring on database and web search information, we analyse US-subsidiaries in need of creatives (as per FLORIDA 2002), staff not predominantly found in Germany, and their locations within Germany. And indeed, via correlation and regression analyses, we overall detect support for our deducted propositions, subsidiaries not operating in 'manufacturing' and of organisationally higher rank with a need for urban infrastructure and connectedness are located in creative class locations in Germany. This illustrates the plethora of aspects involved in MNC location decisions, even within one country, especially when organisations are in need of staff not majorly found in Germany, such as the

creative class.¹⁰¹ Furthermore, it is demonstrated that the varieties of capitalism approach (see HALL/SOSKICE 2001) can also be used in combination with the creative class approach, and thereby when rather untypical subsidiaries as per the varieties of capitalism concept are considered, while also revealing country-specific issues that should be taken into account in terms of the creative class approach applied to Germany.

In a methodological sense I employ different approaches to analyse the two overall research questions as posed in the introduction. On the one hand, I employ country level comparisons in terms of employment relations practice differences determined by for example chi-square tests, and on the other hand a logit analysis (and marginal effects) with the dependent variable representing different country locations and independent variables representing subsidiary characteristics. To operationalise the host-country fit concept, I have both used an empirical approach by referring to predicted probabilities of subsidiaries to be located in a certain host-country (employed from the logit analysis), thereby taking account of actual differences found between subsidiaries' characteristics in the preceding analysis. On the other hand, I have employed a theoretical approach to model host-country fit, by comparing subsidiary characteristics to theoretical predictions and creating an index displaying the extent of host-country fit. While the empirically derived fit-measure allows taking account of actual differences between subsidiaries, even if some are not as originally predicted, the theoretically derived host-country fit measure allows assessing host-country fit exactly as theoretically expected. Furthermore, I have employed correlation and regression analyses to investigate the relationship of host-country fit with the focused on employment relations variables. And lastly, yet a different viewpoint was taken by employing a qualitative comparative analysis, to analyse specific bundles of employment relations practices of differently radically innovative subsidiaries in the three analysed host-countries.

Considering the different insights from the presented papers regarding the overall research questions, the following picture emerges: When compared on the country-level, subsidiaries are found to significantly differ in certain characteristics that can be linked back to employment relations comparative advantages (and in terms of certain employment relations practices). Furthermore, within country differ-

¹⁰¹ For the following part of the conclusion, chapter 7 is only considered occasionally, as it is not directly related to the overall research questions.

ences of subsidiaries of varying host-country fit are found to play a significant role in determining in how far subsidiaries adopt host-country employment relations practices (at least where a substantial difference between the analysed home- and host-country employment relations practices is concerned, as tested here regarding staff adjustments and training & skill practices). This indicates support for theoretical approaches such as the varieties of capitalism theory (see HALL/SOSKICE 2001) when taking into account individual subsidiary differences. However, this is not always the case, as the somewhat mixed findings indicate. Furthermore, it appears that subsidiaries have certain leeway within any type of institutional environment, to adopt certain employment relations to their strategic advantage even if that advantage is not typically supported by national institutions, as especially the findings from chapter 6 indicate.

Therefore, in summary the overall research questions can be answered as follows: Based on my analyses, US-subsubsidiaries in Germany, Switzerland and the UK appear to be located in host-countries where they can – at least partly – profit from host-country employment relations. Furthermore, according to how much subsidiaries can profit from their host-country employment relations they use host-country employment relations regarding a number of analysed practices, albeit not all analysed practices.

From my work, implications regarding the use of the varieties of capitalism approach (see HALL/SOSKICE 2001), the main theoretical approach referred to here, can also be deducted. It is useful to relate to as a framework when analysing the employment relations practices of MNCs. However, as has been demonstrated, one should employ it in a differentiated way, not only focus on the overall label of liberal versus coordinated economies, but apply a distinction according to employment relations spheres as needed, IR and education & training, for example. Thereby, also employment relations practices of foreign subsidiaries in not so typical, hybrid market economies can be analysed. And lastly, one should not forget to take into account that individual subsidiaries have leeway for strategic behaviour even within different market economies and account for this in applied analyses.

Further, implications can be established regarding the question what market economies offer employment relations comparative advantage, a question often discussed regarding location decisions. From my research, taking into account individual subsidiary differences and practices, it appears that not only one type of

market economy offers optimal employment relations comparative advantage for all multinational investors. Indeed, different market economies should be useful for different subsidiary endeavours, and offer specific comparative employment relations advantages, as e.g. suggested by the varieties of capitalism approach (see HALL/SOSKICE 2001).

Additionally, I can add insights regarding the discussion about in how far Anglo-Saxon MNCs use host-country employment relations or other practices. According to my findings, overall subsidiaries will adopt host-country employment relations the more they can benefit from them. Subsidiaries can also adapt when in environments not typically predicted as most suitable for them in terms of employment relations. Subsidiaries may take strategic steps in terms of for example using a certain *combination* of employment relations practices that may better serve them (e.g. to radically innovate) or locate in specific places within a country to benefit from not dominantly prevalent resources in their host-country such as staff with certain skills (as the additional paper in chapter 7 indicates).

Moreover, for certain subsidiaries and practices no statistically significant relationship between host-country fit and host-country employment relations practices was found where one was theoretically expected. This indicates that some companies with a good host-country fit could use the comparative advantage of their location in terms of host-country employment relations more than already done, and hence profit more from possible host-country comparative advantages.

From my findings, avenues for future research can be deducted. In future projects on a larger scale, one could investigate and extend the posed research questions further by analysing subsidiaries from different home- and host-countries and explore in how far there is a link between host-country fit, subsidiaries' employment relations practices and subsidiary performance. One may apply a yet finer differentiation of subsidiaries and their characteristics with survey questions not yet captured in this analysis, and potentially focus on specific industries or increase the sample size in order to then additionally be able to distinguish between different industries or within country locational factors (see chapter 7 for this different angle). And selected in-depth case studies of subsidiaries where there is a subsidiary present in all analysed host-countries should enhance our understanding further as well.

References

- Afonso, Alexandre; André Mach (2011): Coming Together but Staying Apart: Continuity and Change in the Austrian and Swiss Varieties of Capitalism. In: Becker, Uwe (ed.): *The Changing Political Economies of Small West European Countries*. Amsterdam: Amsterdam University Press: 99-124.
- Aghion, Philippe; Peter Howitt (1998): *Endogenous Growth Theory*. Cambridge (MA): MIT Press.
- Ahlstrom, David (2010): Innovation and Growth: How Business Contributes to Society. *Academy of Management Perspectives* 24 (2010)3: 11-24.
- Allen, Matthew M.C.; Maria L. Aldred (2011): Varieties of capitalism, governance, and high-tech export performance: A fuzzy-set analysis of the new EU member states. *Employee Relations* 33(2011)4: 334-355.
- Almond, Phil (2011): Re-visiting 'country of origin' effects on HRM in multinational corporations. *Human Resource Management Journal* 21(2011)3: 258-271.
- Almond, Phil; Tony Edwards; Trevor Colling; Anthony Ferner, Paddy Gunnigle; Michael Müller-Camen, Javier Quintanilla; Hartmut Wächter (2005): Unraveling Home and Host Country Effects: An Investigation of the HR Policies of an American Multinational in Four European Countries. *Industrial Relations* 44(2005)2: 276-306.
- Amable, Bruno (2003): *The Diversity of Modern Capitalism*. Oxford: University Press.
- AmCham Germany (eds.) (2010): *US Investments in Germany 2010*, 20th edition. Frankfurt: ACC Verlag & Services GmbH.
- Arundel, Anthony; Edward Lorenz; Bengt-Åke Lundvall; Antoine Valeyre (2007): How Europe's economies learn: a comparison of work organization and innovation mode for the EU-15. *Industrial and Corporate Change* 16(2007)6: 1175-1210.
- Axford, Rita; Barbara Carter; Gary Grunwald (1997): Enhancing Dillman's total design method for mailed/telephone surveys using current technology to maximise cost-benefit ratios. *Journal of Sociology* 33(1997)3: 387-393.
- Backhaus, Klaus; Bernd Erichson; Wulff Plinke; Rolf Weiber (2003): *Multivariate Analysemethoden*. 10th edition. Berlin: Springer.
- Baruch, Yehuda; Brooks C. Holtom (2008): Survey response rate levels and trends in organizational research. *Human Relations* 61(2008)8: 1139-1160.
- Bassanini, Andrea; Ekkehard Ernst (2002): Labour market regulation, industrial relations and technological regimes: a tale of comparative advantage. *Industrial and Corporate Change* 11(2002)3: 391-426.

Berlin-Institut für Bevölkerung und Entwicklung (eds.) (2007): Talente, Technologie und Toleranz – wo Deutschland Zukunft hat. [http://www.berlin-partner.de/fileadmin/chefredaktion/pdf/studien-rankings/2007_de_talente_technologie_toleranz.pdf, found on 05.06.2012].

Bewley, Truman F. (2002): Interviews as a valid empirical tool in economics. *Journal of Socio-Economics* 31(2002)4: 343-353.

Björkman, Ingmar; Pawan Budhwar (2007): When in Rome ...? Human resource management and the performance of foreign firms operating in India. *Employee Relations* 29(2007)6: 595-610.

Bloom, Nicholas; John Van Reenen (2010): Why Do Management Practices Differ across Firms and Countries? *The Journal of Economic Perspectives* 24(2010)1: 203-224.

Bognanno, Mario F.; Michael P. Keane; Donghoon Yang (2005): The influence of wages and industrial relations environments on the production location decisions of U.S. multinational corporations. *Industrial and Labor Relations Review* 58(2005)2: 171-200.

Bontje, Marco; Sako Musterd (2009): Creative industries, creative class and competitiveness: Expert opinions critically appraised. *Geoforum* 40(2009)5: 843-852.

Bosch, Gerhard; Jean Charest (2008): Vocational training and the labour market in liberal and coordinated economies. *Industrial Relations Journal* 39(2008)5: 428-447.

Boschma, Ron A.; Michael Fritsch (2009): Creative Class and Regional Growth: Empirical Evidence from Seven European Countries. *Economic Geography* 85(2009)4: 391-423.

Boxall, Peter; John Purcell (2000): Strategic human resource management: where have we come from and where should we be going? *International Journal of Management Reviews* 2(2000)2: 183-203.

Brewster, Chris; Geoffrey Wood; Michael Brookes (2008): Similarity, Isomorphism or Duality? Recent Survey Evidence on the Human Resource Management Policies of Multinational Corporations. *British Journal of Management* 19(2008)4: 320-342.

Bundesamt für Bauwesen und Raumordnung (eds.) (2009): Positionierung Europäischer Metropolregionen in Deutschland. BBSR Berichte Kompakt 3/2009. [http://www.bbsr.bund.de/nn_287484/BBSR/DE/Veroeffentlichungen/BerichteKompakt/2009/DL_3_2009,templateId=raw,property=publicationFile.pdf/DL_3_2009.pdf, found on 05.10.2012].

Bundesamt für Statistik (eds.) (2008): Analysen zur Betriebszählung 2005. Die Ausbildungsbereitschaft der Betriebe: Entwicklungen 1995 bis 2005. [www.panorama.ch/pdf/bba4868a.pdf, found on 05.05.2012].

Bundesamt für Statistik (eds.) (2010): Unternehmen – Indikatoren. [<http://www.bfs.admin.ch/bfs/portal/de/index/themen/06/02/blank/key/01/groesse.html>, found on 09.09.2012].

Bundesministerium für Bildung und Forschung (eds.) (2003): Schaubildsammlung Berufsausbildung sichtbar gemacht. BMBF Publik. [http://www.bmbf.de/pub/berufsausbildung_sichtbar_gemacht.pdf, found on 05.06.2012].

Bureau of Labor Statistics U.S. Department of Labor (eds.) (2012): Employee Tenure in 2012. [<http://www.bls.gov/news.release/pdf/tenure.pdf>, found on 18.10.2012].

Bureau van Dijk (eds.) (2009): Amadeus (Update 173, Februar 2009 Volltextdatenbank CD-ROM/DVD-ROM).

Caligiuri, Paula M.; Saba Colakoglu (2007): A strategic contingency approach to expatriate assignment management. *Human Resource Management Journal* 17(2007)4: 393-410.

Casey, Catherine; Antje Fiedler; Ljiljana Erakovic (2012): Liberalising the German model: institutional change, organisational restructuring and workplace effects. *Industrial Relations Journal* 43(2012)1: 53-69.

Casper, Steven (2007): Creating Silicon Valley in Europe: Public Policy Towards New Technology Industries. Oxford: Oxford University Press.

Casper, Steven; Richard Whitley (2004): Managing competences in entrepreneurial technology firms: a comparative institutional analysis of Germany, Sweden and the UK. *Research Policy* 33(2004)1: 89-106.

Chakrabarti, Avik (2001): The Determinants of Foreign Direct Investment: Sensitivity Analyses of Cross-Country Regressions. *Kyklos* 54(2001)1: 89-114.

Clifton, Nick (2008): The “creative class” in the UK: an initial analysis. *Geografiska Annaler: Series B, Human Geography* 90(2008)1: 63-82.

Collings, David G.; Patrick Gunnigle; Michael J. Morley (2008): Between Boston and Berlin: American MNCs and the shifting contours of industrial relations in Ireland. *The International Journal of Human Resource Management* 19(2008)2: 240-261.

Cooke, William N. (1997): The Influence of Industrial Relations Factors on U.S. Foreign Direct Investment Abroad. *Industrial and Labor Relations Review* 51(1997)1: 3-17.

Cooke, William N. (2001): The effects of labour costs and workplace constraints on foreign direct investment among highly industrialized countries. *The International Journal of Human Resource Management* 12(2001)5: 697-716.

Cooke, William N.; Deborah S. Noble (1998): Industrial Relations Systems and US Foreign Direct Investment Abroad. *British Journal of Industrial Relations* 36(1998)4: 581-609.

Coriat, Benjamin; Olivier Weinstein (2002): Organizations, firms and institutions in the generation of innovation. *Research Policy* 31(2002)2: 273-290.

Coughlin, Cletus C.; Eran Segev (1999): Foreign Direct Investment in China: A spatial econometric study. St. Louis: Federal Reserve Bank of St. Louis, Federal Reserve Bank of St. Louis Working Paper Series, Working Paper 1999-001A.

- Cranet (eds.) (2009): Cranet Methodology. [www.cranet.org/Networkinformation/Pages/Methodology.aspx, found on 28.11.2011].
- Cycyota, Cynthia S.; David A. Harrison (2002): Enhancing Survey Response Rates at the Executive Level: Are Employee- or Consumer-Level Techniques Effective? *Journal of Management* 28(2002)2: 151-176.
- Damanpour, Fariborz; Shanthi Gopalakrishnan (1998): Theories of organizational structure and innovation adoption: the role of environmental change. *Journal of Engineering and Technology Management* 15(1998)1: 1-24.
- Datta, Deepak K.; James P. Guthrie; Dynah Basuil; Alankrita Pandey (2010): Causes and Effects of Employee Downsizing: A Review and Synthesis. *Journal of Management* 36(2010)1: 281-348.
- Delery, John E.; D. Harold Doty (1996): Modes of Theorizing in Strategic Human Resource Management: Tests of Universalistic, Contingency, and Configurational Performance Predictions. *The Academy of Management Journal* 39(1996)4: 802-835.
- Department for Business Innovation and Skills (eds.) (2012): Workplace Employment Relations Study (WERS). [<http://www.bis.gov.uk/policies/employment-matters/research/wers>, found on 02.06.2012].
- Deutsche Bundesbank (eds.) (2012): Bestandserhebung über Direktinvestitionen. Statistische Sonderveröffentlichung 10. [http://www.bundesbank.de/Redaktion/DE/Downloads/Veroeffentlichungen/Statistische_Sonderveroeffentlichungen/Statso_10/statso_10_bestandserhebung_ueber_direktinvestitionen.pdf?__blob=publicationFile, found on 05.06.2012].
- Dillman, Don A. (1978): Mail and telephone surveys. The total design method. New York: Wiley.
- Dillman, Don A.; Virginia Lesser; Robert Mason; John Carlson; Fern Willits; Rob Robertson; Bryan Burke (2007): Personalization of Mail Surveys for General Public and Populations with a Group Identity: Results from Nine Studies. *Rural Sociology* 72(2007)4: 632-646.
- Ding, Daniel Z.; Syed Akhtar (2001): The organizational choice of human resource management practices: A study of Chinese enterprises in three cities in the PRC. *The International Journal of Human Resource Management* 12(2001)6: 946-964.
- Doeringer, Peter B.; Christine Evans-Klock; David G. Terkla (1998): Hybrids or Hodgepodes? Workplace practices of Japanese and Domestic Startups in the United States. *Industrial and Labor Relations Review* 51(1998)2: 171-186.
- Doty, D. Harold; William H. Glick; George P. Huber (1993): Fit, Equifinality, and Organizational Effectiveness: A Test of Two Configurational Theories. *The Academy of Management Journal* 36(1993)6: 1196-1250.
- Duden (eds.) (2012): 'Stadtstaat'. [<http://www.duden.de/rechtschreibung/Stadtstaat>, found on 05.06.2012].

Dustmann, Christian; Sonia C. Pereira (2008): Wage Growth and Job Mobility in the United Kingdom and Germany. *Industrial and Labor Relations Review* 61(2008)3: 374-393.

Edwards, Tony; Sarosh Kuruvilla (2005): International HRM: national business systems, organizational politics and the international division of labour in MNCs. *The International Journal of Human Resource Management* 16(2005)1: 1-21.

Edwards, Phil; Ian Roberts; Mike Clarke; Carolyn DiGuseppi; Sarah Pratap; Reinhard Wentz; Irene Kwan (2002): Increasing response rates to postal questionnaires: systematic review. *BMJ* 324(2002)7347: 1183-1191.

Euro Online (eds.) (2005): Industrial relations in the USA 2003-4. [<http://www.eurofound.europa.eu/eiro/2004/11/feature/us0411101f.htm>, found on 22.08.2012].

Euro Online (eds.) (2009a): Germany: Industrial relations profile. [<http://www.eurofound.europa.eu/eiro/country/germany.pdf>, found on 28.11.2011].

Euro Online (eds.) (2009b): United Kingdom: Industrial relations profile. [<http://www.eurofound.europa.eu/eiro/country/united.kingdom.pdf>, found on 22.08.2012].

Englisch, Peter (2011): Standort Deutschland 2011 – Deutschland und Europa im Urteil internationaler Manager. [[http://www.ey.com/Publication/vwLUAssets/Standort_Deutschland_2011_neu/\\$FILE/Standort%20Deutschland%202011_final.pdf](http://www.ey.com/Publication/vwLUAssets/Standort_Deutschland_2011_neu/$FILE/Standort%20Deutschland%202011_final.pdf), found on 05.06.2012].

Ernst & Young (eds.) (2006): Swiss Attractiveness Survey – What Foreign Companies Say. [http://www2.eycom.ch/publications/items/2006_swiss_attractiveness_survey/200609_ey_attractiveness_survey_e.pdf, found on 05.06.2012].

Ernst & Young (eds.) (2011): Destination UK: sustaining success in the new economy. Ernst & Young's 2011 UK Attractiveness Survey. [[http://www.ey.com/Publication/vwLUAssets/2011_UK_Attractiveness_Survey/\\$FILE/2011_UK_Attractiveness_Survey.pdf](http://www.ey.com/Publication/vwLUAssets/2011_UK_Attractiveness_Survey/$FILE/2011_UK_Attractiveness_Survey.pdf), found on 05.06.2012].

Estevez-Abe, Margarita; Torben Iversen; David Soskice (2001): Social Protection and the Formation of Skills: A Reinterpretation of the Welfare State. In: Hall, Peter A.; David Soskice (eds.): *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford: Oxford University Press: 145-183.

Eurostat (eds.) (2012): Manufacturing Statistics – NACE Rev. 2. [http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Manufacturing_statistics_-_NACE_Rev._2, found on 09.09.2012].

Farndale, Elaine; Chris Brewster; Erik Poutsma (2008): Coordinated vs. liberal market HRM: the impact of institutionalization on multinational firms. *The International Journal of Human Resource Management* 19(2008)11: 2004-2023.

Farndale, Elaine; Jaap Paauwe (2007): Uncovering competitive and institutional drivers of HRM practices in multinational corporations. *Human Resource Management Journal* 17(2004)4: 355-375.

Fenton-O'Creevy, Mark; Paul Gooderham; Odd Nordhaug (2008): Human resource management in US subsidiaries in Europe and Australia: centralisation or autonomy? *Journal of International Business Studies* 39(2008)1: 151-166.

Ferner, Anthony; Javier Quintanilla; Matthias Z. Varul (2001): Country-of-origin effects, host-country effects, and the management of HR in multinationals: German companies in Britain and Spain. *Journal of World Business* 36(2001)2: 107-127.

Fiss, Peer C. (2011): Building better causal theories: a fuzzy set approach to typologies in organizational research. *Academy of Management Journal* 54(2011)2: 393-420.

Flick, Uwe (2009): *An Introduction to Qualitative Research*. London: Sage Publications.

Florida, Richard (2002): *The Rise of the Creative Class*. Cambridge: Basic Books.

Florida, Richard (2003): Cities and the Creative Class. *City and Community* 2(2003)1: 3-19.

Florida, Richard (2012): *The Rise of the Creative Class – Revisited*. Cambridge: Basic Books.

Florida, Richard; Irene Tinagli (2004): Europe in the Creative Age. [<http://www.demos.co.uk/files/EuropeintheCreativeAge2004.pdf?1240939425>, found on 28.02.2012].

Frei, Marek; Florian Janik (2008): Betriebliche Berufsausbildung: Wo Ausbildungspotenzial noch brach liegt. IAB Kurzbericht 19/2008 [<http://doku.iab.de/kurzber/2008/kb1908.pdf>, found on 05.12.2011].

Fritsch, Michael; Michael Stützer (2007): Die Geographie der Kreativen Klasse in Deutschland. *Raumforschung und Raumordnung* 65(2007)1: 15-29.

Gabler Wirtschaftslexikon (eds.) (2011): Repräsentativität. [<http://wirtschaftslexikon.gabler.de/Definition/repraesentativitaet.html>, found on 20.10.2011].

Gabler Wirtschaftslexikon (eds.) (2012): Großstadt. [<http://wirtschaftslexikon.gabler.de/Definition/grossstadt.html>, found on 04.10.2012].

Geletkanycz, Marta (1997): The salience of 'culture's consequences': The effects of cultural values on top executive commitment to the status quo. *Strategic Management Journal* 18(1997)8: 615-634.

Gläser, Jochen; Grit Laudel (2009): *Experteninterviews und qualitative Inhaltsanalyse*, 3rd edition. Wiesbaden: VS Verlag.

Gooderham, Paul; Odd Nordhaug; Kristen Ringdal (2006): National embeddedness and calculative human resource management in US subsidiaries in Europe and Australia. *Human Relations* 59(2006)11: 1491-1513.

Grahl, John; Paul Teague (2004): The German model in danger. *Industrial Relations Journal* 35(2004)6: 557-573.

Greckhamer, Thomas; Vilmos F. Misangyi; Heather Elms; Rodney Lacey (2008): Using Qualitative Comparative Analysis in Strategic Management Research: An Examination of Combinations of Industry, Corporate, and Business-Unit Effects. *Organizational Research Methods* 11(2008)4: 695-726.

Greer, Thomas V.; Ritu Lohita (1994): Effects of source and paper color on response rates in mail surveys. *Industrial Marketing Management* 23(1994)1: 47-54.

Griffith, Rachel; Gareth Macartney (2010): Employment Protection Legislation, Multinational Firms and Innovation. London: Institute for Fiscal Studies, IFS Working Paper W10/01.

Groves, Robert M. (2006): Nonresponse Rates and Nonresponse Bias in Household Surveys. *Public Opinion Quarterly* 70(2006)5: 646-675.

Guimarães, Paulo; Octávio Figueiredo; Douglas Woodward (2000): Agglomeration and the Location of Foreign Direct Investment in Portugal. *Journal of Urban Economics* 47(2000)1: 115-135.

Hall, Peter A; Daniel W. Gingerich (2009): Varieties of Capitalism and Institutional Complementarities in the Political Economy: An Empirical Analysis. *British Journal of Political Science* 39(2009)3: 449-482.

Hall, Peter A.; David Soskice (2001): An Introduction to Varieties of Capitalism. In: Hall, Peter A.; David Soskice (eds.): Varieties of Capitalism: The Institutional Foundations of Comparative Advantage. Oxford: Oxford University Press: 1-68.

Ham, Hwikwon; Morris M. Kleiner (2007): Do Industrial Relations Institutions Influence Foreign Direct Investment? Evidence from OECD nations. *Industrial Relations* 46(2007)2: 305-328.

Hancké, Bob (2001): Revisiting the French Model: Coordination and Restructuring in French Industry. In: Hall, Peter A.; David Soskice (eds.): Varieties of Capitalism: The Institutional Foundations of Comparative Advantage. Oxford: Oxford University Press: 307-334.

Hans-Böckler-Stiftung (eds.) (2010): Tarifvertrag und Betriebsrat – Vertretung auf zwei Ebenen. [http://www.boeckler.de/hbs_showpicture.htm?id=28746&chunk=1, found on 04.09.2012].

Hans-Böckler-Stiftung (eds.) (2011a): Mitbestimmung in Deutschland. [<http://www.boeckler.de/67.htm>, found on 04.09.2012].

Hans-Böckler-Stiftung (eds.) (2011b): Zahlen und Fakten. [<http://www.boeckler.de/5306.htm>, found on 04.09.2012].

Hansen, Høgni Kalsø; Thomas Nedomysl (2009): Migration of the creative class: evidence from Sweden. *Journal of Economic Geography* 9(2009)2: 191-206.

Harcourt, Mark; Geoffrey Wood (2007): The Importance of Employment Protection for Skill Development in Coordinated Market Economies. *European Journal of Industrial Relations* 13(2007)2: 141-159.

Harzing, Anne-Wil (2000): Cross-National Industrial Mail Surveys: Why do response rates differ between countries? *Industrial Marketing Management* 29(2000)3: 243-254.

Harzing, Anne-Wil; Arndt Sorge (2003): The Relative Impact of Country of Origin and Universal Contingencies on Internationalization Strategies and Corporate Control in Multinational Enterprises: Worldwide and European Perspectives. *Organization Studies* 24(2003)2: 187-214.

Henneberger, Fred; Alfonso Sousa-Poza (2002): Beweggründe und Determinanten zwischenbetrieblicher Mobilität: Die Schweiz in einer internationalen Perspektive. *Mitteilungen aus der Arbeitsmarkt- und Berufsforschung* 35(2002)2: 205-231.

Herrmann, Andrea M.; Alexander Peine (2011): When 'national innovation system' meet 'varieties of capitalism' arguments on labour qualifications: On the skill types and scientific knowledge needed for radical and incremental product innovations. *Research Policy* 40(2011)5: 687-701.

Hippach-Schneider, Ute; Martina Krause; Christian Woll (2007): Berufsbildung in Deutschland: Kurzbeschreibung. Luxemburg: Amt für amtliche Veröffentlichungen der Europäischen Gemeinschaften, 2007, Cedefop Panorama Series 136.

Huselid, Mark A.; Brian E. Becker (2011): Bridging Micro and Macro Domains: Workforce differentiation and strategic human resource management. *Journal of Management* 37(2011)2: 421-428.

Institut für Arbeitsmarkt- und Berufsforschung (eds.) (2012): IAB-Betriebspanel. [<http://www.iab.de/de/erhebungen/iab-betriebspanel.aspx/>, found on 02.06.2012].

Institut für Weltwirtschaft (eds.) (2012): Stocks of Foreign Direct Investment of USA by Host Countries and Sectors in percent of total – FDI USA Share in All Countries. [http://www.ifw-kiel.de/forschung/datenbanken/fdi/usa_fdi_share_coun.pdf, found on 05.06.2012].

Iseke, Anja; Martin Schneider (2012): Transfer of Employment Practices, Varieties of Capitalism, and National Employment Systems. A Review. *Industrielle Beziehungen* 19(2012)2: 236-252.

Jacobebbinghaus, Peter; Jens Mohrenweiser; Thomas Zwick (2008): Wie kann die durchschnittliche Ausbildungsquote in Deutschland korrekt gemessen werden? Zürich: Institut für Strategie und Unternehmensökonomik, Swiss Leading House Working Paper No. 34. [http://www.isu.uzh.ch/leadinghouse/WorkingPapers/0034_lhwpaper.pdf, found on 05.05.2012].

Javorcik, Beata S.; Mariana Spatareanu (2005): Do Foreign Investors Care About Labour Market Regulations? London: Centre for Economic Policy Research, CEPR Discussion Paper No. 4839.

Jiménez-Jiménez, Daniel; Raquel Sanz-Valle (2005): Innovation and human resource management fit: an empirical study. *International Journal of Manpower* 26(2005)4: 364-381.

Johnson, Joanne; John R. Baldwin; Brent Diverty (1996): The implications of innovation for human resource strategies. *Futures* 28(1996)2: 103-119.

- Kluike, Marlies (2012): What Follows Employment Relations Comparative Advantage: Within Country Variation of Subsidiaries' Host-Country Fit and Staff Adjustment Practices. [<http://ssrn.com/abstract=2066636>, found on 19.11.2012].
- Kluike, Marlies; Kerstin Pull (2012): Similar but Still Different: How US-MNCs in Germany and Switzerland use Host-Country Training & Skill Practices. [http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2049936, found on 19.11.2012].
- Kogut, Bruce; John Paul MacDuffie; Charles Ragin (2004): Prototypes and strategy: Assigning causal credit using fuzzy sets. *European Management Review* 1(2004)2: 114-131.
- Krätke, Stefan (2010): 'Creative Cities' and the Rise of the Dealer Class: A Critique of Richard Florida's Approach to Urban Theory. *International Journal of Urban and Regional Research* 34(2010)4: 835-53.
- Küter, Janina (2009): Länderrankings zur internationalen Wettbewerbsfähigkeit. Aussagekraft und Vergleichbarkeit der Ergebnisse. *Wirtschaftsdienst* 89(2009)10: 691-699.
- Lange, Knut (2009): Institutional embeddedness and the strategic leeway of actors: the case of the German therapeutical biotech industry. *Socio-Economic Review* 7(2009)2: 181-207.
- Lavelle, Jonathan (2008): Charting the Contours of Union Recognition in Foreign-Owned MNCs: Survey Evidence from the Republic of Ireland. *Irish Journal of Management* 29(2008)1: 45-63.
- Leibniz-Institut für Sozialwissenschaften (eds.) (2011): Gesis. [<http://www.gesis.org>, found on 02.06.2012].
- Lewis-Beck, Michael S.; Alan Bryman; Tim Futing Liao (eds.) (2004): The Sage Encyclopedia of Social Science Research Methods. Volume 3. Thousand Oaks: Sage.
- Lorenz, Edward; Antoine Valeyre (2005): Organisational Innovation, Human Resource Management and Labour Market Structure: A Comparison of the EU-15. *The Journal of Industrial Relations* 47(2005)4: 424-442.
- Lundvall, Bengt-Åke (1992): Introduction. In: Lundvall, Bengt-Åke (ed.): National Systems of Innovation – Towards a Theory of Innovation and Interactive Learning. London: Pinter Publishers: 1-19.
- Mak, Simon K.M.; Syed Akhtar (2003): Human resource management practices, strategic orientations, and company performance: a correlation study of publicly listed companies. *Journal of American Academy of Business* 2(2003)2: 510-515.
- Marsden, David (1999): A Theory of Employment Systems: Micro-Foundations of Societal Diversity. Oxford: Oxford University Press.
- Marsden, David (2000): A theory of job regulation, the employment relationship, and the organisation of labour institutions. *Industrielle Beziehungen* 7(2000)4: 320-347.

Martin-Brelot, Helene; Michel Grossetti; Denis Eckert; Olga Gritsai; Zoltán Kovács (2010): The Spatial Mobility of the 'Creative Class': A European Perspective. *International Journal of Urban Research* 34(2010)4: 854-870.

Meyer, Alan D.; Anne S. Tsui; C. R. Hinings (1993): Configurational Approaches to Organizational Analysis. *Academy of Management Journal* 36(1993)6: 1175-1195.

Michie, Jonathan; Maura Sheehan (2003): Labour market deregulation, 'flexibility' and innovation. *Cambridge Journal of Economics* 27(2003)1: 123-143.

Miles, Raymond E.; Charles C. Snow (1984): Designing strategic human resources systems. *Organizational Dynamics* 13(1984)1: 36-52.

Muller, Michael (1998): Human resource and industrial relations practices of UK and US multinationals in Germany. *The International Journal of Human Resource Management* 9(1998)4: 732-749.

Nelson, Richard R. (1993): National Innovation Systems: A Comparative Analysis. Oxford: Oxford University Press.

Nooteboom, Bart (2000): Learning and Innovation in Organizations and Economies. Oxford: University Press.

OECD (eds.) (2003): OECD Glossary of Statistical Terms Subsidiary. [<http://stats.oecd.org/glossary/detail.asp?ID=3315>, found on 27.02.2012].

OECD (eds.) (2005): Glossary of Statistical Terms Non-Response Bias. [<http://stats.oecd.org/glossary/detail.asp?ID=5145>, found on 18.10.2011].

OECD (eds.) (2010): Employment protection in OECD and selected non-OECD countries, 2008. [www.oecd.org/dataoecd/42/4/42768860.xls, found on 27.02.2012].

OECD (eds.) (2011): Science, Technology and Industry Scoreboard 2011. Paris: OECD.

OECD (eds.) (2012): Employment by job tenure intervals – average tenure (dependent employment). [<http://stats.oecd.org/Index.aspx?QueryId=9591>, found on 27.02.2012].

Oesch, Daniel (2007): Weniger Koordination, mehr Markt? Kollektive Arbeitsbeziehungen und Neokorporatismus in der Schweiz seit 1990. *Swiss Political Science Review* 13(2007)3: 337-368.

Oesch, Daniel (2010): Trade Unions and Industrial Relations in Switzerland. Munich: Munich Personal RePEc Archive, MPRA Paper No 22059.

Office for National Statistics (eds.) (2011): Foreign Direct Investment involving UK companies, 2010 Release. [http://www.ons.gov.uk/ons/dcp171778_245878.pdf, found on 05.06.2012].

Parry, Emma; Michael Dickmann; Michael Morley (2008): North American MNCs and their HR policies in liberal and coordinated market economies. *The International Journal of Human Resource Management* 19(2008)11: 2024-2040.

- Pohl, Thomas (2008): Distribution Patterns of the creative Class in Hamburg: "Openness to Diversity" as a Driving Force for Socio-Spatial Differentiation? *Erdkunde* 62(2008)4: 317-328.
- Pudelko, Markus (2006): A comparison of HRM systems in the USA, Japan and Germany in their socio-economic context. *Human Resource Management Journal* 16(2006)2: 123-153.
- Pudelko, Markus; Anne-Wil Harzing (2007): Country-of-origin, localization, or dominance effect? An empirical investigation of HRM practices in foreign subsidiaries. *Human Resource Management* 46(2007)4: 535-559.
- Pull, Kerstin (2003): Arbeitsmarktregulierung und Standortwahl. Mering: Hampp.
- Pull, Kerstin (2008): Flexibility in HRM and foreign direct investment: Do international investors self-select? *The International Journal of Human Resource Management* 19(2008)2: 314-329.
- Ragin, Charles C. (1987): *The Comparative Method: Moving beyond Qualitative and Quantitative Strategies*. Berkeley: University of California Press.
- Ragin, Charles C. (2000): *Fuzzy set social science*. Chicago: University of Chicago Press.
- Ragin, Charles C. (2005): *From Fuzzy Sets to Crisp Truth Tables*. Tuscon, Arizona: University of Arizona working paper. [<http://www.compass.org/wpseries/Ragin2004.pdf>, found on 06.06.2012].
- Ragin, Charles C. (2006): Set Relations in Social Research: Evaluating Their Consistency and Coverage. *Political Analysis* 14(2006)3: 291-310.
- Ragin, Charles C. (2008): *Redesigning social inquiry: Fuzzy sets and beyond*. Chicago: University of Chicago Press.
- Ragin, Charles C.; Peer C. Fiss (2008): Net Effects Analysis Versus Configurational Analysis: An Empirical Demonstration. In Ragin, Charles C. (ed.): *Redesigning Social Inquiry: Set Relations in Social Research*. Chicago: University of Chicago Press: 190-212.
- Regini, Mario (2003): Tripartite Concertation and Varieties of Capitalism. *European Journal of Industrial Relations* 9(2003)3: 251-263.
- Rhein, Thomas (2010): Beschäftigungsdynamik im internationalen Vergleich. Ist Europa auf dem Weg zum „Turbo-Arbeitsmarkt“? IAB Brief Report 19/2010. [<http://doku.iab.de/kurzber/2010/kb1910.pdf>, found on 05.12.2011].
- Rihoux, Benoît; Charles C. Ragin (eds.) (2009): *Configurational Comparative Methods: Qualitative Comparative Analysis (QCA) and Related Techniques*. Thousand Oaks: Sage.
- Robinson, Cecil; Randall E. Schumacker (2009): Interaction Effects: Centering, Variance Inflation Factor, and Interpretation Issues. *Multiple Linear Regression Viewpoints* 35(2009)1: 6-11.

- Rogelberg, Steven G.; Jeffrey M. Stanton (2007): Introduction: Understanding and Dealing With Organizational Survey Nonresponse. *Organizational Research Methods* 10(2007)2: 195-209.
- Rosenzweig, Philip M.; Nitin Nohria (1994): Influences on Human Resource Management Practices in Multinational Corporations. *Journal of International Business Studies* 25(1994)2: 229-251.
- Roth, Philip L.; Craig A. BeVier (1998): Response Rates in HRM/OB Survey Research: Norms and Correlates, 1990-1994. *Journal of Management* 24(1998)1: 97-117.
- Royle, Tony (2002): Multinational corporations, employers' associations and trade union exclusion strategies in the German fast-food industry. *Employee Relations* 24(2002)4: 437-460.
- Royle, Tony (2004): Employment Practices of Multinationals in the Spanish and German Quick-Food Sectors: Low-Road Convergence? *European Journal of Industrial Relations* 10(2004)1: 51-71.
- Santos, Fernando C.A. (2000): Integration of human resource management and competitive priorities of manufacturing strategy. *International Journal of Operations & Production Management* 20(2000)5: 610-628.
- Schmitt, Matthias (2002): Der grenzüberschreitende Transfer von Personalpraktiken innerhalb multinationaler Unternehmen. Mering: Hampp.
- Schmitt, Matthias (2003): Deregulation of the German Industrial Relations System via Foreign Direct Investment: Are the subsidiaries of Anglo-Saxon MNCs a Threat for the Institutions of Industrial Democracy in Germany? *Economic and Industrial Democracy* 24(2003)3: 349-377.
- Schmitt, Matthias; Dieter Sadowski (2003): A cost-minimization approach to the international transfer of HRM/IR practices: Anglo-Saxon multinationals in the Federal Republic of Germany. *The International Journal of Human Resource Management* 14(2003)3: 409-430.
- Schnabel, Klaus (2005): Gewerkschaften und Arbeitgeberverbände: Organisationsgrade, Tarifbindung und Einflüsse auf Löhne und Beschäftigung. *Zeitschrift für Arbeitsmarktforschung* 2/3(2005): 181-196.
- Schneider, Martin R.; Conrad Schulze-Bentrop; Mihai Paunescu (2010): Mapping the institutional capital of high-tech firms: A fuzzy-set analysis of capitalist variety and export performance. *Journal of International Business Studies* 41(2010)2: 246-266.
- Schneider, Martin R.; Mihai Paunescu (2012): Changing varieties of capitalism and revealed comparative advantages from 1990 to 2005: a test of the Hall and Soskice claims. *Socio-Economic Review* 10(2012)4: 731-753.
- Schuler, Randall S.; Susan E. Jackson (1987): Linking Competitive Strategies with Human Resource Management Practices. *The Academy of Management Executive* 1(1987)3: 207-219.

Schwab, Klaus (ed.) (2011): The Global Competitiveness Report 2011–2012. [http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf, found on 05.06.2012].

Schweizerische Nationalbank (eds.) (2010): Ausländische Direktinvestitionen in der Schweiz – Länder. [http://www.snb.ch/ext/stats/fdi/pdf/de/2_1_Ausl_Direktinve_Kapitalimporte.pdf, found on 05.06.2012].

Schweizerischer Arbeitgeberverband (eds.) (2010): Über uns. [http://www.arbeitgeber.ch/index.php?option=com_content&view=category&layout=blog&id=18&Itemid=28&lang=de, found on 09.09.2012].

Sherblom, John C.; Claire F. Sullivan; Elizabeth C. Sherblom (1993): The What, the Whom, and the Hows of Survey Research. *Business Communication Quarterly* 56(1993)4: 58-64.

Shih, Tse-Hua; Xitao Fan (2008): Comparing response rates from web and mail surveys: A meta-analysis. *Field Methods* 20(2008)3: 249-271.

Shoham, Aviv (1996): Marketing-Mix Standardization: Determinants of Export Performance. *Journal of Global Marketing* 10(1996)2: 53-73.

Statista (eds.) (2012a): Erwerbstätige in verschiedenen Wirtschaftsbereichen in Deutschland im Jahr 2008 (Anteil in %). [<http://de.statista.com/statistik/daten/studie/150764/umfrage/erwerbstaetige-nach-wirtschaftsbereichen-in-deutschland-2008/>, found on 09.09.2012].

Statista (eds.) (2012b): Erwerbstätige nach Wirtschaftssektoren in der Schweiz 2010. [<http://de.statista.com/statistik/daten/studie/216757/umfrage/erwerbstaetige-nach-wirtschaftssektoren-in-der-schweiz/>, found on 09.09.2012].

Statista (eds.) (2012c): Erwerbstätige nach Wirtschaftssektoren in Großbritannien 2010. [<http://de.statista.com/statistik/daten/studie/167316/umfrage/verteilung-der-erwerbstaetigen-nach-wirtschaftssektoren-in-grossbritannien/>, found on 09.09.2012].

Statistische Ämter des Bundes und der Länder (eds.) (2012): Gebiet und Bevölkerung – Fläche und Bevölkerung. [http://www.statistik-portal.de/statistik-portal/de_jb01_jahrta1.asp, found on 04.10.2012].

Steedman, Hilary (2010): The State of Apprenticeship in 2010. [http://www.apprenticeships.org.uk/~media/AAN/Documents/Research_1_616.ashx, found on 03.09.2012].

Stifterverband für die Deutsche Wissenschaft e.V. (eds.) (2010): Ländercheck. Lehre und Forschung im föderalen Wettbewerb. [http://www.laendercheck-wissenschaft.de/archiv/forschung/pdf/laendercheck_forschung.pdf, found on 04.10.2012].

Stifterverband für die Deutsche Wissenschaft e.V. (eds.) (2011): Verbreitung dualer Studiengänge in Deutschland. [http://www.stifterverband.info/wissenschaft_und_hochschule/infothek/duales_studium/verbreitung/index.html, found on 04.10.2012].

Suchman, Lucy; Brigitte Jordan (1990): Interactional Troubles in Face-to-Face Survey Interviews. *Journal of the American Statistical Association* 85(1990)409: 232-241.

Swiss-American Chamber of Commerce (eds.) (2009): Yearbook 2009/2010. Stäfa: Zürichsee Medien AG.

Teuber, Silvia; Paul Ryan; Kathleen Thelen; Karin Wagner (2011): Duale Ausbildung und Personalpolitik – So gleich und doch so fremd? Eine vergleichende Untersuchung im Industriesektor zwischen Deutschland und der Schweiz. *DBW Die Betriebswirtschaft* 71(2011)3: 217-233.

Thelen, Kathleen (2009): Institutional Change in Advanced Political Economies. *British Journal of Industrial Relations* 47(2009)3: 471-498.

Traxler, Franz; Birgit Woitech (2000): Transnational Investment and National Labour Market Regimes: A Case of 'Regime Shopping'? *European Journal of Industrial Relations* 6(2000)2: 141-159.

Tsai, Cheng-Fei; Yu-Fang Yen (2008): A model to explore the mystery between organizations' downsizing strategies and firm performance: Integrating the perspectives of organizational change, strategy and strategic human resource management. *Journal of Organizational Change Management* 21(2008)3: 367-384.

Tüselmann, Hans-Josef (1998): Standort Deutschland: German direct foreign investment – exodus of German industry and export of jobs? *Journal of World Business* 33(1998)3: 295-313.

Tüselmann, Hans-Josef; Frank McDonald; Arne Heise (2003): Employee Relations in German Multinationals in an Anglo-Saxon Setting: Toward a Germanic Version of the Anglo-Saxon Approach? *European Journal of Industrial Relations* 9(2003)3: 327-349.

U.S. Census Bureau (eds.) (2011a): 2007 NAICS. [<http://www.census.gov/cgi-bin/sssd/naics/naicsrch?chart=2007>, found on 17.10.2011].

U.S. Census Bureau (eds.) (2011b): NAICS 54. [<http://www.census.gov/econ/industry/def/d54.htm>, found on 09.09.2012].

Vitols, Sigurt (2001a): Unternehmensführung und Arbeitsbeziehungen in deutschen Tochtergesellschaften großer ausländischer Unternehmen. Düsseldorf: Forum Mitbestimmung und Unternehmen, März 2001.

Vitols, Sigurt (2001b): Varieties of Corporate Governance: Comparing Germany and the UK. In: Hall, Peter A.; David Soskice (eds.): Varieties of Capitalism: The Institutional Foundations of Comparative Advantage. Oxford: Oxford University Press: 337-360.

Whitley, Richard (2000): The Institutional Structuring of Innovation Strategies: Business Systems, Firm Types and Patterns of Technical Change in Different Market Economies. *Organization Studies* 21(2000)5: 855-886.

Whitley, Richard (2002): Developing innovative competences: the role of institutional frameworks. *Industrial and Corporate Change* 11(2002)3: 497-528.

Windsperger, Josef (2006): A Resource-based View of the Competitive Advantages of Cities: Empirical Results on Advantages for Headquarters in Vienna for Central Europe. *SEE Journal* September (2006): 20-31.

Wölfl, Anita (2005): The Service Economy in OECD Countries. OECD Science, Technology and Industry Working Papers 2005/03. [<http://dx.doi.org/10.1787/212257000720>, found on 05.05.2012].

WSI Tarifarchiv (eds.) (2011): Tarifbindung 2010 (West und Ost). [http://www.boeckler.de/pdf/ta_tarifbindung_2010_betriebe_gesamt.pdf, found on 11.04.2012].

Yammarino, Francis J.; Steven J. Skinner; Terry L. Childers (1991): Understanding Mail Survey Response Behaviour A Meta Analysis. *Public Opinion Quarterly* 55(1991)4: 613-639.

Yun, Gi Woong; Craig W. Trumbo (2000): Comparative Response to a Survey Executed by Post, E-mail, & Web Form. *Journal of Computer-Mediated Communication* 6(2000)1.

Zachert, Ulrich (2004): Kündigungsschutz, Befristung und Leiharbeit in Europa. Düsseldorf: Wirtschafts- und Sozialwissenschaftliches Institut, WSI-Mitteilungen 3/2004.

Appendix

1. Questionnaire
2. Letter template Germany
3. Letter template Switzerland
4. Letter template UK
5. Additional tables for chapter 5
6. Additional tables for chapter 6

Multinational Company Location Decisions and Employment Relations

In our study we analyse the strategic advantages that US companies can utilize from different country environments. Our survey addresses US subsidiaries in Switzerland, Germany and the UK. If the company you work for is not a US subsidiary please disregard this questionnaire. If you cannot answer all the questions please still participate in the survey and answer as many questions as possible. The information provided will be treated in a strictly confidential manner. All questions refer to this subsidiary.

A: Subsidiary background information:

1. Please let us know the current overall staff headcount. approx. _____
2. The subsidiary was incorporated in form of a: start-up merger/acquisition
3. The subsidiary is a joint venture: yes no
4. The year of incorporation is: year: _____

B: Subsidiary business strategy:

<i>Please indicate via the scale how much you agree with the following statements regarding the subsidiary.</i>	strongly disagree	1	2	3	4	strongly agree
1. The success of our main business driving products/services is quality determined. ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. The success of our main business driving products/services is price determined.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Specialised assets and components (e.g. machinery, software) are used.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Assets and components used could easily be switched to another use (e.g. new products/services).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Our main business driving products/services are at the start of the product cycle.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Our main business driving products/services belong to high-tech.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. The subsidiary business undergoes minor, continuous changes over time (e.g. adjusted, new product versions).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. The subsidiary business undergoes core changes from time to time (e.g. next generation products/services).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. How often does the subsidiary business encounter core business changes?	<input type="checkbox"/> approx. every 1-3 years <input type="checkbox"/> approx. every 4-6 years <input type="checkbox"/> approx. every 7+ years					
10. What share of the premises and equipment is subsidiary owned?	approx. _____ %					
11. What share of the subsidiary budget is spent on R&D activities?	approx. _____ %					
12. What share of the subsidiary budget is spent on information and communication technology?	approx. _____ %					

C: Subsidiary employment relations:

1. What is the current percentage of staff originating from the parent company? approx. _____ %
2. Is this subsidiary member of an employers' association? yes no
3. Is there a works council? yes no
4. Are employees represented in a European works council? yes no
5. How are key issues – for example HR related – mainly communicated to staff? directly works council or similar
6. Does a collective agreement exist? yes no
7. If 6 applies: On what level is bargaining conducted? subsidiary/company higher level
8. If 6 does not apply: Are tariff wages taken as a guideline for pay/wages? yes no
9. Is pay/are wages set rather according to occupational qualifications or other criteria? occupational other

10. How many strike days occurred in 2009? approx. _____ days

11. What is the current average job tenure of permanent staff in years? approx. _____ years

12. What was the voluntary fluctuation rate of permanent staff in 2009? approx. _____ %

13. What percentage of staff is currently made up of fixed-term & temporary personnel? ... approx. _____ %

14. Do you currently train apprentices? yes no

15. What percentage of staff is currently made up of apprentices? approx. _____ %

16. What is the current approximate share of staff with a school education, a vocational qualification/apprenticeship or a university degree as their highest qualification? school: _____ %
 apprenticeship/vocational: _____ %
 university degree: _____ %

17. If you recruit vocationally trained staff, what type of vocational education/ apprenticeship have the majority of them completed before being hired? workplace-based only
 school-based only
 mix of workplace and school

18. What percentage of current staff is commonly engaged in formalized teamwork? ... approx. _____ %

19. How many days of training did staff receive on average in 2009? approx. _____ days

20. If there is a performance management system, is it based rather on demands of individual jobs or on professional standards linked to occupational qualifications? individual job demands
 occupational qualification standards
 no such system is in place

Please indicate via the scale how much you agree with the following statements regarding the subsidiary.

	strongly disagree	1	2	3	4	5	strongly agree
21. Jobs are categorized mainly according to occupational qualifications (e.g. engineer). ...	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
22. Jobs are categorized mainly according to work tasks (e.g. typist).	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
23. Most staff are assigned a broad variety of tasks.	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
24. The most important work skills of our staff have been acquired on-the-job.	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
25. Mostly generalists who can be trained for various jobs if needed are required.	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
26. Only few staff have job assignments outside their original job function.	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
27. Managers and their teams jointly engage in tasks such as problem solving.	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
28. Responsibilities for some tasks can be shared by more than one same-level job type. ...	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
29. Staff numbers are often adjusted according to business need.	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
30. When needed, working time, or similar, has rather been adjusted than staff let go. ...	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
31. An HR strategy applicable in the entire company is followed.	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
32. National industrial relations allow for having an efficient HR strategy.	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

D: About the respondent:

1. Your position in this subsidiary is: _____

2. How long have you been employed in the corporation overall and in this position in years? total: ____ this position: ____

3. Have you been working in the parent company before your assignment here? yes no

4. In case you have any comments regarding the questionnaire please mention them here: _____

5. Would you like to be provided with a summary report of our findings? yes no

6. Can we contact you in case of further questions? Please let us know.
 yes, phone: _____ email: _____ no

Thank you very much for your support. Please send the survey back via post or email it.
 Please contact us in case of questions or comments: marlies.kluike@uni-tuebingen.de
 Marlies Kluike, Eberhard Karls Universität Tübingen, Nauklerstr. 47, 72074 Tübingen, Germany

questionnaire ID
 internal use only:
 xxxx

Wirtschaftswissenschaftliche Fakultät

Abteilung Personal und Organisation

EBERHARD KARLS
UNIVERSITÄT
TÜBINGEN



Prof. Dr. Kerstin Pull, Nauklerstr. 47, 72074 Tübingen

<Anrede> <Management VN> <Management NN>
<Job-Titel>
<Name Unternehmen>
<Straße und Hausnummer>
<PLZ> <Ort>

Prof. Dr. Kerstin Pull

Telefon: 0049 (0) 70 71 · 29 75256

E-Mail: kerstin.pull@uni-tuebingen.de

www.uni-tuebingen.de/Personal_und_Organisation

Tübingen, im Oktober 2010

Internationale Wettbewerbsfähigkeit und strategische Entscheidungen

<Anrede> < Management NN>,

das unternehmerische Umfeld ist zunehmend globalisiert und durch einen sich verschärfenden Wettbewerb gekennzeichnet. Mehr denn je stehen Unternehmen heute unter dem Druck, die Wettbewerbsvorteile unterschiedlicher Länderstandorte strategisch zu nutzen. In unserer Studie, die sich an US-Tochtergesellschaften in der Schweiz, Deutschland und Großbritannien richtet, analysieren wir strategische Standortentscheidungen multinationaler Unternehmen und identifizieren internationale Best Practice-Lösungen.

Wir bitten Sie um Ihre Unterstützung, indem Sie einen kurzen Fragebogen ausfüllen, dessen Bearbeitung ca. 8-12 Minuten in Anspruch nehmen wird. Gerne können Sie den Fragebogen an eine andere Person in Ihrem Unternehmen weitergeben, welche mit den Gegebenheiten der Tochtergesellschaft vertraut ist.

Sie können uns den Fragebogen per Post oder eingescannt per E-Mail zurückschicken. Alternativ können Sie den Fragebogen auch online, in deutscher oder englischer Sprache, ausfüllen:

<https://www.soscisurvey.de/MNC> (englisch) <https://www.soscisurvey.de/MNC?q=G> (deutsch)

Der einmalige Zugangscode lautet: XXXXXX.

Ihre Angaben werden selbstverständlich absolut vertraulich behandelt. Niemand außerhalb des Forscherteams wird Ihnen bzw. Ihrem Unternehmen individuelle Antworten zuordnen können.

Für Ihre Mitarbeit bieten wir Ihnen eine Zusammenfassung unserer Ergebnisse zu internationalen Best Practice-Lösungen im Bereich strategischer Standortentscheidungen an. Sollten Sie Fragen haben, zögern Sie bitte nicht, uns zu kontaktieren (marlies.kluike@uni-tuebingen.de).

Mit freundlichen Grüßen und herzlichem Dank im Voraus,
Ihre

Kerstin Pull, Prof. Dr.

Marlies Kluike, M.Sc.

Faculty of Economics and Business
Administration

Department of Human Resource
Management and Organization

EBERHARD KARLS
UNIVERSITÄT
TÜBINGEN



Prof. Dr. Kerstin Pull, Nauklerstr. 47, 72074 Tübingen, Germany

<Salutation> <Management fn> <Management In>
<Job title>
<Company name>
<Street name and number>
<Zip code> <Location>
<Country>

Prof. Dr. Kerstin Pull

Telephone: 0049 (0) 70 71 · 29 75256

E-Mail: kerstin.pull@uni-tuebingen.de

www.uni-tuebingen.de/Personal_und_Organisation

Tübingen, October 2010

International competitiveness and strategic choices

<Salutation> <Management In>,

Companies around the world are affected by globalization and increased competition. Today more than ever before, companies are under pressure to strategically utilize the competitive advantages of different country locations. This survey addresses US subsidiaries in Switzerland, Germany and the UK, to find out more about their strategic choices and international best practices.

We ask you to kindly support our project by answering a short questionnaire. The completion of the questionnaire will take about 8-12 minutes. Appreciating your time constraints, we encourage you - if you prefer - to pass the questionnaire on to someone else in the subsidiary for filling it in.

You can send us the questionnaire back via post. Alternatively you can email us a scanned copy of the questionnaire or fill it in online at: <https://www.soscisurvey.de/MNC>. A German version is available at: <https://www.soscisurvey.de/MNC?q=G>. The one-time access key is: XXXXXX.

The information you provide us with will be handled in a strictly confidential manner; no one outside the study team will be able to attribute individual responses to you or your organization.

Thank you very much for your cooperation, we will be happy to provide you with an executive summary of the study results. In case of questions, please do not hesitate to contact us by emailing marlies.kluike@uni-tuebingen.de.

Yours sincerely,

Kerstin Pull, Prof. Dr.

Marlies Kluike, M.Sc.

Faculty of Economics and Business
Administration

Department of Human Resource
Management and Organization

EBERHARD KARLS
UNIVERSITÄT
TÜBINGEN



Prof. Dr. Kerstin Pull, Nauklerstr. 47, 72074 Tübingen, Germany

<Salutation> <Management fn> <Management ln>
<Job title>
<Company name>
<Street name and number>
<Zip code>
<Location>
<Country>

Prof. Dr. Kerstin Pull

Telephone: 0049 (0) 70 71 - 29 75256

E-Mail: kerstin.pull@uni-tuebingen.de

www.uni-tuebingen.de/Personal_und_Organisation

Tübingen, October 2010

International competitiveness and strategic choices

<Salutation> <Management ln>,

Companies around the world are affected by globalization and increased competition. Today more than ever before, companies are under pressure to strategically utilize the competitive advantages of different country locations. This survey addresses US subsidiaries in Switzerland, Germany and the UK, to find out more about their strategic choices and international best practices.

We ask you to kindly support our project by answering a short questionnaire. The completion of the questionnaire will take about 8-12 minutes. Appreciating your time constraints, we encourage you - if you prefer - to pass the questionnaire on to someone else in the subsidiary for filling it in.

You can send us the questionnaire back via post. Alternatively you can email us a scanned copy of the questionnaire or fill it in online at: <https://www.soscisurvey.de/MNC>. The one-time access key is: XXXXXX.

The information you provide us with will be handled in a strictly confidential manner; no one outside the study team will be able to attribute individual responses to you or your organization.

Thank you very much for your cooperation, we will be happy to provide you with an executive summary of the study results. In case of questions, please do not hesitate to contact us by emailing marlies.kluike@uni-tuebingen.de.

Yours sincerely,

Kerstin Pull, Prof. Dr.

Marlies Kluike, M.Sc.

Table A-1: Staff adjustments and US-subsidiaries in Germany

staff adjustments	model 2
OLS regression (with robust standard errors)	R-Squ.: 0.30 N = 22 prob>F = 0.05
	coefficient
host-country fit	-0.4**
headcount	0.0
alternative measures	-0.5*
constant	6.3***

Note: *** significant at 1%, ** significant at 5%, * significant at 10%.

Source: Own data.

Table A-2: Staff adjustments and US-subsidiaries in Switzerland

staff adjustments	model 2
OLS regression (with robust standard errors)	R-Squ.: 0.15 N = 30 prob>F = 0.23
	coefficient
host-country fit	0.1
headcount	0.0
alternative measures	-0.4*
constant	4.1***

Note: *** significant at 1%, ** significant at 5%, * significant at 10%.

Source: Own data.

Table A-3: Staff adjustments and US-subsidiaries in the UK

staff adjustments	model 2
OLS regression (with robust standard errors)	R-Squ.: 0.24 N = 20 prob>F = 0.12
	coefficient
host-country fit	-0.0
headcount	0.0
alternative measures	0.4*
constant	2.3**

Note: *** significant at 1%, ** significant at 5%, * significant at 10%.

Source: Own data.

Table A-4: Distribution of CHANGES in the three countries

COREOFT	GER	CH	UK	Total
0	1	3	2	6
0.2	3	1	0	4
0.4	2	1	0	3
0.6	2	5	2	9
0.8	10	11	1	22
1	8	0	7	15
Total	26	21	12	59

Source: Own data.

Table A-5: Distribution of days of training

days of training per year	freq.	percent	cum.
0	4	6.78	6.78
1	5	8.47	15.25
1.5	1	1.69	16.95
2	11	18.64	35.95
3	6	10.17	45.76
4	2	3.39	49.15
5	14	23.73	72.88
6	2	3.39	76.27
8	2	3.39	79.66
10	7	11.86	91.53
13	1	1.69	93.22
20	1	1.69	94.92
25	1	1.69	96.61
30	2	3.39	100

Source: Own data.

Table A-6: Distribution of share of university graduates in the company

share of university graduates	freq.	percent	cum.
0	1	1.69	1.69
5	1	1.69	3.39
10	5	8.47	11.86
12	1	1.69	13.56
14	1	1.69	15.25
15	2	3.39	18.64
16.5	1	1.69	20.34
20	6	10.17	30.51
25	2	3.39	33.90
30	2	3.39	37.29
35	1	1.69	38.98
36	1	1.69	40.68
40	8	13.56	54.24
50	4	6.78	61.02
60	3	5.08	66.10
70	3	5.08	71.19
80	1	1.69	71.88
85	4	6.78	79.66
90	2	3.39	83.05
95	3	5.08	88.14
96	1	1.69	89.83
98	1	1.69	91.53
99	1	1.69	93.22
100	4	6.78	100

Source: Own data.

Table A-7: Truth table CHANGES

ADJUST- MENT	UNIVER- SITY	TRAIN- ING	MUL- TIPLE TASKS	CROSS- JOB ASSIGN- MENT	number of obser- vations	CHANGES	raw consist.
1	1	0	1	0	1	1	0.87
1	1	1	1	1	4	1	0.84
1	1	0	1	1	5	1	0.84
1	0	1	1	0	1	1	0.81
1	1	0	0	0	3	1	0.81
1	0	1	1	1	3	0	0.80
0	0	1	1	1	1	0	0.79
1	0	1	0	1	1	0	0.77
1	0	1	0	0	3	0	0.77
1	1	0	0	1	4	0	0.75
0	1	0	1	1	3	0	0.75
0	0	1	0	0	1	0	0.75
1	0	0	0	1	1	0	0.73
0	0	0	1	1	3	0	0.73
1	0	0	1	0	1	0	0.73
1	1	1	0	0	1	0	0.73
0	1	0	0	1	1	0	0.72
0	0	1	1	0	1	0	0.71
1	1	1	0	1	1	0	0.71
0	1	1	0	0	1	0	0.70
1	0	0	1	1	5	0	0.70
0	0	0	1	0	1	0	0.70
1	0	0	0	0	1	0	0.70
0	1	1	0	1	2	0	0.64
0	1	1	1	1	5	0	0.61
0	1	1	1	0	5	0	0.61

Note: Logical remainders not listed.

Source: Own data.

Table A-8: Truth table CHANGES negated

ADJUST- MENT	UNIVER- SITY	TRAIN- ING	MUL- TIPLE TASKS	CROSS- JOB ASSIGN- MENT	number of obser- vations	CHANGES	raw consist.
1	0	1	0	1	1	1	0.89
0	0	1	1	0	1	1	0.87
1	0	1	0	0	3	1	0.85
1	1	1	0	1	1	1	0.84
0	0	1	0	0	1	1	0.83
0	0	0	1	0	1	0	0.81
1	0	0	0	1	1	0	0.80
1	0	1	1	0	1	0	0.80
1	0	0	0	0	1	0	0.80
0	1	1	1	0	5	0	0.79
0	0	1	1	1	1	0	0.79
1	0	0	1	0	1	0	0.78
1	1	1	0	0	1	0	0.77
0	1	1	0	1	2	0	0.75
0	1	1	1	1	5	0	0.74
1	0	1	1	1	3	0	0.73
1	0	0	1	1	5	0	0.73
0	1	1	0	0	1	0	0.73
1	1	0	0	1	4	0	0.73
0	1	0	0	1	1	0	0.72
0	0	0	1	1	3	0	0.72
0	1	0	1	1	3	0	0.67
1	1	1	1	1	4	0	0.63
1	1	0	1	0	1	0	0.61
1	1	0	0	0	3	0	0.59
1	1	0	1	1	5	0	0.59

Note: Logical remainders not listed.

Source: Own data.